INTEGRATED CONTINGENCY PLAN

CALIFORNIA PIPELINE RESPONSE ZONE

PHMSA Sequence Number 1277
OSPR Number P5-19-1695

Owner/Operator:

Phillips 66
3010 Briarpark Drive
Houston, TX 77042

24-Hour Number:

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Volume 1 of 1

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Master Table of Contents

Core – Table of Contents

Section I – Table of Contents

Sec. I-1 Purpose and Scope of Plan Coverage

This Integrated Contingency Plan (ICP) is designed to follow the National Response Team's (NRT) Integrated Contingency Plan Guidance (Federal Register # 61: 28641-28664). This ICP is a mechanism to consolidate multiple plans that the Company is required to maintain throughout the United States.

The purpose of this Plan is to help Facility personnel prepare for and respond quickly and safely to a spill incident originating at the Facility. The Plan's primary purpose is to ensure an effective, comprehensive response and prevent injury or damage to company employees, the public and the environment.

The specific objectives of the Plan are to:

- Define alert and notification procedures to be followed when a spill incident occurs.
- Document equipment, manpower and other resources available to assist with a spill incident response.
- Describe an oil spill response team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define organizational lines of responsibility to be adhered to during a spill incident response.
- Outline response procedures and techniques to be used during a spill incident.
- Provide guidelines for handling a spill response operation.

The Company ICP Core contains information applicable to the following entities: (Effective May 1, 2012)

- Phillips 66 (previously associated with ConocoPhillips),
- Phillips 66 Company (previously associated with ConocoPhillips Company),
  - Chisholm Pipeline Company,
  - WesTTex 66 Pipe Line Company,
  - Phillips 66 Pipeline LLC (previously ConocoPhillips Pipe Line Company; Phillips Pipe Line Company merged with Tosco Pipeline Company and Union Pipeline Company and then with Conoco Pipeline Company to form ConocoPhillips Pipe Line Company.)
    - Lake Charles Pipe Line Company
    - Heartland Pipeline Company
    - Yellowstone Pipe Line Company
    - Pioneer Investment Corp.
    - Pioneer Pipe Line company
    - Salt Lake Terminal Company
    - 66 Pipe Line Company
    - Phillips Texas Pipeline Company, LTD.

Herein out everything is referred to Phillips 66 Company and will be referred to throughout this plan as the "Company".

Sec. I-2 Regulatory Compliance

This ICP is based on the National Incident Management System (NIMS) and the Incident Command System (ICS). This plan utilizes the standard format guidance provided for by the National Response Team. For the purposes of this plan the following federal agencies and their corresponding regulatory requirements are included in the plan.

The plan is intended to satisfy the requirements of regulatory agencies mandating written procedures to address planning and response to emergencies, including:	
✓	U.S. Environmental Protection Agency's (EPA) Oil Pollution Prevention Regulations, 40 CFR, Part 112, that requires a Non-Transportation Related Facility Response Plan.
✓	The Department of Transportation's (DOT) regulations as defined in 49 CFR 192.615, 194, 195.402 and similar regulations issued by the state agencies.
✓	U.S. Coast Guard, 33 CFR, Part 154
✓	The National Contingency Plan and applicable Area Contingency Plans.
✓	OSHA's 29 CFR 1910.
✓	Applicable State and Local requirements
✓	Oil Pollution Act of 1990 (OPA 90).
✓	Company has opted to follow the PREP Guidelines for exercise/drilling purposes.

Sec. I-2.1 Interface With Other Plans

This Plan has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP provides for an organized and coordinated response by Federal agencies to discharges and threats of discharge of oil into the environment if the responsible party's response actions are improper or insufficient.

The NCP calls for a system of regional and local contingency plans. Regional and local agencies subsequently developed Area Contingency Plans (ACPs) that conform to the NCP. Both the NCP and the respective ACP are used to provide a framework for liaison and assistance during an oil spill response. This liaison may be in part or in full depending on the necessary level of Federal, State or Local agency involvement.

OPA '90 regulations stipulate that EPA-regulated facilities review Emergency Response Plans annually to insure conformance with the applicable ACP [30 CFR 112.20(g)(2)]. DOT regulated facilities are required to review and certify compliance with the applicable ACP every five years [49 CFR 194.121(a)]. Inconsistencies are corrected prior to compliance certification. Conformance is reviewed and certified by Company staff at headquarters.

Area Contingency Plans have been renamed as Regional Integrated Contingency Plans (RICP). RICPs can be found by EPA Region at the following U.S. National Response Team website: **www.nrt.org**.

The major agencies, and their contingency plans and responsibilities, are discussed below.

National Response Team (NRT): consists of representatives of primary and advisory Federal agencies. It serves as the national body for planning and preparedness, including recommending revisions to the NCP. The NRT may be activated in the event of a pollution incident, which exceeds the response capabilities of the Regional Response Team.

Regional Response Team (RRT): consists of representatives from selected Federal and State agencies and is the regional body responsible for planning and preparedness. The RRT functions as an emergency advisory and assistance team to the Federal On Scene Coordinator.

Federal On-Scene Coordinator (FOSC): the USCG provides the FOSC for oil spills occurring in the coastal zone and on inland navigable waterways. The EPA acts as FOSC in other inland areas. A Memorandum of Understanding for each region defines federal jurisdiction boundaries between the USCG and EPA. The FOSC has developed a Federal, Local Contingency Plan for each zone of responsibility.

Sec. I-3 General Facility Identification Information

Each geographic area and type of operations has its own unique challenges. In the guidance provided for by the National Response Teams ICP format all geographic specific operations and their corresponding regulatory requirements are found in the appropriate ICP Geographical Annexes to this plan. The corresponding facility specific information will also be found in the applicable ICP Geographical Annex.

Required emergency response notifications will be made during any emergency response operation. Refer to the Annex Notification Section located in this plan for contact information.

Emergency response operations involve actions taken at, or in close proximity to, the site of an incident that are designed to mitigate the situation, establish unified command and control over the incident, ensure the safety of responders and general public, develop plans of action, and facilitate communications. Emergency response operations also include actions taken away from the incident scene to support on-scene response operations, facilitate planning, address the concerns of external parties, and manage the financial aspects of response operations.

This plan demonstrates the potential response capabilities available by the Company to respond to any product release within the United States. It is not a guarantee of what will occur or the equipment/deployment sequencing that will be used in an actual spill event. Nothing in this plan is intended to limit the discretion of Company employees to select any sequence of actions or to take whatever time they deem necessary to maximize the effectiveness of the response, consistent with safety considerations.

This plan represents a planning standard but is not and should not be regarded as a performance guarantee. Response operations in any spill event will be tailored to meet the actual circumstances.

This response plan contains information applicable to the Company. This plan applies to emergency response operations carried out by the on-site field personnel and the Emergency Response Team. This plan applies to any type or size of incident that may occur within the United States.

The plan contains prioritized procedures for personnel to follow in the event of a release or other emergency situation involving Company assets.

Sec. I-4 Management Certification

MANAGEMENT CERTIFICATION

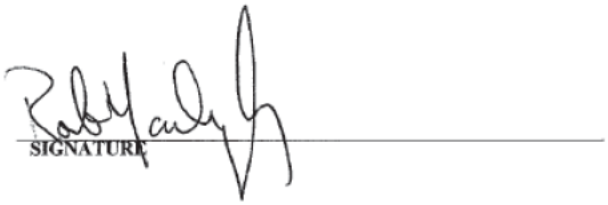
This plan is approved for implementation as herein described. Manpower, equipment and materials will be provided in accordance with all applicable regulatory requirements. The Company is dedicated to protection of the environment and commits to implement the necessary measures, as specified in this Plan, as necessary in a spill response emergency.

In addition to any OSRO and non-company resources listed in this Plan, the necessary personnel and equipment resources, owned or operated by the Company, are available to respond to a discharge within appropriate response times.

This plan has been prepared in accordance to and is consistent to the National Contingency Plan and the applicable Area Contingency Plan(s) for the business units covered by this plan.

This plan represents a planning standard, but is not and should not be regarded as a performance guarantee. Response operations in any incident will be tailored to meet the actual circumstances.

CERTIFICATION SIGNATURE:



SIGNATURE

Rob Yarbrough
PRINTED NAME

Director, Emergency Preparedness, Response & Security
TITLE

June 2013
DATE

Sec. I-5 Consistency with NCP and ACPs

This ICP has been prepared and is maintained in accordance with the policies and information contained in the National Contingency Plan (NCP) as well as in the applicable Area Contingency Plans and their corresponding geographically specific requirements.

Areas of concern regarding consistency with NCP, and ACP's:	
•	Identification of environmentally and economically sensitive areas potentially impacted by a spill
•	Descriptions of Company's response strategies and responsibilities
•	Integration of Company's response efforts with those of the federal, state and local agencies

Response Zone	Applicable ACPs
Louisiana Response Zone (74)	EPA Region 6 Regional Intergraded Contingency Plan; USCG One Gulf Plan, MSO Port Arthur GRP and MSO New Orleans GRP
Texas Response Zone (75)	EPA Region 6 Regional Intergraded Contingency Plan; USCG One Gulf Plan, MSO Houston/Galveston GRP
Montana and Wyoming Response Zone (128)	EPA Region 8 Regional Contingency Plan; Clark Fork and Flathead Basin, Montana Sub-ACP; EPA Region 10 Northwest ACP
Kansas Response Zone (546)	EPA Region 7 Intergraded Contingency Plan
Oklahoma Response Zone (547)	EPA Region 6 Regional Intergraded Contingency Plan
Missouri Response Zone (551)	EPA Region 7 Intergraded Contingency Plan; EPA Greater St. Louis Sub-ACP
Illinois Response Zone (946)	EPA Region 5 Regional Intergraded Contingency Plan; EPA Greater St. Louis Sub-ACP; MSO Chicago ACP
Colorado Response Zone (953)	EPA Region 8 Regional Contingency Plan
California Response Zone (1277)	USCG 2000 ACP Los Angeles/Long Beach; USCG 2000 ACP for the California North Coast, San Francisco Bay and Delta, Central Coast; EPA Region 9 Mainland Regional Contingency Plan
East Washington Response Zone Plan (132)	EPA Region 10-Regional Contingency Plan; Northwest ACP

P66 U.S. PIPELINES DIVISION MAP

P66 DIVISIONS LEGEND
- WEST COAST
- BILLINGS
- EAST/GULF
- AMARILLO
- CENTRAL

BILLINGS DIVISION
BILLINGS, MT

MIKE MILLER – PIPELINE DIV. MANAGER
CHRIS CARPENTER – DIVISION ENGINEER
BRIAN ELLERBECK – I&E COORDINATOR
KIM HUIZENGA – PLANNER
CARRIE WILDIN – MAJOR MAINT. SUPT.
KENT NUNBERG – ROTATING EQUIP. LEAD
BRETT MYERS – CORROSION LEAD

CENTRAL DIVISION
BARTLESVILLE, OK

MANNY CORTEZ – PIPELINE DIV. MANAGER
KEITH FAUCETT – DIVISION ENGINEER
STEVE PULIS & ZEB TALLEY – I&E COORDINATORS
STARLA WOLF – PLANNER
PHIL DAVIDSON – MAJOR MAINT. SUPT.
PAUL THOMAS – ROTATING EQUIP. LEAD
KARL RHEINBOLDT – CORROSION LEAD

PIPELINE ORGANIZATION
HOUSTON, TX

TODD DENTON – PIPELINE ORG. MANAGER
JOE VAUGHN – TECH SERVICES MANAGER
CHARLIE STONE – O&M ENGINEER
JAMEY MCLAUGHLIN – AUTOMATION SUPERVISOR
MIKE MCCULLEN – SENIOR PLANNER
RANDY BOWEN – MAINTENANCE INTEGRITY PROJECT MANAGER
CARRIE WILDIN – RIVER CROSSING PROJECT MANAGER

WEST COAST DIVISION
LONG BEACH, CA

JEFF RANDEL – PIPELINE DIV. MANAGER
MATT KRUBSKI – DIVISION ENGINEER
BILL NORTHRUP & DEREK DAHLGREN – I&E COORDINATORS
ELOY GUITIERREZ – PLANNER
STEVE GASKA – MAJOR MAINT. SUPT.
PAUL BAUER – ROTATING EQUIP. LEAD
DAN KNUTSON – CORROSION LEAD

AMARILLO DIVISION
AMARILLO, TX

RODGER LEWIS – PIPELINE DIV. MANAGER
DAVID M. SOUKUP – DIVISION ENGINEER
TIM BAILEY & EDGAR GALLEGOS – I&E COORDINATORS
VACANT – PLANNER
ANDY MURRY – MAJOR MAINT. SUPT.
DALE DOLEN – ROTATING EQUIP. LEAD
GARY FOSTER – CORROSION LEAD

EAST/GULF DIVISION
HOUSTON, TX

JOHN ROARK – PIPELINE DIV. MANAGER
STEPHANIE WEBB – DIVISION ENGINEER
MONTE PENDLEY – I&E COORDINATOR
BEN BASQUEZ – PLANNER
ROY BURLESON – MAJOR MAINT. SUPT.
J. ARDOIN – ROTATING EQUIP. LEAD
JAMES BRUMLEY – CORROSION LEAD

U.S. Pipelines & Facilities
LEGEND
- REFINED PRODUCTS (OWNED & OPERATED)
- REFINED PRODUCTS (JOINTLY OWNED/OPERATED)
- NOTE: BORGER TO DENVER PRODUCTS IS JOINTLY OWNED AND OPERATED
- NATURAL GAS PIPELINES (OWNED & OPERATED)
- NGL/LPG PIPELINES (OWNED & OPERATED)
- NGL/LPG PIPELINE (JOINTLY OWNED/OPERATED)
- CRUDE PIPELINES (OWNED & OPERATED)
- PETROCHEMICAL PIPELINES (TEXAS GULF COAST)
- IDLE PIPELINES
- REFINERIES
- TERMINALS

Phillips 66 Pipeline LLC

FILE: MZ521ZB.DGN
BASEMAP REVISION DATE: 06/09/12
DIVISION MAP REVISION DATE: 09/11/2012

P66 U.S. TERMINALS DIVISION MAP

P66 DIVISIONS LEGEND
- WEST COAST
- BILLINGS
- EAST/GULF
- AMARILLO
- CENTRAL

BILLINGS DIVISION
BILLINGS, MT

AMY GROSS – TERMINAL DIV. MANAGER
MARK DEICHL – DIVISION ENGINEER
TIM WEBB – I&E COORDINATOR
TANER SORGE – PLANNER
MARK HILBERT – MAJOR MAINT. SUPT.

CENTRAL DIVISION
BARTLESVILLE, OK

BILL SHEPHERD – TERMINAL DIV. MANAGER
ELI KLIEWER – DIVISION ENGINEER
JIM WOLF – I&E COORDINATOR
LOWELL THORNHILL – PLANNER
PAUL A. BUTLER – MAJOR MAINT. SUPT.
CHRISTY HENRY – OPERATIONS ENGINEER

TERMINAL ORGANIZATION
HOUSTON, TX

MILES KAJIOKA – TERMINALS ORG. MANAGER
DAVID FREEMAN – TECH SERVICES MANAGER
PAUL RADY – O&M ENGINEER
JENNIFER KOTT-LOONEY – O&M ENGINEER
WARREN COLE – TERMINAL CONTROLS SUPV.
VACANT – SENIOR PLANNER

EAST/GULF DIVISION
HOUSTON, TX

GABE MUNOZ – TERMINAL DIV. MANAGER
OLVICE GREENWOOD – DIVISION ENGINEER
DONNIE HEMPHILL – I&E COORDINATOR
JIM THOMAS – PLANNER
S. CRISSY – GULF COAST MAJOR MAINT. SUPT.

WEST COAST DIVISION
LONG BEACH, CA

GABE MUNOZ – TERMINAL DIV. MANAGER
SCOTT EDWARDS – DIVISION ENGINEER
DENNIS AVALOS – I&E COORDINATOR
LORI PRETORIUS – PLANNER
STAN BROWN – MAJOR MAINT. SUPT.

AMARILLO DIVISION
AMARILLO, TX

DAVID OSBURN – TERMINAL DIV. MANAGER
LUKE SORENSON – DIVISION ENGINEER
VACANT – I&E COORDINATOR
TIM FROST – PLANNER
KENT BRIGANCE – MAJOR MAINT. SUPT.

U.S. Pipelines & Facilities
LEGEND
- REFINED PRODUCTS (OWNED & OPERATED)
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- IDLE PIPELINES
- REFINERIES
- TERMINALS

Phillips 66 Pipeline LLC

FILE: MZ521ZB.DGN
BASEMAP REVISION DATE: 06/09/12
DIVISION MAP REVISION DATE: 08/21/12

Sec. I.6 Plan Implementation, Review and Update Procedures

Sec. I-6.1 Plan Implementation

This section outlines initial response procedures and implementation upon notification of a release. The Plan and the Facility's Spill Response Team become effective immediately upon notification of any type of spill, leak or emergency situation occurring at the Facility.

The specific action taken to control, contain and clean up a spill will vary with the type of oil spilled, and type of incident that has occurred. The incident commander will analyze the situation and exercise good judgment in formulating the best action plan for the type of incident that occurs. For initial Emergency Response Actions, see section 1.

This plan shall also be implemented in times of natural disasters (i.e., earthquakes, floods, tornadoes, hurricanes, etc.) as well as incidents involving civil unrest or terrorism, which could potentially adversely impact a Company asset resulting in the release of oil or highly volatile liquids. Each Incident Commander, in consultation with the incident command structure, shall be responsible to take any necessary action to minimize the impact that a natural disaster might have on a Company asset. Precautionary measures will be taken, as deemed appropriate by the Incident Commander, in consultation with the incident command structure, to prevent a release. The Commander will consider population, environmentally sensitive areas, pipeline or facility system design, and operating and maintenance practices when determining what precautionary measures to implement. These precautionary measures may include increasing patrols on pipelines, decreasing operating pressures, or shutting in lines, etc.

Sec. I-6.2 Plan Review and Update Procedures

Reviewing and updating this Plan shall be the responsibility of the Facility Manager. Revisions to the Plan may result from: 1) scheduled annual reviews; 2) as a result of conducting formal drills and training exercises; 3) from a response to an accidental discharge; 4) a change in the facility's configuration that materially alters the information included in the response plan; and 5) a material change at the facility (or with a contracted OSRO) which alters the required response capabilities and/or resources. All revisions to the Plan shall be distributed to all Plan holders. In addition, any material or significant changes at the facility that mandate a change in this Plan as described in pages 3, 4 and 5 of this Section shall be submitted to the appropriate regulatory agency. The following sections outline the procedures to be followed to ensure that the Plan is periodically reviewed and updated so that the Plan remains current and functional.

Plan revisions or amendments may be generated as a result of the annual and review process, or by a post drill/post discharge review as discussed above. If new or different operating conditions or information is determined to substantially affect the implementation of this Plan, the Facility Manager shall immediately modify this Plan to address such a change. Within 30 days of changes in the Record Copy of the Plan, revisions and amendments will be submitted to the appropriate Federal and State Agencies listed in this Plan. In addition, the Facility Manager will ensure all revisions and amendments are provided to each Plan holder for incorporation into his/her Plan. Applicable Agency (DOT, EPA & USCG) regulatory language is included below to assist with determining conditions and timeframes for various Agency plan revisions and submittals.

USCG Plan Revisions

A facility owner or operator must review his or her response plan(s) annually. This review shall incorporate any revisions to the plan, including listings of fish and wildlife and sensitive environments identified in the ACP in effect 6 months prior to plan review.

For an MTR facility, this review must occur within one month of the anniversary date of COTP approval of the plan. For an MTR facility identified as a "substantial harm facility" this review must occur within 1 month of the anniversary date of submission of the plan to the COTP.

The facility owner or operator shall submit any revision(s) to the response plan to the COTP and all other holders of the response plan for information or approval, as appropriate.

- Along with the revisions, the facility owner or operator shall submit a cover letter containing a detailed listing of all revisions to the response plan.
- If no revisions are required, the facility owner or operator shall indicate the completion of the annual review on the record of changes page.
- The COTP will review the revision(s) submitted by the owner or operator and will give written notice to the owner or operator of any COTP objection(s) to the proposed revisions within 30 days of the date the revision(s) were submitted to the COTP. The revisions shall become effective not later than 30 days from their submission to the COTP unless the COTP indicates otherwise in writing as provided in this paragraph. If the COTP indicates that the revision(s) need to be modified before implementation, the owner or operator will modify the revision(s) within the time period set by the COTP.

Any required revisions must be entered in the plan and noted on the record of changes page.

The facility owner or operator shall submit revisions to a previously submitted or approved plan to the COTP and all other holders of the response plan for information or approval within 30 days, whenever there is:

- A change in the facility's configuration that significantly affects the information included in the response plan;
- A change in the type of oil (petroleum oil group) handled, stored or transported that affects the required response resources;
- A change in the name(s) or capabilities of the oil spill removal organization;
- A change in the facility's emergency response procedures;
- A change in the facility's operating area that includes ports or geographic area(s) not covered by the previously approved plan. A facility may not operate in an area not covered in a plan previously submitted or approved, as appropriate, unless the revised plan is approved or interim operating approval is received;
- Any other changes that significantly affect the implementation of the plan.

Revisions to personnel and telephone number lists included in the response plan do not require COTP approval. The COTP and all other holders of the response plan shall be advised of these revisions and provided a copy of the revisions as they occur.

The COTP may require a facility owner or operator to revise a response plan at any time as a result of a compliance inspection if the COTP determines that the response plan does not meet the requirements or as a result of inadequacies noted in the response plan during an actual pollution incident at the facility.

EPA Plan Revisions

The owner or operator of a facility for which a response plan is required shall revise and resubmit revised portions of the response plan within 60 days of each facility change that materially may affect the response to a worst case discharge, including:

- A change in the facility's configuration that materially alters the information included in the response plan;
- A change in the type of oil handled, stored or transferred that materially alters the required response resources;
- A material change in capabilities of the oil spill removal organization(s) that provide equipment and personnel to respond to discharges of oil;
- A material change in the facility's spill prevention and response equipment or emergency response procedures; and
- Any other changes that materially affect the implementation of the response plan.

For EPA-associated ERP's, amendments to personnel and telephone number lists included in the response plan and a change in the oil spill removal organization(s) that does not result in a material change in support capabilities do not require approval by the Regional Administrator. Facility owners or operators shall provide a copy of such changes to the Regional Administrator as the revisions occur.

DOT Plan Revisions

Each operator shall review its response plan at least every 5 years from the date of submission and modify the plan to address new or different operating conditions or information included in the plan.

If a new or different operating condition or information would substantially affect the implementation of a response plan, the operator must immediately modify its response plan to address such a change and, within 30 days of making such a change, submit the change to PHMSA.

Examples of changes in operating conditions that would cause a significant change to an operator's response plan are:

- An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved plan;
- Relocation or replacement of the pipeline in a way that substantially affects the information included in the response plan, such as a change to the worst case discharge volume;
- The type of oil transported, if the type affects the required response resources, such as a change from crude oil to gasoline;
- The name of the oil spill removal organization;
- Emergency response procedures;
- The qualified individual;
- A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities; and
- Any other information relating to circumstances that may affect full implementation of the plan.

In addition, per 49 CFR 194.107 (c)(1)(x) and 194.121 (a)(2), Company will review and re-submit this Plan to the U.S. DOT Office of Pipeline Safety for approval every 5 years from the last plan approval date.

Sec. I-7 Glossary/Acronyms

Term	Definition
A	
Access/Staging Areas	Designated areas offering access to spill sites for the gathering and deployment of spill response equipment and personnel.
Adverse Weather	The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operation environment. Factors to consider include significant wave height, ice, temperature, weather-related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.
Agency Representative	Individual assigned to an incident from an assisting or cooperating agency that has been delegated full authority to make decisions on all matters affecting his/her agency's participation at the incident.
Area	The geographic area for which a separate and distinct Area Contingency Plan has been prepared as described in the Oil Pollution Act of 1990. For EPA Areas with sub-area plans or annexes to the Area Contingency Plan, the EPA Regional Administrator will decide which sub-area is to be exercised within the triennial cycle.
Area Committee (AC)	Area Committees are those committees comprised of Federal, State and Local officials, formed in accordance with Section 4202 of the Oil Pollution Act of 1990, whose task is to prepare an Area Contingency Plan for the Area for response to a discharge of oil or hazardous substance.
Assisting Agency	An agency directly contributing tactical or service resources to another agency.
Average Most Probable Discharge	(Small Oil Spill) – The size of the discharge as defined in 33 CFR 154.1020 (a discharge of the lesser of 50 barrels or 1 percent of the volume of the worst case discharge), 33 CFR 155.1020 (a discharge of 50 barrels of oil from the vessel during oil transfer operations) – (for Coast Guard regulated facilities & vessels); for EPA, the tiered planning quantity of 2,100 gallons or less, provided this amount is less than the worst case discharge; for PHMSA and BOEMRE, the size of the discharge as defined in each agency's respective regulations, as appropriate; and the size of the discharge as defined in the respective Area Contingency Plan.
B	
Barrel	Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.
Boom	Any number of specially designed devices that float on water and are used to contain or redirect the flow of oil on the water's surface.
Boom Deployment	The methodology for installing boom based on differing water depths, currents, wave heights, etc.

Term	Definition
C	
Captain of the Port Zone (COTP)	Refers to a zone specified in 33 CFR Part 3 and the seaward extension of that zone to the outer boundary of the exclusive economic zone (200 NM).
CERCLA	The Comprehensive Environmental Response, Compensation Liability Act regarding hazardous substance releases into the environment and the cleanup of inactive hazardous waste disposal sites.
Certification	The act of confirming that an exercise: 1) was completed, 2) met the required objectives, and 3) was evaluated to determine effectiveness of the response plan based on exercise performance.
Chief	The ICS title of individuals responsible for command of functional sections: Operations, Planning, Logistics, and Finance/Administration.
Clean-up	For the purposes of this document, clean-up refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Clean up includes restoration of the site and its natural resources.
Clear Text	The use of plain English in radio communications transmissions. Ten Codes or agency specific codes are NOT used when using Clear Text.
Coastal Waters	All tidally influenced waters extending from the head of tide seaward to the three marine league limit of state jurisdiction; and non-tidally influenced waters extending from the head of tide in the arms inland to the point at which navigation by regulated vessels is naturally or artificially obstructed.
Command Post	A site located in the cold zone where response decisions and activities can be planned, coordinated, and managed. The Incident Commander and regulatory On-Scene Coordinator(s) may operate from this location.
Command Staff	It consists of the Information Officer, Safety Officer and Liaison Officer, who report directly to the Incident Commander. They may have an assistant or assistants, as needed.
Communication Equipment	Equipment that will be utilized during response operations to maintain communication between employees, contractors, Federal/State/Local agencies. (Radio/telephone equipment and links).
Company Away Team	Volunteer Emergency Tier II Responders, See IMAT
Containment Boom	A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.
Contingency Plan	A document used by (1) Federal, State, and Local agencies to guide ties planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Term	Definition
C (Cont'd)	
Contract or Other Approved Means	1. A written contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment described under this plan within stipulated response times in the specified geographic areas; 2. Certification by the facility owner or operator that the specified personnel and equipment described under this plan are owned, operated, or under the direct control of the facility owner or operator, and are available within the stipulated times in the specified geographic areas; 3. Active membership in a local or regional oil spill removal organization that has identified specific personnel and equipment described under this plan that are available to respond to a discharge within stipulated times in the specified geographic areas; 4. A document which: a) Identifies the personnel, equipment, services, capable of being provided by the response contractor within stipulated response times in specified geographic areas; b) Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response; c) Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections and drills; and d) Is incorporated by reference in the response plan; or 5. With the written consent of the response contractor or the oil spill removal organization, the identification of a response contractor or oil spill removal organization with specified equipment and personnel which are available within stipulated response times in specific geographic areas: a) For a facility that could reasonably be expected to cause substantial harm to the environment; b) For a facility that handles, stores, or transports Group V petroleum oil; and c) For a facility that handles, stores, or transports non-petroleum oil.
Crude Oil	Any liquid hydrocarbon mixture occurring naturally in the earth, whether or not treated to render it suitable for transportation, and includes crude oil from which certain distillate fractions may have been removed and crude oil to which certain distillate fractions may have been added.
Cultural Resources	Current, historic, prehistoric, and archaeological resources which include deposits, structures, sites, ruins, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to historical or prehistoric culture of people as well as the natural history of the state.

Term	Definition
D	
Damage Assessment	The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.
Decontamination	The removal of hazardous substances from personnel and equipment necessary to prevent adverse health effects.
Deputy	A fully qualified individual who, in the absence of a superior, could be delegated the authority to manage a functional operation or perform a specific task. In some cases, a Deputy could act as relief for a superior, and, therefore, must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.
Discharge	Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.
Dispatch	To move resources from one place to another.
Dispersants	Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.
Diversion Boom	A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert floating product towards a pick up point or away from certain areas.
Division	The organization level having responsibility for operation within a defined geographic area or with functional responsibility. The Division level is organizationally between the Task Force/Strike Teams and Branches.
Documentation Unit	Functional unit within the Planning Section responsible for collecting, recording and safeguarding all documents relevant to the incident.
Duty Officer	Company support designed to provide communication assistance to the Incident Commander.
E	
Emergency Operations Center (EOC)	A pre-designated facility established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency response.
Environmentally Sensitive Areas (ESA)	Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas, parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Term	Definition
E (Cont'd)	
Equipment Deployment Exercise	An exercise where response equipment is deployed to a specific site and operated in its normal operating medium.
Estuary	Unique environment at the mouth of coastal rivers where fresh water and sea water meet, providing important habitat for marine life, birds, and other wildlife.
Exclusion Zone	The area where contamination does or may occur.
F	
Facility	Any pipeline, structure, equipment, or device used for handling oil including, but not limited to, underground and aboveground storage tanks, impoundments, mobile or portable drilling or workover rigs.
Facility That Could Reasonably Be Expected to Cause Significant and Substantial Harm	Any fixed MTR on-shore facility (including piping and any structures that are used for the transfer of oil between a vessel and a facility) that is capable of transferring oil, in bulk, to or from a vessel of 250 barrels or more, and a deepwater port. This also includes any facility specifically identified by the COTP.
Facility That Could Reasonably Be Expected to Cause Substantial Harm	Any mobile MTR facility that is capable of transferring oil to or from a vessel with a capacity of 250 barrels or more. This also includes any facility specifically identified by the COTP.
Federal On-Scene Coordinator (FOSC)	The pre-designated Federal On-Scene Coordinator operating under the authority of the National Contingency Plan (NCP).
Finance / Administration Section	The Section responsible for all incident costs and financial considerations. Includes the Time Unit, Procurement Unit, Compensation/Claims Unit and Cost Unit.
First Responders, First Response Agency	A public health or safety agency (i.e., fire service/police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.
Fish and Wildlife and Sensitive Environments	Areas that may be identified by either their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered/threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.
Food Unit	Functional unit within the Service Branch of the Logistics Section responsible for providing meals for incident personnel.

Term	Definition
G	
General Staff	The group of incident management personnel comprised of: Incident Commander, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.
H	
Handle	To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.
Hazardous Chemicals	All chemicals that constitute a physical hazard or a health hazard as defined by 29 CFR 1910.1200, with the exceptions listed in section 311(e). This term comprises approximately 90 percent of all chemicals.
Hazardous Material	Any non-radioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.
Hazardous Substance	Any substance designed as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or discharged by the TWC.
Hazardous Waste	Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.
Health Hazard	A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.
Helibase/Helispot	ICS Terms defining locations within the general incident area for parking, fueling, maintaining, and loading helicopters/ where a helicopter can take off and land.
I	
Incident Management Assistance Team (IMAT)	Made up of Company volunteers from across North America. Will assist with activation, deployment and integration of the ICS/UCS spill response organization. ICS/UCS Division/Group Leaders are available
Incident	Any event that results in the spill or release of oil or hazardous materials.

Term	Definition
I (Cont'd)	
Incident Action Plan (IAP)	Is initially prepared at the first meeting, contains general control objectives reflecting the overall incident strategy, and specific action plans for the next operational period. When complete, the Incident Action Plans will include a number of attachments.
Incident Area	Legal geographical area of the incident including affected area(s) and traffic route(s) to corresponding storage and disposal sites.
Incident Commander	The individual responsible for managing all incident operations.
Incident Command Post (ICP)	The location at which the primary command functions are executed; may be collocated with the incident base.
Incident Command System/ Unified Command System	A standardized on-scene emergency management system specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Incident Communication Center	The location of the Communications Unit and the Message Center.
Incident Management Handbook (IMH)	The IMH is intended to be used as an easy reference job aid for responders; designed to assist responders in the use of the National Incident Management System (NIMS) Incident Command System (ICS) during response operations.
Incident Objectives	Statements of guidance and direction necessary for the selection of appropriate strategies, and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives.
Incident Support Team (IST)	Company responders.
Industry	For the purpose of these guidelines, industry means the oil and hazardous substance industry required to submit response plans and comply with exercise requirements, as specified in appropriate vessel, facility, pipeline, and Outer Continental Shelf platform regulations. The USCG, EPA, PHMSA and BSEE administer these regulations.
Information Officer (IO)	A member of the Command Staff responsible for providing incident information to the public and news media or other agencies or organizations. There is only one Information Officer per incident. The Information Officer may have assistants.
Inland Area	The area shoreward of the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) defined in 80.740 – 80.850 of Title 33 of the CFR. The inland area does not include the Great Lakes.

Term	Definition
J	
Joint Information Center (JIC)	A facility established within, or near, the Incident Command Post where the Information Officer and staff can coordinate and provide incident information to the public, news media, and other agencies or organizations. The JIC is normally staffed with representatives from the FOSC, SOSC and RP.
Jurisdictional Agency	The agency having jurisdiction and responsibility for a specific geographical area, or a mandated function.
L	
Landing Zone	See "HELISPOT"
Lead Agency	The government agency that assumes the lead for directing response.
Leader	The ICS title for an individual responsible for a Task Force/Strike Team or functional Unit.
Liaison Officer (LO)	A member of the Command Staff responsible for coordinating with stakeholder groups and representatives from assisting and cooperating agencies.
Local On Scene Coordinator (LOSC)	Local Government Representative.
Logistics Section	The Section responsible for providing facilities, services and materials for the incident.
Lower Explosive Limit	Air measurement to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.
M	
Marinas	Small harbors with docks, services, etc. for pleasure craft.
Marine Facility	Any facility used for tank vessel wharfage or anchorage, including any equipment used for the purpose of handling or transferring oil in bulk to or from a tank vessel.
Marine Transportation Related Facility (MTR)	An on-shore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

Term	Definition
M (Cont'd)	
Maximum Most Probable Discharge	(Medium Oil Spill) - The size of the discharge as defined in 33 CFR 154.1020 (a discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge), 33 CFR 155.1020 (a discharge of 2,500 barrels of oil for vessels with an oil cargo capacity equal to or greater than 25,000 barrels, or 10 percent of the vessel's oil cargo capacity for vessels with a capacity of less than 25,000 barrels) - (for Coast Guard regulated facilities & vessels); for EPA regulated facilities, a discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank at the facility, whichever is less; for PHMSA and BSEE, the size of the discharge as defined in each agency's respective regulations, if appropriate; and the size of the discharge as defined in the respective Area Contingency Plan.
Medical Unit	Functional unit within the Service Branch of the Logistics Section responsible for developing the Medical Plan, and for providing emergency medical treatment for incident response personnel.
N	
National Contingency Plan	The plan prepared under the Federal Water Pollution Control Act (33 United State Code SS1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code SS9601 et seq), as revised from time to time.
Natural Resource	Land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.
Natural Resource Damage Assessment (NRDA)	The process of collecting and analyzing information to evaluate the nature and extent of injuries resulting from an incident, and determine the restoration actions needed to bring injured natural resources and services back to baseline and make the environment whole for interim losses. (15 CFR 990.30)
Nearshore Area	The area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico.
Non-Persistent or Group I Oil	Refers to a petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions -- a) At least 50% of which by volume, distill at a temperature of 340° C (645° F); and b) At least 95% of which by volume distill at a temperature of 370° C (700° F).
Northwest Area Contingency Plan (NWACP)	A geographically specific area plan, covering the coastal and inland zones of Idaho, Oregon, and Washington States, required by the National Contingency Plan (Title 40 Code of Federal Regulations Part 300).

Term	Definition
O	
Offshore Area	Refers to the area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR Part 7 extending seaward to 50 nautical miles, except in the Gulf of Mexico.
Oil or Oils	Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by P.L. 99-499.
Oil Spill Removal Organization (OSRO)	An entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provided required response resources.
Oily Waste	Oil-contaminated waste resulting from an oil spill or spill response operations.
Operating Area	refers to the Rivers and Canals, Inland, Nearshore, Great Lakes or Offshore geographic location(s) in which a facility is handling, storing or transporting oil.
Operating Environment	refers to Rivers and Canals, Inland, Great Lakes, or Ocean. These terms are used to define the conditions in which response equipment is designed to function.
Operational Period	The period of time scheduled for execution of a given set of operational actions specified in the Incident Action Plan. Operational Periods can be various lengths, usually not over 24 hours.
Operations Section	Responsible for all operations directly applicable to the primary mission. Directs unit operational plans preparation, requests or releases resources, makes expedient changes to the Incident Action Plan (as necessary) and reports such to the Incident Commander. Includes the Recovery and Protection Branch, Emergency Response Branch, Air Operations Branch, and Wildlife Branch.
Owner or Operator	Any person, individual, partnership, corporation, association, governmental unit or public or private organization of any character.
P	
Persistent Oil	Under OPA 90, persistent oils are petroleum-based oils that do not meet the distillation criteria for a non-persistent oil. Persistent oils are classified based on a specific gravities as follows: • Group II – specific gravity less than .85; • Group III – specific gravity between .85 and less than .95; • Group IV – specific gravity .95 to and including 1.0.; and • Group V – specific gravity greater than 1.0.

Term	Definition
P (Cont'd)	
Person	Any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual, or any other entity whatsoever.
Plan	Oil spill response, cleanup and disposal contingency plan.
Planning Meeting	A meeting, held as needed throughout the duration of an incident, to select specific strategies and tactics for incident control operations and for service and support planning.
Planning Section	Responsible for collecting, evaluating and disseminating tactical information related to the incident, and for preparing and documenting Incident Action Plans. The section also maintains information on the current and forecast situation, and on the status of resources assigned to the incident. Includes the Situation, Resource, Environmental, Documentation, and Demobilization Units, and Technical Specialists.
Primary Response Contractor(s)	An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.
Procurement Unit	Functional unit within the Finance/Administration Section responsible for financial matters involving vendor contracts.
R	
Recreational Areas	Publicly accessible locations where social/sporting events take place.
Regional Response Team (RRT)	A Federal response organization, consisting of representatives from specific Federal and state agencies, responsible for regional planning and preparedness before an oil spill occurs and for providing advice to the FOSC in the event of a major or substantial spill.
Repair	Any work necessary to maintain or restore a tank or related equipment to a condition suitable for safe operation.
Reporting Location	Any one of six facilities/locations where incident assigned resources may be checked in. The locations are: Incident Command Post-Resources Unit, Base, Camp, Staging Area, Helibase, or Division/Group Supervisors (for direct line assignments.) Check-in for each specific resource occurs at one location only.
Resources	All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.
Resources Unit	Functional unit within the Planning Section responsible for recording the status of resources committed to the incident. The Unit also evaluates resources currently committed to the incident, the impact that additional responding resources will have on the incident, and anticipated resource needs.
Response Activities	Refers to the containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the environment.

Term	Definition
R (Cont'd)	
Response Contractors	Persons/companies contracted to undertake a response action to contain and/or clean up a spill.
Response Guidelines	Guidelines for initial response that are based on the types of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.
Response Resources	The personnel, equipment, supplies and other capability necessary to perform the response activities identified in a response plan.
Response Plan	A practical plan used by industry for responding to a spill. Its features include (1) identifying the notification sequence, responsibilities, response techniques, etc. in an easy to use format; (2) using decision trees, flowcharts, and checklists to insure the proper response for spills with varying characteristics; and (3) segregating information needed during the response from that required by regulatory agencies to prevent confusion during a spill incident.
Responsible Party (RP)	The owner/operator of the vessel or facility that is the spill source.
Restoration	The actions involved in returning a site to its former condition.
Rivers and Canals	A body of water confined within the inland area that has a project depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.
S	
Safety Officer (SOFR)	A member of the Command Staff responsible for monitoring and assessing safety hazards or unsafe situations, and for developing measures for ensuring personnel safety. The Safety Officer may have assistants.
Self-Certification	Self-certification involves the following action on the part of the plan holder: 1) completed the exercise, 2) ensured the exercise met the required objectives, and 3) evaluated effectiveness of the plan based on exercise performance. Documentation must be approved and signed by an appropriate official within the organization.
Self-Evaluation	Self-evaluation means the plan holder evaluates effectiveness of the plan during the exercise using the stated objectives as minimum criteria and an evaluation process, which adequately measures performance. The plan holder is then responsible for correcting deficiencies identified in the evaluation process.
Ship	Any boat, ship, vessel, barge or other floating craft of any kind.
Single Resource	An individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.
Site Emergency	Means an incident has occurred and the entire terminal, with the exception of critical employees has been sheltered on-site or evacuated.

Term	Definition
S (Cont'd)	
Site Safety and Health Plan (SSHP)	Site-specific document required by state and Federal OSHA regulations and specified in the Area Contingency Plan. The SSHP, at minimum, addresses, includes, or contains the following elements: health and safety hazard analysis for each site task or operation, comprehensive operations workplan, personnel training requirements, PPE selection criteria, site-specific occupational medical monitoring requirements, air monitoring plan, site control measures, confined space entry procedures (if needed), pre-entry briefings (tailgate meetings, initial and as needed), pre-operations commencement health and safety briefing for all incident participants, and quality assurance of SSHP effectiveness.
Site Conditions	Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.
Situation Unit	Functional unit within the Planning Section responsible for collecting, organizing and analyzing incident status information, and for analyzing the situation as it progresses. Reports to the Planning Section Chief.
Skimmers	Mechanical devices used to skim the surface of water and recover floating oil. There are four basic categories of skimmers; suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices. These vary in efficiency depending on the type of oil and size of spill.
Sorbents	Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.
Source Control	Actions necessary to control the spill source and prevent the continued release of oil or hazardous substance(s) into the environment.
Span of Control	On how many organizational elements may be directly managed by one person. Span of Control may vary from three to seven, and a ratio of one to five reporting elements is recommended.
Spill Management Team (SMT)	The spill management team is the group of personnel identified to staff the appropriate organizational structure to manage spill response implementation in accordance with the response plans.
Spill Observer	The first company individual who discovers an oil spill. This individual must function as the responsible person-in-charge until relieved by an authorized supervisor.
Spill Response	All actions taken in responding to spills of oil and hazardous materials, i.e., receiving and making notifications; information gathering and technical advisory phone calls; preparation for and travel to and from spill sites; direction of clean-up activities; damage assessments; report writing, enforcement investigations and actions; cost recovery; and program development.

Term	Definition
S (Cont'd)	
Spill Response Personnel	Federal, State, Local agency, and industry personnel responsible for participating in or otherwise involved in spill response. All spill response personnel will be preapproved on a list maintained in each region.
Staging Area	The location where incident personnel and equipment are staged awaiting tactical assignment.
Stakeholders	Any person, group, or organization affected by, and having a vested interest in, the incident and/or the response operation.
State Emergency Response Commission (SERC)	A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Reauthorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.
State On-Scene Coordinator (SOSC)	The pre-designated State On-Scene Coordinator.
Strategy	The general plan or direction selected to accomplish incident objectives.
Strike Team	Specified combinations of the same kinds and types of resources, with common communications and a leader.
Supervisor	The ICS title for individuals responsible for directing the activities of a Division or Group.
T	
Tabletop Exercise (TTX)	A tabletop exercise is an activity in which key members of the plan holder's staff with emergency management responsibilities are gathered together informally, usually in a conference room, to discuss actions to be taken during an oil or hazardous substance spill, based upon the response plan and their standard operating procedures. The primary characteristic is a verbal "walk through" of a response. The tabletop exercise is designed to elicit constructive discussion by the participants, usually without time constraints, as they examine and resolve problems based on the response plan. A tabletop exercise has participants practice problem solving and resolve questions of coordination and assignment of responsibilities in a non-threatening format, under minimum stress.
Tactics	Deploying and directing resources during an incident to accomplish the desired objective.
Task Force	A group of resources with common communications and a leader assembled for a specific mission.
Technical Specialists	Personnel with special skills or technical expertise who can be used anywhere within the ICS organization.
Tribal On Scene Coordinator (TOSC)	Local Tribal Agency Representative.

Term	Definition
U	
Unified Command (UC)	A command structure consisting of the Federal On Scene Coordinator, the State On Scene Coordinator and the Responsible Party. The Unified Command is utilized during a spill response to achieve the coordination necessary to carry out an effective and efficient response.
Unit	The organizational element having functional responsibility for a specific incident planning, logistic, or finance/administration activity.
V	
Verification	The act of ensuring that an exercise was certified. The Coast Guard, EPA, PHMSA or BSEE will conduct verification.
Volunteer	For purpose of the NIMS, a volunteer is any individual accepted to perform services by the lead agency, which has authority to accept volunteer services, when the individual performs services without promise, expectation, or receipt of compensation for services performed. See, e.g., 16 U.S.C. 742f(c) and 29 CFR 553.101.
Wildlife Branch Director	Responsible for minimizing wildlife injuries during spill response.
Wildlife Rescue	Efforts made in conjunction with Federal and State agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.
Worst Case Discharge	The size of the discharge as defined in 33 CFR 154.1020 (in the case of an onshore facility and deepwater port, the largest foreseeable discharge in adverse weather conditions meeting the requirements of 33 CFR 154.1029), 33 CFR 155.1020 (a discharge in adverse weather conditions of a vessel's entire oil cargo) - (for Coast Guard regulated facilities & vessels); for EPA, the size of the discharge required in 40 CFR 112.20; for PHMSA and BSEE, the size of the discharge as defined in each agency's respective regulations, as appropriate; and the size of the discharge as defined in the respective Area Contingency Plan. For an on-shore non-transportation-related facility means - ". . . the largest foreseeable discharge in adverse weather conditions as determined using the [EPA Final Rule] . . . worksheets . . ." (EPA Final Rule, 40 CFR 112.2, July 1, 1994).

Acronyms

Acronym	Description
ACP	Area Contingency Plan
API	American Petroleum Institute
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
B	Beam
BBL	Barrel (Unit of Volume Equal to 42 Gallons)
BSEE	Bureau of Safety and Environmental Enforcement
C	Degrees Centigrade
CCR	California Code of Regulations
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
CG or USCG	Coast Guard
CGIS	Coast Guard Intelligence Service
CH	Cargo Hold
CMST	Crisis Management Support Team
CORE	Contingency Response
COTP	Captain of the Port
COW	Crude Oil Washing
C/S	General Cargo Ship
CSA	Canada Standards Association
CSC	International Convention for Safe Containers, 1972
CT	Cargo Tank
C/V	Container Vessel
CVS	Commercial Vessel Safety Program
CWA	Clean Water Act
DEIS	Draft Environmental Administration
DEM	Washington Department of Emergency Management
DL	Decision Letters
DOT/PHMSA	U.S. Department of Transportation/Pipeline & Hazardous Materials Safety Administration
DWT	Deadweight Tons
ECY	Washington Department of Ecology
EOC	Emergency Operations Center
	Explosive Ordinance Disposal
EP	Estimated Position
EPA	U.S. Environmental Protection Agency
EPR&S	TPTN Emergency Preparedness, Response & Security Group
ERT	Emergency Response Team

Acronym	Description
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FP	Flashpoint
FPS	Feet Per Second
FWPCA	Federal Water Pollution Control Act (as amended) (33 U.S.C. 1251 et seq.)
GPM	Gallons Per Minute
GT	Gross Tons
HAZMAT	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
HP	Horse Power
IC	Incident Commander
ICS	Incident Command System
IMAT	Incident Management Assistance Team
IMH	Incident Management Handbook
IS	Intrinsically Safe
IST	Incident Support Team
JTTF	Joint Terrorism Task Force
LEL	Lower Exposure Limit
LEPC	Local Emergency Planning Committee
LOSC	Local On Scene Coordinator
LPG	Liquefied Petroleum Gases
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level
MSRC	Marine Spill Response Corporation
N/A	Not Applicable
NC	Not Certified
NCP	National Contingency Plan
NIOSH	National Institute of Standards and Technology
NM	Nautical Mile
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRDA	Natural Resources Damage Assessment
NRT	National Response Team
NWACP	North West Area Contingency Plan
OPA 90	Oil Pollution Act of 1990
OSHA	Federal Occupational Safety and Health Administration

Acronym	Description
OSR	Oil Spill Response
OSRO	Oil Spill Response Organization
OVM	Organic Vapor Monitor
PEL	Permissible Exposure Limit
PHMSA	Pipeline and Hazardous Materials Safety Administration
PID	Photo Ionization Detector
PPE	Personal Protective Equipment
PSI	Pounds per square inch
QI	Qualified Individual
RA	Regional Administrator
RCRA	Resource Conservation and Recovery Act
RRT	Regional Response Team
SERC	State Emergency Response Commission
SI	Surface Impoundment
SIC	Standard Industry Codes
SMART	Special Monitoring for Applied Response Technologies
SOSC	State On-scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasures
TBD	To Be Determined
TPTN	Transportation
TOSC	Tribal On-scene Coordinator
USCG	U.S. Coast Guard
USGS	U.S. Geological Survey
U.S.	United States
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
UTV	Utility Vehicle
WT	Water Tight
WDFW	Washington State Department of Fish and Wildlife

Section II – Table of Contents

Sec. II-1 Discovery

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Company Emergency Response Team is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

Sec. II-2 Initial Response

Immediate actions are required at the onset of an emergency response to mitigate the extent of a release, minimize the potential hazard to human health and the environment, and implement an effective response. It is also important to act decisively and in so doing, create a professional working atmosphere among Company and regulatory authority personnel and public officials. This section is intended to provide guidance for determining the appropriate initial response and notification actions that should be carried out in the event of a release or other emergency incident.

General guidelines on the procedures and sequence for making the various internal and external notifications following any type of product release or other emergency incident can be found elsewhere in this plan in the applicable ICP Geographical Annex. The information provided herein focuses primarily on internal notifications and reporting with some general information provided for external notifications. Relevant external notifications will be found in the geographic specific ICP Geographical Annex along with all notification checklists applicable to that area.

Sec II-2.1 On-Scene Incident Commander / Qualified Individual

It is the On-Scene Incident Commander's / Qualified Individual's responsibility to first make the appropriate notifications, then to initiate response operations. This individual has absolute authority to obligate any funds necessary to carry out all required and/or directed response activities. This individual will also act as liaison with city, county, state and federal agencies. They are also responsible to direct operations of the Emergency Response Teams, activate the Company Emergency Management Team as appropriate as appropriate.

Sec. II-3 Notification Procedures

Primary communications for Company response activities will consist of the following:	
✓	Company mobile phones, hard line phones, faxes, and Company intranet devices.
✓	Communications needs beyond primary communications devices will be supplied by Company contracted OSRO's.

Sec II-3.1 Field Personnel

Any person who observes or becomes aware of a release shall immediately report the incident to the person in charge. Information related to the incident should be captured on the Incident Report Form located in this section.

The minimum duties required of the QI (or PIC for Marine Terminals) include:	
✓	Activate internal alarms and hazard communication systems to notify all facility personnel
✓	Notify all response personnel, as needed
✓	Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification
✓	Notify and provide necessary information to appropriate Federal, State, and local authorities with the designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Commission
✓	Assess the interaction of the spilled substance with water and/ or other substances stored at the facility and notify response personnel at the scene of that assessment
✓	Assess the possible hazards to human health and the environment due as a result of the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any hazardous surface waters runoffs from water or chemical agents used to control fire and heat-induced explosion)
✓	Assess and implement prompt removal actions to contain and then remove the substance released
✓	Coordinate rescue and response action as previously arranged with all response personnel
✓	Use authority to immediately access company funding to initiate response, mitigation and clean-up activities
✓	Direct clean-up activities until properly relieved of this responsibility

Sec II-3.2 Emergency Response Team Contact Information

The Emergency Response Team may be activated as a group or individually, depending upon the size, location, nature, and complexity of the incident.

The response organization is capable of providing trained personnel, services, and response equipment on a twenty-four hour per day basis.

Sec II-3.3 Field Notifications

1. Call 911 or local emergency phone number for the jurisdiction affected by the incident.
2. Notify Person In Charge.
3. Notify the Company Control Center.
4. Notify the Duty Officer to activate support resources, as needed.

Sec II-3.4 Required Notification Information

The Incident Report Form should be used to document information and to log notifications. Provide the following information regarding the incident, when making internal notifications:

- Brief description of the incident, including the location.
- The impact or potential impact.
- Contact name and telephone number to obtain follow-up information.

Sec II-3.5 Duty Officer Role

The Duty Officer is a support tool designed to provide communication assistance to the Company Incident Commander. The Duty Officer is in place to provide a 24/7 contact that can assist with internal notifications to facilitate a timely response to emergency situations.

NOTE: ***Regardless of the situation, the ultimate responsibility for making proper internal and external notification is with the Incident Commander.*** The Duty Officer is a support tool, available to the Incident Commander to ensure that timely internal and external notifications are made in an effective and efficient manner.

Sec II-3.5.1 Duty Officer Response

When notified, the duty officer will contact the requested company representative (SME), following the detailed requests received by the caller, the Notification Flowchart and Internal Contact List. The company representative (SME) will determine the applicable internal and external notifications and ensure that they are completed. The SME will also ensure that other appropriate company representatives (SME) have been notified in the notification process.

Sec II-3.6 Emergency “Meet-Me” Conference Line Activation

The company has established a transportation conference number that is active 24/7 to assist in the management of emergencies. (Refer to the List of Contacts, Emergency Notification Telephone List, located in this plan for support resource contact information), dial the number and pass code listed; instruct others involved in the incident to do the same. The line is capable of receiving up to thirty phone connections simultaneously to assist in the management of the event.

Sec II-3.7 Incident Reporting Guidance

Refer to the Company Website.

Sec II-3.8 Notifications Requirements & Threshold Criteria

Each business unit, staff or group shall provide notification to Corporate Executive Management via the 24-hour Notification Hotline as soon as possible after the occurrence of any incident that meets the Notification Threshold Criteria.

Crisis Management Notification Requirements & Thresholds	
✓	The following identify internal and external reporting thresholds.
• Incidents	
✓	An incident resulting in an on-the-job employee or contractor fatality, or public fatality.
✓	Lost workday on-the-job injury to an employee or contractor.
✓	Resulting in one or more injuries requiring immediate overnight hospitalization and treatment of employee, contractor or the public.
✓	Incident resulting in multiple injuries/illnesses to employees, contractors or to the public.
• Spills and Releases	
✓	To environmentally sensitive areas, national parks or wildlife habitats and refuges which are likely to attract media attention or cause closure, stoppage or re-routing of traffic on a public road or waterway.
✓	Liquid hydrocarbon spills or releases from primary containment greater than 100 bbls (15.9 cubic meters).
✓	Hazardous chemical spills or releases from primary containment greater than 5,000 bbls (2.27 metric tons).
✓	On-shore produced water spills or releases greater than 100 bbls (15.9 m^3).
✓	Spills of an unknown volume in an area adjacent to waters of the state (including any environmental conditions that may worsen potential impact).
• Property Damage/Business Interruption	
✓	Property damage events likely to exceed $100,000.00 (USD) in estimated damages (Examples: fire, explosion, acts of nature, vandalism, theft, etc.).
✓	Any situation that should be brought to the attention of Corporate Management (CM&ER) due to actual or potential impact on the Company such as: Unscheduled business interruption that will likely result in $1, 000, 000 (USD) or more in estimated losses. This also applies to Partner/JV operated operations that meet the criteria.
• Evacuation/Shelter-In-Place	
✓	Evacuation beyond facilities of Company employees' and contractor personnel.
✓	Shelter-In-Place of the public
✓	Mandatory evacuation of the public.
• Well Control Incidents	
✓	Loss of surface well control that endangers the rig, onsite personnel or the environment.

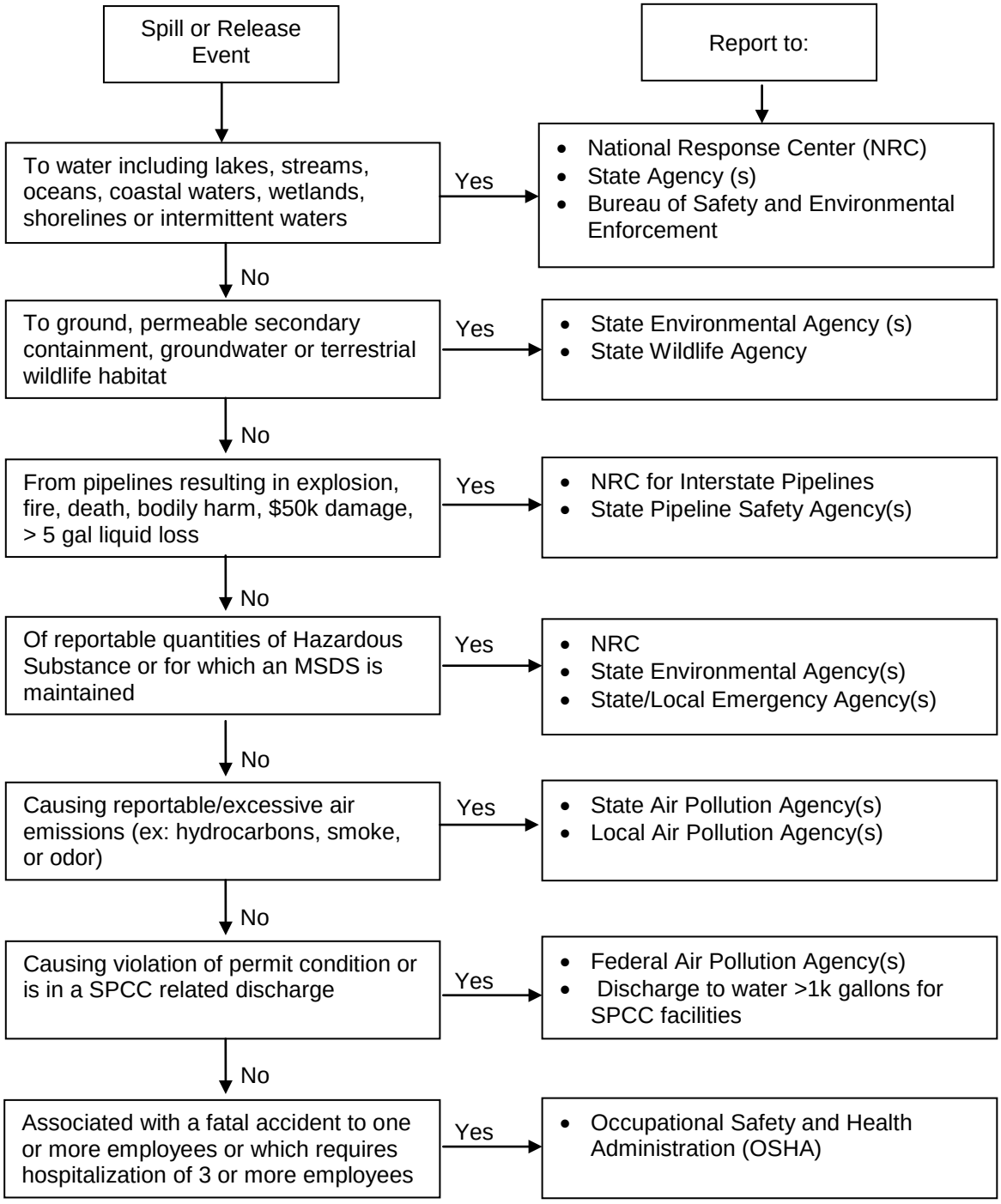
• Public Relation/Actual or Potential Impact	
✓	Serious transportation issues such as derailments involving our products and spills or releases resulting in traffic stoppage or evacuations.
✓	Acts of terrorism (e.g. bomb threats, sabotage, kidnapping, employee violence, etc.).
✓	That attracts, or could attract media attention including, but not limited to confrontations with anti-industry groups.
✓	Multiple complaints of acute illness by third parties allegedly caused by Company operations or products (i.e.: calls by more than one individual.).
• External Department of Transportation Reporting Thresholds	
✓	An incident involving a pipeline system failure that resulted in either a fire or explosion not intentionally set by the operator; or significant, in the judgment of the operator, even though it did not meet any other criteria as listed in this section.
✓	Spill or release to environmentally sensitive areas, as described by the Department of Transportation (DOT)
✓	Spill or release in any water of the United States.
✓	Spill cleanup/product loss costs reaching and exceeding $50,000.00.
✓	Property Damage costs reaching and exceeding $50,000.00
Transportation – HSE Manager Reporting Threshold	
In addition to above threshold criteria for incidents, the following requires notification to the Transportation HSE Manager or alternate as per the Incident Notification and Investigation Policy:	
✓	An incident involving an employee or contractor OSHA recordable injury or illness.

Sec II-3.9 Notification and Support Teams

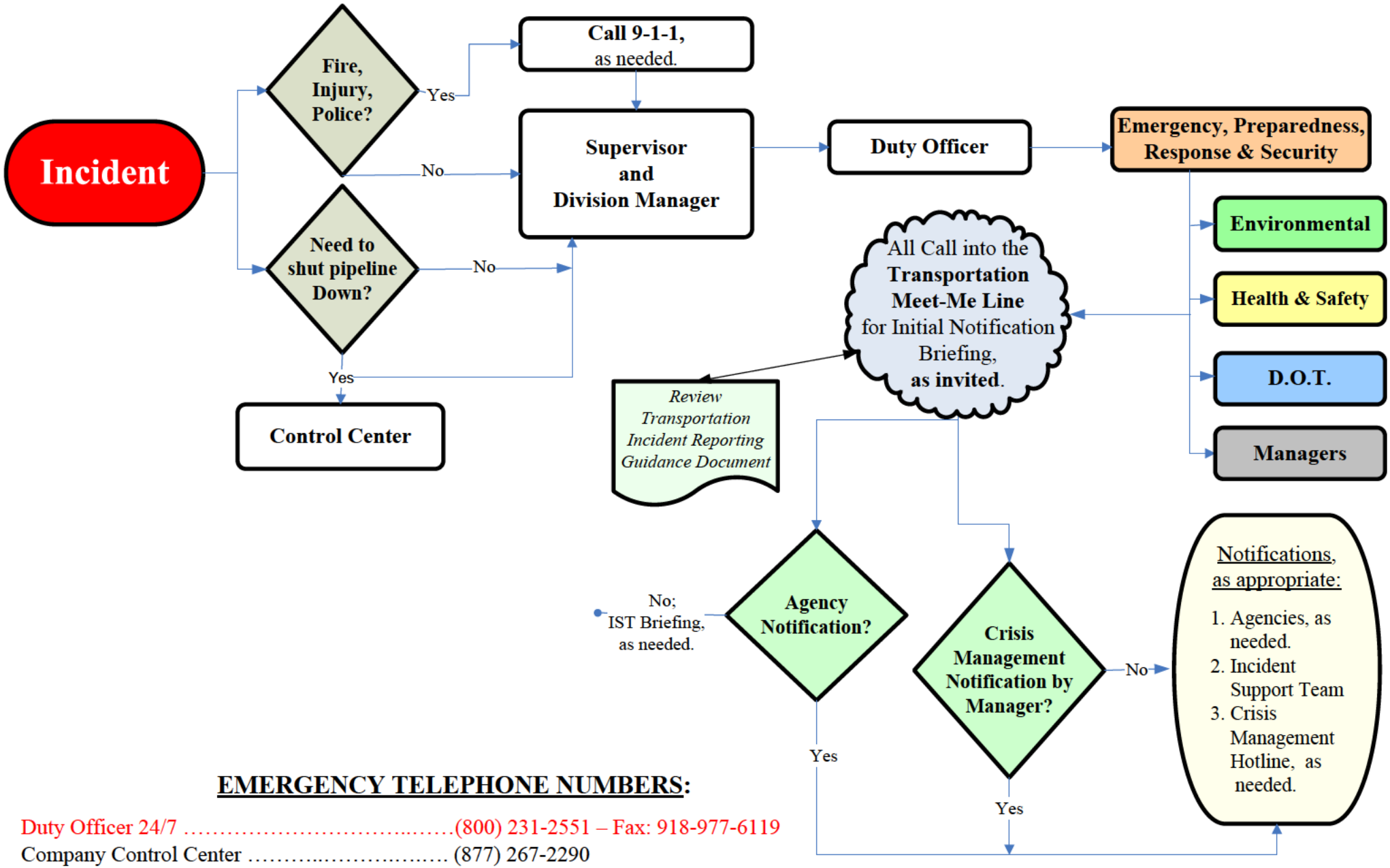
Subject Matter Expert (SME) – Primary Company Representative	
Contacts in the following areas provide support for internal and external notifications; assist with supporting plans, assessment and documentation:	
✓	Environmental Director
✓	Health & Safety Director
✓	DOT Regulatory Compliance Manager
✓	Emergency Preparedness, Response & Security Director

Incident Support Team (IST)	
Consists of the personnel in the following positions:	
✓	Pipelines Manager
✓	Terminals Manager
✓	Division Managers
✓	Logistics Manager
✓	Engineering & Projects Manager
✓	Health, Safety & Environmental Manager
✓	Emergency Preparedness, Response & Security Director
✓	TPTN Tier 1 Team and/or any other support staff, as deemed necessary by the IST, or requested by the IC.
Company Away Team	
Activation of the team can be made through the Crisis Management Hotline. Follow the Notification Flowchart located in this Section. A description of the Company Away Team organization is as follows:	
✓	Approximately 18 ICS positions can be staffed a minimum of three personnel deep.
✓	The team is made up of Company volunteers from across North America
✓	Operations Division/Group Leaders are available
✓	One hundred plus personnel are available for activation
✓	Will assist with activation, deployment and integration of the ICS spill response organization
✓	Resources also include dedicated communications equipment (i.e., computers, phones, radios, etc.).
✓	Typically the team members attend two weeks of response training and/or exercises annually. Additionally, specialized training in Fire & HAZMAT Response, Oil Spill Response, Incident Command System (NIMS) and Incident/Consequence Management is provided depending on the ICS position.
Tier 1 Response	
✓	Any response that can be effectively managed completely within Transportation services, including functional resources and contractors.
Tier 2 Response	
✓	Any response that requires resources beyond Transportation's ability to effectively manage (i.e., one or more away team resource(s) are deployed to assist with response management).
Tier 3 Response	
✓	Any response that requires the activation of the Crisis Management Support Team (CMST) to assist with the management of the response.

Figure Sec II-1 Overview of External Notifications for Major Incidents



Transportation Notifications Flowchart



EMERGENCY TELEPHONE NUMBERS:

Duty Officer 24/7 ……..……(800) 231-2551 – Fax: 918-977-6119
Company Control Center ……..…….…… (877) 267-2290
Transportation Meet Me Conference Line ……..(866) 836-3169; Pass Code: 157528
Axiom Medical Consulting ……..…… (281) 419-7063
Employee Hotline (Evacuation & Natural Disaster)….. (866) 397-3822
Crisis Management Hotline ……..(855) 699-8701 *or* (832) 765-3500

Revision: 20130129

Figure Sec II-3 Transportation Incident Notification & Reporting Tool

QI/IC Field Version

The following incidents should be immediately reported to the Transportation Duty Officer. The Transportation Duty Officer will contact the on-call Transportation Emergency Preparedness, Response and Security (EPR&S) team member. EPR&S will contact the person reporting the incident to the Duty Officer to determine the level of response and support required and if an Incident Briefing meeting should be scheduled. Incidents marked as "Crisis Hotline Notification" will need to be immediately reported to the Transportation Duty Officer. Transportation HSE is responsible for reporting incidents to the Crisis management Hotline.

Incident Notification Criteria **Duty Officer Number: 1-800-231-2551**
INJURY:
Incident resulting in an on-the-job employee, contractor or public fatality.
Incident resulting in one or more injuries requiring immediate overnight hospitalization and treatment of employee, contractor or the public.
Incident resulting in multiple injuries/illnesses to employees, contractors or the public.
SPILLS/RELEASES:
Greater than 5-gallons, or potential to exceed 5-gallons. This includes suspected, but not yet confirmed potential leaks.
HVL (Any volume.)
To environmentally sensitive areas, any water of the United States, national Parks or wildlife habitats and refuges. (Any volume)
That attracts or is likely to attract media attention.
That causes closure, stoppage or re-routing of traffic on public road or waterway.
PROPERTY DAMAGE/BUSINESS INTERRUPTION:
Property damage events exceeding or likely to exceed $25,000 in estimated damages (example fire, explosion, pipeline repairs, collision, act of nature, vandalism, theft, etc.)
Unscheduled business interruption events exceeding or likely to exceed $1,000,000 (USD) or more in estimated losses regardless of cause.
EVACUATION/SHELTER IN PLACE
Evacuation beyond facilities of employees or contractor personnel (includes evacuation as a result of storms or threat of storms).
Shelter-In-Place of employees or contractors.
Shelter-In-Place or mandatory evacuation of the public.
PUBLIC RELATIONS/ACTUAL OR POTENTIAL COMPANY IMPACT
Any situation that attracts or is likely to attract media attention.
Serious transportation incidents such as derailments involving our products resulting in a closure of a public road and/or re-routing or stoppage of traffic.
Acts of terrorism (bomb threat, sabotage, kidnapping, employee violence, etc.)
Confrontations with anti-industry groups that could attract media attention.
Multiple complaints of acute illness by third parties allegedly caused by our operations or products (i.e. calls by more than one individual)
SECURITY
Theft or Vandalism of Company property, equipment and/or facility
Security Breach (trespassing)
Suspicious activity (Picture tacking, parking near facility, etc.)
Threats by telephone or warnings from local enforcement.

Sec II-3.10 External Notifications

Sec II-3.10.1 Agencies (Federal, State & Local)

The Incident Commander is responsible for assuring that all required notifications/reports are completed in a timely manner for all incidents. All contacts with Local, State, and Federal regulatory agencies must be properly documented. The Duty Officer is a support tool designed to provide communication assistance to the Company Incident Commander. The Duty Officer is in place to provide a 24/7 contact to assist the Incident Commander with internal support team notifications to facilitate a timely response to emergency situations. Refer to the Transportation Notifications Flowchart, Incident Notification and Reporting Tool and the Incident Report Form located in this section. Upon completion of the initial notifications and the implementation of the initial response actions, periodic follow-up notifications should be made to the National Response Center and state agencies to provide updated information on the incident. The internal support teams may assist the Incident Commander with follow-up information to the agencies.

Sec II-3.10.2 National Response Center (NRC)

NRC	
If you have a spill/release to report, contact the NRC via the toll-free number or visit the NRC Web Site (http://www.nrc.uscg.mil) for additional information on reporting requirements and procedures. **Refer to Annex 2 Notifications**.	
Reporting Requirements	
☐ **Type**	All spills that impact or threaten navigable water or adjoining shorelines
☐ **Verbal:**	Within 1 Hour of release
☐ **Written:**	As requested by the agency

Sec II-3.10.3 Environmental Protection Agency (EPA)

EPA	
Refer to Annex 2 Notifications.	
Reporting Requirements	
Type	All spills that impact or threaten navigable water or adjoining shorelines
Verbal:	As soon as possible
Written:	As requested by the agency

Sec II-3.10.4 United States Coast Guard (USCG)

Refer to Annex 2 Notifications.	
Reporting Requirements	
Type	All spills that impact or threaten navigable water or adjoining shorelines
Verbal:	As soon as possible
Written:	As requested by the agency

Sec II-3.10.5 Department of Transportation (DOT) – Pipeline and Hazardous Materials Safety Administration (PHMSA)

DOT/PHMSA	
Refer to Annex 2 Notifications.	
Reporting Requirements	
In addition to the reporting of accidents to the NRC, a written/electronic accident report (DOT/PHMSA F 7000-1), must be submitted as soon as practicable but no later than 30 days after the incident for releases resulting in the following:	
☐	Caused a death or a personal injury requiring hospitalization.
☐	Explosion or fire not intentionally set by the operator.
☐	Caused estimated property damage, including cost of cleanup and recover, value of lost product, and damage to the Company property or others or both, exceeding $50,000.
☐	Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines.
☐	In the judgment of the Incident Commander/Qualified Individual that the event was significant enough even though it did not meet the criteria of any of the above incidents.
The electronic form can be found at https://opsweb.phmsa.dot.gov. Notify the appropriate DOT Coordinator to complete the DOT/PHMSA F 7000-1.	

Sec II-3.10.6 Occupational Safety & Health Administration

OSHA *Occupational Safety & Health Administration*	
Refer to Annex 2 Notifications.	
Reporting Requirements	
☐	Basic requirement. Within eight (8) hours after the death of any employee from a work-related incident or the in-patient hospitalization of three or more employees as a result of a work-related incident, you must orally report the fatality/multiple hospitalization by telephone or in person. In accordance with 29 CFR 1904.39 the following information is to be supplied to OSHA when reporting an incident: ☐ Company name; ☐ Location of the Incident; ☐ Time of Incident; ☐ Number of fatalities or hospitalized employees; ☐ Names of any injured employees; ☐ Contact person and his/her phone number; ☐ A brief description of the incident.

Sec II-3.10.7 State and Local notifications

All required State and Local notifications will be listed as well. They can be found in the applicable **Annex 2 Notifications**.

Sec II-3.10.8 Follow-up Notifications

Upon completion of the initial notifications and the implementation of the initial response actions, periodic follow-up notifications shall be made to the National Response Center and State Agencies to provide updated information on the incident including (before to have you:	
•	Name of facility or pipeline
•	Time of release
•	Location of discharge
•	Name of material involved
•	Reason for discharge (e.g., material failure, excavation damage, corrosion, etc.)
•	Estimated volume of oil/product discharged
•	Weather conditions on-scene
•	Actions taken or planned by persons on scene

Sec II-3.10.9 Incident Command Posts

The Company has determined Incident Command Post (CP) locations within each operating area where adequate resources are available to command an incident. In response to most incidents, a CP is established at existing Company facilities. In the event of a significant incident for which Company facilities are not adequate, a more appropriate Command Post location must be selected based on the incident circumstances. Possible sources of other CP locations would include appropriate government, public, and commercial facilities available for CP purposes. Local governments usually maintain facilities which have been pre-designated for CP purposes. These facilities are often prescribed in Area Contingency Plans and/or local governments' Emergency Operations Plans.

Incident Command Post Characteristics	
•	Initial CP location should consider the nature and expected duration of the incident. The location is a safe area usually near the incident. The CP can be moved if necessary, although once established, it will normally not be relocated.
•	The CP should have the ability to provide security and controlled access.
•	The CP should be large enough to provide adequate working room for all assigned personnel, including agency representatives.
•	The CP should provide the resources necessary to manage the incident, e.g., meeting rooms, communications equipment, documentation equipment, materials and supplies needed to support the command function, etc.
•	The incident Communications Center, if established at an incident, is often located with or adjacent to the CP.

Sec II-3.10.10 Documentation

Documentation of a spill provides not only a historical account covering the entire period from pre-spill through cleanup actions to final post-spill assessment, but also serves as a legal instrument and a means to account for all cleanup costs. Documentation relies heavily upon detection and assessment functions, and together these functions provide the necessary data on the extent of the spill and the necessity for control measures. While facility personnel are in charge of this important function, it may be desirable to utilize consultants who can provide overall guidance on type of data collection required and, where necessary, assist in data collection or provide sampling survey personnel.

An important aspect to bear in mind when designing forms and entering data is to use a quantitative system. Avoiding relative or arbitrary terms such as large, small, thick, thin, a lot, not much, etc. These cause confusion and are not comparable between locations and individuals.

To ensure that all pertinent data and information are available for the incident report, documentation should commence immediately upon notification of a spill and should continue until termination of all operations. The Documentation Unit Leader should coordinate all documentation. The documentation unit leader, incident commander, deputy incident commander, directors, supervisors, and designated support personnel should keep notes on all significant occurrences, including details and time of occurrence. Notes are best kept in chronological log format, to be compiled later in the final report. Every contact, written or verbal, with government personnel should be noted. All data should be written in a bound notebook, from which pages cannot be removed without leaving some track. Numbering of notebooks and pages may also help in filing of field data and provide for a method of reference later. These notebooks should also be used by supervisory personnel for documentation of an individual's activities. The Documentation Unit Leader should be responsible for distributing suitable notebooks to all personnel, and for assuring that personnel make proper use of the notebooks.

Sec. II-4 Response Management System

This Section describes specific duties and responsibilities of the members of the Company Response Team. This section should be used as a guide; specific circumstances during an incident response may require different actions. Certain duties, responsibilities and position titles listed here may not be needed in all circumstances and may change with time as the response evolves.

The Company response team consists of trained personnel that will respond to all company emergency incidents. Trained and qualified OSRO personnel will be called on fill ICS/UCS roles as required, including but not limited to positions in the Operations, Planning and Logistics sections.

Sec. II-4.1 Incident Command System Structure

The Company has adopted the National Incident Management System (NIMS) ICS/UCS organization as outlined in:

- Homeland Security Presidential Directive Five (HSPD-5)
- National Response Plan (NRP), December 2005

All Federal, State, tribal, and local levels of government, as well as many private sector and non-governmental organizations use ICS/UCS for a broad spectrum of emergencies. These range from small to complex incidents, both natural and manmade, and include acts of catastrophic terrorism. The Company has adopted the NIMS ICS/UCS to allow the partnership of Unified Command to be developed when required in training, exercises or responses.

Note: The document, FEMA 501, National Incident Management System was referenced in the development of this document.

ICS/UCS Organization	
The ICS/UCS is applicable across a spectrum of incidents that may differ in terms of size, scope, and complexity because of its:	
✓	Functional unit management structure.
✓	Modular organizational structure that is extendable to incorporate all necessary elements. Responsibility and performance begin with the incident command element, the IC/UC, and build from the top down.

Functional Areas	
ICS/UCS is usually organized around five major functional areas:	
✓	Command
✓	Operations
✓	Planning
✓	Logistics
✓	Finance/administration.
The IC will establish the sixth functional area, intelligence, based on the requirement of the situation at hand.	

Transitional Steps	
Some of the more important transitional steps that are necessary to apply ICS/UCS in a field incident environment include the following:	
✓	Recognize and anticipate the requirement that organizational elements will be activated and take the necessary steps to delegate authority as appropriate.
✓	Establish incident facilities as needed, strategically located, to support field operations.
✓	Establish the use of common terminology for organizational functional elements, position titles, facilities, and resources.
✓	Rapidly evolve from providing oral direction to the development of a written IAP.

Modular Extension	
The modular concept is based upon the following considerations:	
✓	Develop the form of the organization to match the function or task to be performed.
✓	Staff only those functional elements that are required to perform the task.
✓	Observe recommended span-of-control guidelines.
✓	Perform the function of any non-activated organizational element at the next highest level.
✓	Deactivate organizational elements no longer required.

Management Assignments	
The IC's initial management assignments will normally be one or more section chiefs to manage the major ICS/UCS functional areas.	
✓	Section chiefs will further delegate management authority for their areas as required.
✓	If needed, section chiefs may establish branches or units as appropriate for the section.
✓	Each functional unit leader will further assign individual tasks within the unit as needed.
✓	Section chiefs serve as the general staff for the IC.

Staffing	
Use the separate sections to organize staff as the need arises.	
✓	Section chiefs will further delegate management authority for their areas as required.
✓	If needed, section chiefs may establish groups/branches/units as appropriate for the section.

Leadership Titles	
✓	Incident Command; Incident Commander.
✓	Command Staff; Officer.
✓	Section; Section Chief.
✓	Branch; Branch Director.
✓	Divisions/Groups; and Supervisors (Supervisor is only used within the operations section).
✓	Unit; and Unit Leader (Applies to the subunits of the planning, logistics, and finance / administration sections).

Partners	
Several types of agencies could be in the ICS/UCS, and work together or in combinations depending on the situation.	
✓	Fire
✓	Law enforcement
✓	Public health
✓	Public works/ Emergency services
✓	State Agencies
✓	Tribal Representatives
Other participants may include private individuals, companies, or nongovernmental organizations, some of which may be fully trained and qualified to participate as partners in the ICS/UCS.	

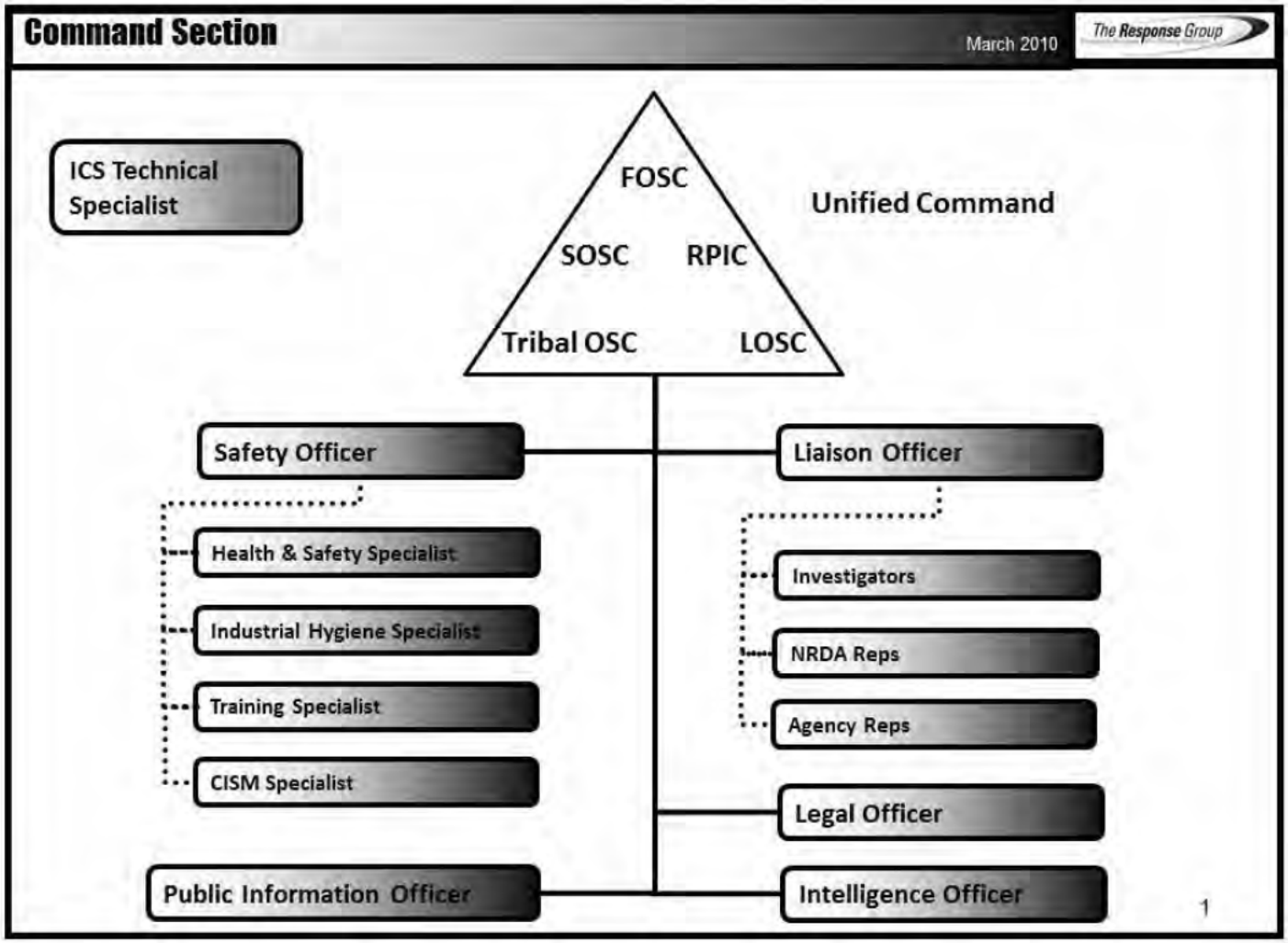
Tactical Operations	
The specific method selected for organizing and executing incident operations will depend on the:	
✓	Type of incident.
✓	Agencies involved.
✓	Objectives and strategies of the incident management effort.

Organization	
The organizational structure for incident tactical operations can vary and may be based on:	
✓	A method to accommodate jurisdictional boundaries.
✓	An approach that is strictly functional in nature.
✓	A mix of functional and geographical approaches.

Branches	
Establish branches in ICS/UCS for reasons such as:	
✓	The numbers of divisions and/or groups exceed the recommended span of control for the operations section chief.
✓	The nature of the incident calls for a functional branch structure.
✓	The incident is multi-jurisdictional.

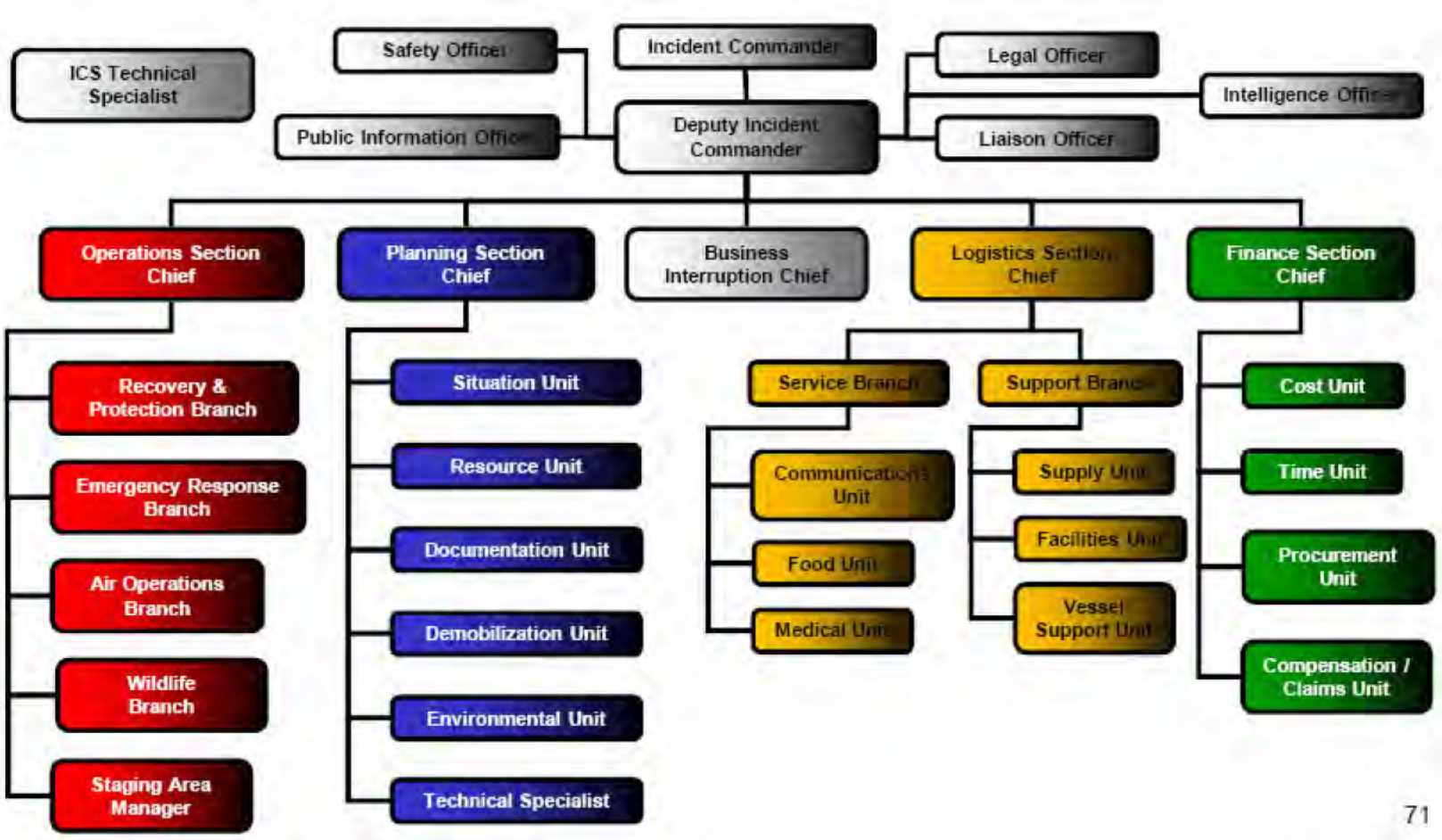
Sec. II-4.2 Company Organization

Figure 4.2.1 Company Command Staff Organization Chart (Sample from IMH)



Sec. II-4.2 Company Organization

Figure 4.2.2 Company IMT Organization Chart (Sample from IMH)



Sec. II-4.3 Common Responsibilities

Common Responsibilities Checklist	
Receive assignment from your agency, including:	
☐	Job assignment (e.g., Strike Team designation, position, etc.).
☐	Brief overview of type and magnitude of incident.
☐	Resource order number and request number.
☐	Reporting location & time.
☐	Travel instructions.
☐	Any special communications instructions (e.g., travel, radio frequency).
☐	Monitor incident related information from media, internet, etc., if available.
☐	Assess personal equipment readiness for specific incident and climate (e.g.) medications, money, computer, medical record, etc.). Maintain a checklist of items and possible a personal Go-Kit.
☐	Inform others as to where you are going and how to contact you.
☐	Review Incident Management Handbook.
☐	Take advantage of available travel to rest prior to arrival.
Upon arrival at the incident, check-in at the designated check-in location. Check-in may be found at any of the following locations:	
☐	Incident Command Post (CP), Base/Camps, Staging Areas, and Helibases.
☐	If you are instructed to report directly to a line assignment, check-in with the Division/Group Supervisor.
☐	Receive briefing from immediate supervisor.
☐	Agency Representatives from assisting or cooperating agencies report to the Liaison Officer (LNO) at the CP after check-in.
☐	Acquire work materials.
☐	Abide by organizational code of ethics.
☐	Participate in IMT meetings and briefings as appropriate.
☐	Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
☐	Supervisors shall maintain accountability for their assigned personnel with regard as to exact location(s) and personal safety and welfare at all times, especially when working in or around incident operations.
☐	Organize and brief subordinates.
☐	The Command and General staff shall ensure branches are identified, set up and allocate divisions and groups within them to stay within the recommended span of control. (1 Supervisor per 7 people) Put in Common Responsibilities
☐	Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
☐	Use clear text and ICS/UCS terminology (no codes) in all radio communications.
☐	Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
☐	Ensure all equipment is operational prior to each work period.
☐	Report any signs/symptoms of extended incident stress, injury, fatigue or illness for yourself or coworkers to your supervisor.

Common Responsibilities Checklist (Cont'd)	
☐	Respond to demobilization orders and brief subordinates regarding Demobilization.
☐	Prepare personal belongings for demobilization.
☐	Return all assigned equipment to appropriate location.
☐	Complete Demobilization Check-out process before returning to home base.
☐	Participate in After-Action activities as directed.
☐	Carry out all assignments as directed.

Sec. II-4.4 Roles and Responsibilities

Sec. II.4.4.1 Incident Commander and Deputy IC Responsibilities

The Incident Commander's responsibility is the overall management of the incident. On most incidents, the command activity is carried out by a single IC. The IC is selected by qualifications and experience. The IC may have a deputy, who may be from the same agency, or from an assisting agency. Deputies may also be used at the section and branch levels of the ICS/UCS organization. Deputies may have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time. When span of control becomes an issue for the IC, a Deputy IC/Chief of Staff may be assigned to manage the Command Staff.

Incident Commander and Deputy IC Checklist	
☐	Review common responsibilities.
☐	Obtain a briefing from the prior IC (201 Briefing).
☐	Determine incident objectives & general direction for managing the incident.
☐	Establish the immediate priorities.
☐	Establish a CP.
☐	Brief Command Staff and General Staff.
☐	Establish an appropriate organization.
☐	Ensure planning meetings are scheduled as required.
☐	Approve and authorize the implementation of an IAP.
☐	Ensure that adequate safety measures are in place.
☐	Coordinate activity for all Command and General Staff.
☐	Coordinate with key people and officials.
☐	Approve requests for additional resources or for the release of resources.
☐	Keep internal and external stakeholders informed.
☐	Evaluate/Approve the use of trainees, volunteers, and auxiliary personnel.
☐	Authorize release of information to the news media.
☐	Ensure ICS 209 is completed and forwarded to appropriate higher authority.
☐	Order the demobilization of the incident when appropriate.

Sec. II.4.4.2 Safety Officer

The Safety Officer (SOFR) function is to develop and recommend measures for assuring personnel safety and to asses and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident. The SOFR may have specialists, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as air operations, hazardous materials, etc.

Safety Officer Checklist	
☐	Review Common Responsibilities.
☐	Identify hazardous situations associated with the incident.
☐	Complete the initial incident action plan site safety and control analysis (ICS Form 201-5)
☐	Participate in tactics and planning meetings, and other meetings and briefings as required.
☐	Review the IAP for safety implications.
☐	Provide safety advice in the IAP for assigned responders.
☐	Exercise emergency authority to stop and prevent unsafe acts.
☐	Investigate accidents that have occurred within the incident area.
☐	Assign assistants, as needed.
☐	Review and approve the medical plan (ICS Form 206).
☐	Develop the site safety plan and publish site safety plan summary (ICS Form 208) as required.

Sec. II.4.4.3 Public Information Officer

The Public Information Officer (PIO) is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. Only one primary PIO will be assigned for each incident, including incidents operating under a Unified Command (UC) and multiple jurisdiction incidents. The PIO may also have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. Agencies have different policies and procedures relative to the handling of public information.

Public Information Officer Checklist	
☐	Review Common Responsibilities.
☐	Determine from the IC/UC if there are any limits on information release.
☐	Develop material for use in media briefings.
☐	Obtain IC/UC approval of media releases.
☐	Inform media and conduct media briefings.
☐	Arrange for tours and other interviews or briefings that may be required.
☐	Manage a Joint Information Center (JIC) if established.
☐	Obtain media information that may be useful to incident planning.
☐	Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.

Sec. II.4.4.4 Liaison Officer

Incidents that are multi-jurisdictional, or have several agencies involved, may require the establishment of the Liaison Officer (LNO) position on the Command Staff. Only one primary LNO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LNO is assigned to the incident to be the contact for assisting and/or cooperating Agency representatives.

Liaison Officer Checklist	
☐	Review common responsibilities.
☐	Be a contact point for agency representatives.
☐	Maintain a list of assisting and supporting agencies, including name and contact information. Monitor check-in sheets daily to ensure that all agency representatives are identified.
☐	Assist in establishing and coordinating interagency contacts.
☐	Keep agencies supporting the incident aware of incident status.
☐	Monitor incident operations to identify current or potential inter-organizational problems.
☐	Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
☐	Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the Operations Section Chief during oil and HAZMAT responses.
☐	Coordinate response resource needs for incident investigation activities with the Operations Section Chief.
☐	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
☐	Brief IC/UC on agency issues and concerns.
☐	Have debriefing session with the IC/UC prior to departure.
☐	Coordinate activities of visiting dignitaries.

Sec. II.4.4.5 ICS/UCS Technical Specialist

ICS/UCS Technical Specialist Checklist	
☐	Review common responsibilities.
☐	Determine site specific training requirements and need for a training program.
☐	Develop site specific training program and implement as necessary.
☐	Determine the feasibility of using trainees in the response.
☐	Review trainee assignments and modify if appropriate.
☐	Coordinate the assignments of trainees to incident positions with the Resources Unit.
☐	Keep the Safety Officer apprised of status of compliance with training requirements.
☐	Make follow-up contacts in the field to provide assistance and advice for trainees to meet training objectives, as appropriate, and with approval of Unit Leaders to ensure trainees receive performance evaluation.
☐	Monitor operational procedures and evaluate training needs.
☐	Respond to requests for information concerning training activities.
☐	Give the Training Specialist records and logs to the Documentation Unit at the end of each operational period.
☐	Maintain Unit Log (ICS 214).

Sec. II.4.4.6 Legal Officer

Legal Officer Checklist	
☐	Review common responsibilities.
☐	Obtain briefing from the Incident Commander.
☐	Advise the Incident Commander (IC) and the Unified Command (UC), as appropriate, on all legal issues associated with response operations.
☐	Establish documentation guidelines for and provide advice regarding response activity documentation to the response team.
☐	Provide legal input to the Documentation Unit, the Compensation/Claims Unit, and other appropriate Units as requested.
☐	Review press releases, documentation, contracts and other matters that may have legal implications for the Company.
☐	Participate in Incident Command System (ICS) meetings and other meetings, as requested.
☐	Participate in incident investigations and the assessment of damages (including natural resource damage assessments).
☐	Maintain Individual/Activity Log (ICS Form 214a).

Sec. II.4.4.7 Intelligence/Security Officer

Intelligence/Security Officer Checklist	
☐	Collect and analyze incoming intelligence information from all sources.
☐	Determine the applicability, significance, and reliability of incoming intelligence information.
☐	As requested, provide intelligence briefings to the IC/UC.
☐	Provide intelligence briefings in support of the Incident Command System Planning Cycle.
☐	Provide Situation Unit with periodic updates of intelligence issues that impact consequence management operations.
☐	Answer intelligence questions and advise Command and General Staff as appropriate.
☐	Supervise, coordinate, and participate in the collection, analysis, processing, and dissemination of intelligence.
☐	Assist in establishing and maintaining systematic, cross-referenced intelligence records and files.
☐	Establish liaison with all participating law enforcement agencies including the CGIS, FBI/JTTF, State and Local police departments.
☐	Conduct first order analysis on all incoming intelligence and fuse all applicable incoming intelligence with current intelligence holdings in preparation for briefings.
☐	Prepare all required intelligence reports and plans.
☐	As the incident dictates, determine need to implant Intelligence Specialists in the Planning and Operations Sections.

Sec. II.4.4.8 Operations Section Chief

The Operations Section Chief (OSC), a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The OSC will normally be selected from the organization/agency with the most jurisdictional responsibility for the incident and will work in the ICP.

The OSC activates and supervises organization elements in accordance with the IAP and directs its execution. The OSC also directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the IAP, as necessary, and reports such to the IC. The OSC may have deputy OSC's who may be from the same organization or from an assisting agency. In complex incidents, the OSC may assign a Deputy OSC to supervise on-scene operations.

Operations Section Chief Checklist	
☐	Review common responsibilities.
☐	Obtain briefing from IC/UC.
☐	Request sufficient section supervisory staffing for both ops & planning activities.
☐	Convert operational incident objectives into strategic and tactical options through a work analysis matrix.
☐	Coordinate and consult with the PSC, SOFR, technical specialists, modeling scenarios, trajectories on selection of appropriate strategies and tactics to accomplish objectives.
☐	Identify kind and number of resources required to support selected strategies.
☐	Subdivide work areas into manageable units.
☐	Develop work assignments and allocate tactical resources based on strategy requirements.
☐	Coordinate planned activities with the SOFR to ensure compliance with safety practices.
☐	Prepare ICS 234 Work Analysis Matrix with PSC to ensure Strategies, Tactics and tasks are in line with ICS 202 Response Objectives to develop ICS 215.
☐	Participate in the planning process and the development of the tactical portions (ICS 204 and ICS 220) of the IAP.
☐	Assist with development of long-range strategic, contingency, and demobilization plans.
☐	Supervise Operations Section personnel.
☐	Monitor need for and request additional resources to support operations as necessary.
☐	Coordinate with the LOFR and AREP's to ensure compliance with approved safety practices.
☐	Evaluate and monitor current situation for use in next operational period planning.
☐	Interact and coordinate with Command on achievements, issues, problems, significant changes special activities, events, and occurrences.
☐	Troubleshoot operational problems with other IMT members.
☐	Supervise and adjust operations organization and tactics as necessary.
☐	Participate in operational briefings to IMT members as well as briefings to media, and visiting dignitaries.
☐	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.

Sec. II.4.4.9 Planning Section Chief

The Planning Section Chief (PSC), a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources. Information is needed to 1) understand the current situation; 2) predict the probable course of incident events; 3) prepare alternative strategies for the incident; and 4) submit required incident status reports. The PSC may have a deputy PSC, who may be from the same organization or from an assisting agency. The Deputy PSC should have the same qualifications as the individual for whom they work and must be ready to take over position at any time.

Planning Section Chief Checklist	
☐	Review Common Responsibilities.
☐	Collect, process, and display incident information.
☐	Assist OSC in the development of response strategies.
☐	Supervise preparation of the IAP.
☐	Facilitate planning meetings and briefings.
☐	Assign personnel already on-site to ICS/UCS organizational positions as appropriate.
☐	Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation).
☐	Determine the need for any specialized resources in support of the incident.
☐	Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
☐	Assemble information on alternative strategies.
☐	Provide periodic predictions on incident potential.
☐	Keep IMT apprised of any significant changes in incident status.
☐	Compile and display incident status information.
☐	Oversee preparation and implementation of the Incident Demobilization Plan.
☐	Incorporate plans (e.g., Traffic, Medical, Communications, and Site Safety) into the IAP.
☐	Develop other incident supporting plans (e.g., salvage, transition, security).
☐	Assist Operations with development of the ICS 234 Work Analysis Matrix.
☐	Maintain Unit Log (ICS 214).

Sec. II.4.4.10 Logistics Section Chief

The Logistics Section Chief (LSC), a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section.

The LSC may have Deputy LSCs, who may be from the same organization or from an existing agency. The Deputy LSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Logistics Section Chief Checklist	
☐	Review Common Responsibilities.
☐	Plan the organization of the Logistics Section.
☐	Assign work locations and preliminary work tasks to Section personnel.
☐	Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
☐	Assemble and brief Logistics Branch Directors and Unit Leaders.
☐	Determine and supply immediate incident resource and facility needs.
☐	In conjunction with Command, develop and advise all Sections of the IMT resource approval and requesting process.
☐	Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
☐	Identify long-term service and support requirements for planned and expected operations.
☐	Advise Command and other Section Chiefs on resource availability to support incident needs.
☐	Provide input to and review the Communications Plan, Medical Plan and Traffic Plan.
☐	Identify resource needs for incident contingencies.
☐	Coordinate and process requests for additional resources.
☐	Track resource effectiveness and make necessary adjustments.
☐	Advise on current service and support capabilities.
☐	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.
☐	Ensure the general welfare and safety of Logistics Section personnel.
☐	Maintain Unit Log (ICS 214).

Sec. II.4.4.11 Finance Section Chief

The Finance Section Chief (FSC), a member of the General Staff, is responsible for all financial, administrative and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section. The FSC may have Deputy FSCs who may be from the same organization or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Finance Section Chief Checklist	
☐	Review Common Responsibilities.
☐	Participate in incident planning meetings and briefings as required.
☐	Review operational plans and provide alternatives where financially appropriate.
☐	Manage all financial aspects of an incident.
☐	Provide financial and cost analysis information as requested.
☐	Gather pertinent information from briefings with responsible agencies.
☐	Develop an operating plan for the Finance/Admin Section; fill supply and support needs.
☐	Determine the need to set up and operate an incident commissary.
☐	Meet with Assisting and Cooperating Agency Representatives, as needed.
☐	Maintain daily contact with agency(s) administrative headquarters on Finance/Admin matters.
☐	Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
☐	Provide financial input to demobilization planning.
☐	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
☐	Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
☐	Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
☐	Receive and implement applicable portions of the Incident Demobilization Plan.
☐	Maintain Unit Log (ICS 214)

Sec. II.4.5 Transition Checklists

Incident Commander Transition Checklist			
	Item or Task	**Documentation or Forum**	**Complete**
☐	Check in	ICS 211 P	
☐	Current Situation update	Individual Briefing	
☐	Status of Objectives information	ICS 202	
☐	Status of Resources	ICS 201-4 or Resource Summary	
☐	Pending Action Items or Assignments	Open Action Tracker, 214 Log – IC you are relieving	
☐	Verify Incident name (IAP Database login if applicable)	Planning Section Chief	
☐	Verify Operational Period	Sit Stat Board – Team member you are relieving	
☐	Organizational Chart Updated	RESL, Unit Leader, Section Chief or Deputy	
☐	ICS Vest	Documentation Unit or Team member you are relieving	
☐	Communications Plan update	ICS 205 and/or ICS 203	
☐	Announcement of transition of IC	ICP announcement, assessment meeting or Shift Briefing	
☐	Assurance that transitioning Command & General Staff have completed transition & check list	Command & General Staff assessment meeting	

Sec. II.4.5 Transition Checklists (Cont'd)

ICS Position Transition Checklist			
	Item or Task	**Documentation or Forum**	**Complete**
☐	Check in	ICS 211 P	
☐	Verify ICS Position assigned	Section Chief or Deputy, Unit Leader, Branch Director, ICS 207 or IC	
☐	Current Situation update	ICS 201 Briefing or Operational Briefing or Section/Unit Briefing or Individual Briefing	
☐	Pending Action Items or Assignments	Open Action Tracker, 214 Log – Team member you are relieving	
☐	Verify Incident name (IAP Database login if applicable)		
☐	Verify Operational Period	Sit Stat Board – Team member you are relieving	
☐	Organizational Chart Updated	RESL, Unit Leader, Section Chief or Deputy	
☐	ICS Vest	Documentation Unit or Team member you are relieving	
☐	Communications Plan update	ICS 205 and/or ICS 203	

Sec. II-5 Response Procedures

A person evaluating a situation must assess the circumstances surrounding an event, to determine if an emergency situation exists, and respond accordingly. Company personnel are trained in hazards or emergency recognition procedures as described below.

An emergency in pipeline and facility operations often originates with the unexpected release or spill of commodities. Uncontained commodities and high vapor concentrations present substantial hazards for fires or explosions until they dissipate to safe levels. In these situations, sources of ignition must be controlled to eliminate fire and explosion hazards. The Company has strict rules for controlling sources of ignition within the property to avoid such explosions or fires. Potential sources of ignition become more difficult to control on public property. Early detection and quick response are the best actions to reduce the hazards.

The purpose of this section is to identify the response checklist/procedures to follow based on the type of incident that could occur at the facility and related pipeline systems. The checklists below are developed to allow the field personnel the ability to make sound decisions during the initial response of an incident. The checklists are not meant to substitute for emergency response knowledge, training, or sound judgment calls and do not account for all circumstances. In the event of any type of incident, it is imperative that the safety of **all** personnel be considered **first**, and then the protection of property second.

The level of required response is dependent upon the severity of the release, the size, potential environmental, social and economic impact and the expected public interest in the event.

Response Procedures Covered in this Section		Section
•	Initial Discovery	Sec II-5.1
•	Immediate Action Checklist	Sec II-5.2
•	General Initial Response Procedures – Terminals	Sec II-5.3
•	General Initial Response Procedures – Pipeline Maintenance Crews	Sec II-5.4
•	Emergency Shut Down	Sec II-5.5
•	Injury / Medical / Rescue	Sec II-5.6
•	Unconfirmed Report of a Leak	Sec II-5.7
•	Pipeline Leak or Rupture	Sec II-5.8
•	Failure of Manifold, Mechanical Loading Arm, Other Transfer Equipment or Hoses	Sec II-5.9
•	Tank Overfill	Sec II-5.10
•	Tank Failure	Sec II-5.11
•	Natural and Other Gas Leaks	Sec II-5.12
•	Natural and Other Gas Leak In or Near a Building	Sec II-5.13
•	Fire / Explosion	Sec II-5.14
•	Pipeline Station or Manifold Fire	Sec II-5.15
•	Truck Loading Rack Fire	Sec II-5.16
•	Tank Fire Pre-Plan / Flowchart	Sec II-5.17
•	Spill Response Strategy Guide	Sec II-5.18
•	Oil Spill / Release	Sec II-5.19
•	Oil Spill Surveillance	Sec II-5.20
•	Spills to Groundwater	Sec II-5.21
•	Natural Disasters	Sec II-5.22
•	Bomb Threat	Sec II-5.23

Sec. II-5.1 Initial Discovery / Response Actions

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

Initial Discovery / Response Actions Checklist		
DISCOVERER	Initiate Initial Response Procedures and Notifications. A list of contact numbers is located in the Contacts section of this plan.	
INITIAL INCIDENT COMMANDER RESPONSE GUIDELINES		
The appropriate response to a particular incident may vary depending on the nature and severity of the incident.		
✓	**Action**	**Definition**
☐	Secure the source.	Act quickly to shut-in source, close valves, etc. (**IF SAFE TO DO SO, PROPERLY TRAINED & HAVE PROPER PPE**).
☐	Consider safety of personnel / call for medical assistance if needed.	Pull an alarm, push an evacuation button, use radio or call 911. **EVACUATE IF NECESSARY**.
☐	Shut off ignition sources.	Motors, open flames, electrical circuits.
☐	Coordinate rescue and medical response actions.	Perform this task only if trained to do so (i.e., member of medical & rescue teams) Refer to hospital listings in the Contacts section.
☐	Identify pollutant and assess possible hazards to human health and the environment.	Identify source and volume; characterize oxygen levels, explosive character, toxicity of air on scene, splash and ingestive hazards.
☐	Initiate containment if necessary and safe to do so.	Contact OSROs as necessary.
☐	Conduct air monitoring.	Monitor the air quality in the area near the release to ensure there are no organic vapors which may pose an inhalation or flammability hazard.
☐	Report all incidents to the Duty Officer.	Follow Notification Procedures in ICP Geographical Annex 2. Contact Numbers located in the Contacts section.
Initial Incident Commander	Name:	

Sec. II-5.2 Immediate Action Checklist

Spill Observer / Dispatcher	
•	If a pressure drop is noticed or a leak is suspected, notify the Terminal Supervisor and/or the maintenance supervisor immediately and stop all product transfers.
•	To minimize damage, close all automatic isolation valves, if available.
•	Assist with initial response actions as directed.
Line Flyer	
•	Report all abnormal activity and dead vegetation in the vicinity of a pipeline.
•	If action requires immediate attention, report via radio.
•	In the event radio contact cannot be made; the line flyer will land and report to Company management by telephone.
Terminal Supervisor / Maintenance Supervisor	
•	Determine level of response needed, hazards of product(s) involved and proper response guidelines to be followed. (For additional information refer to Company Maintenance Manual (MPR) - MPR-4005.)
•	Work with local law enforcement to make sure all personnel/citizens are a safe distance away from the hazard area.
•	Notify Fire Department as appropriate.
•	Notify Company management as appropriate.
•	Dispatch response team to the site of the suspected leak and assume the position of IC. Implement ICS/UCS and establish a workable CP and Communications Center. Determine the extent of spill or release, verify product type(s), identify material(s), estimate quantity spilled or released, approximate rate of discharge, estimate movement of the spill/vapor cloud, estimate the wind direction. (Report volume details within one hour per DOT regulations)
•	Instruct response team to eliminate sources of vapor cloud ignition. Shut down all engines and motors. (Refer to MPR-3001 and MPR-4003).
•	Review pipeline alignment sheets to become familiar with the location of mainline valves and elevation characteristics. Review environmentally sensitive area maps for the location of any sensitive area that may be impacted.
•	Advise response team on manual valves locations; order them closed if appropriate.
•	Note time of spill or time of first detection, location, source and cause of spill.
•	Make a note of response actions taken and by whom.
•	Instruct response team to attend to injured personnel.
•	Call out cleanup or general contractors, as necessary.
•	Collect information necessary to complete the Incident Report Form.
•	Make appropriate notifications to local and state governmental agencies of the spill and proposed actions. Document names of agencies called, person who received the calls, and the times the calls were made.
•	Complete the Incident Report Form and notifications.
•	Advise neighboring property owners and operators of any threat to their property or personnel.
•	Direct initial response actions.
•	Call additional emergency response contractors as necessary.

Sec II-5.3 General Initial Response Procedures – Terminals

This checklist is generic to all Company Plans and is included as an additional checklist to supplement facility specific checklists contained in this Plan.

Terminals	
•	Any employee observing a spill should take emergency action to stop the release at the source in a safe manner and immediately notify the Terminal or Maintenance Supervisor.
•	Upon becoming aware of a spill, the Facility Supervisor will assess the spill in terms of the location and volume and determine if the ICS/UCS should be activated.
•	Once it has been determined to activate the ICS/UCS, the Facility Supervisor will assume the role of Incident Commander and initiate the following actions: a) Confirm that injured personnel have been attended to and arrange for medical assistance and transportation to hospitals, if necessary, and ensure the safety of all response personnel. b) Confirm that personnel have been assigned to stop the release and flow of oil, and secure leaks. c) Assess the spill; determine parameters such as spill volume, extent, speed, and direction of movement. d) Integrate local evacuation plans into the Unified Command decision-making process. e) Confirm that containment equipment and oil spill contractors have been deployed. f) Notify the appropriate Company management. g) Notify appropriate federal, state and local government agencies, including local utilities and Company HSE personnel. h) Begin development of an initial incident action plan (ICS 201 Forms).
•	Once product is spilled on water, action should be taken as rapidly as possible to control and recover it to minimize damage to the environment. Physical removal of the oil is the preferred action in almost all cases. However, from a practical standpoint, much of the product spilled during a minor spill will be dispersed by wind and wave action. Effective physical removal will be dependent upon relatively calm weather and water conditions and the speed with which the slick can be corralled and removed.

Sec II-5.4 General Initial Response Procedures – Pipeline Maintenance Crews

These procedures have been designed to 1) provide safety to the public and company personnel when threatened by the release of hydrocarbons from a pipeline to the environment, and 2) to coordinate activities for prompt and safe repair of the pipeline and the return to normal operating conditions.

Events that require immediate response include:	
•	Extreme pressure reduction on the line
•	Extreme flow rate changes
•	Extreme measurement losses or gains
•	Receiving notices of an emergency nature such as: a) Release of hazardous liquids from a pipeline facility b) Operational malfunction causing a hazardous condition c) Fire, explosion, or natural disaster involving pipeline facilities d) Notification of a potential leak or hazard

Whenever any of the above conditions occur, the following emergency shutdown procedures should be initiated:	
•	Shutting in the line at the nearest block valves.
•	Notifying the nearest pump station and/or the appropriate control center.
•	Maintenance crewmembers should notify their immediate supervisor who will in turn notify appropriate Company contacts.
•	If the exact location of the leak is unknown, the Incident Commander will request a line flyer, or if it is at night, manpower might be used to walk the line.
•	Once a leak site has been located, the following information should be obtained. a) Have all ignition sources been eliminated? b) Are any schools, homes or commercial properties at risk and should they be evacuated? c) Should access to the area be restricted (roads blocked)? If so, assistance should be requested from law enforcement agencies. d) Have local response agencies been advised of the product's characteristics and handling precautions which are described in the MSDS's? e) Are railroads or utility companies in the area and have they been notified? f) Will product flow into any waterways or roadways? g) Work with Company Environmental Services to conduct a natural resource damage assessment.
•	The Duty Officer should be notified: a) Federal and/or state agencies may need to be contacted if a spill or release meets the criteria outlined in this manual. b) Following an assessment of the release site, an evaluation should be made regarding the effect of downtime on product scheduling. Appropriate Notifications will be made.

Sec II-5.5 Emergency Shutdown

In an emergency situation, it's imperative to identify where the source of the leak can be controlled. Mitigation can involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

More precise shutdown procedures can be found in the ICP Geographical Annex.

Sec. II-5.6 Injury / Medical / Rescue

Medical Emergency Checklist

Procedures	✓	Date/Time
Activate professional medical care for the victim by: ☐ Call **911** to arrange for ground or air ambulance support. Provide the 911 dispatch the following information: ☐ Your name and location ☐ Type of medical emergency ☐ Name and location of the injured ☐ Condition of injured ☐ Contact phone number ☐ Transport injured to a local hospital or physician.	☐	__/__/__ __:__
Caller's Name:		
Note: Evacuation of seriously ill or injured persons should be conducted by ground or air ambulance only. **Transportation by company or private vehicle should be discouraged, unless advised to do so by medical authorities**. All medical emergencies should be documented and applicable emergency notifications completed.		

Sec II-5.7 Unconfirmed Report of a Leak

Following an unconfirmed report of a leak, or the substantial threat of a leak, the sequential response actions that should be implemented immediately are:

Unconfirmed Report of a Leak		
Procedures	✓	Date/Time
Contact the Control Center and request a line balance check and shut down line if a leak is suspected or pipeline integrity is compromised.	☐	__/__/__ ____:____
Conduct aerial or ground reconnaissance of the area at the first possible opportunity (incident may occur at night or in inclement weather) and contact the Control Center to shut down line if reconnaissance detects a potential leak.	☐	__/__/__ ____:____
Isolate line segment	☐	__/__/__ ____:____
Start internal and external notification procedures.	☐	__/__/__ ____:____
Mobilize response and repair personnel.	☐	__/__/__ ____:____

Sec. II-5.8 Pipeline Leak or Rupture

Pipeline Leak or Rupture Checklist		
Procedures	✓	Date/Time
Assess situation and exercise caution.	☐	__/__/__ :
Eliminate all ignition sources onsite.	☐	__/__/__ :
Shut down pumps, close block valves, and shut down affected line.	☐	__/__/__ :
If person(s) down, refer to Medical Emergency Checklist.	☐	__/__/__ :
Contain spill (if safe to do so).	☐	__/__/__ :
Assign person to direct emergency response vehicles.	☐	__/__/__ :
Conduct air monitoring, per the Safety Officer's instruction.	☐	__/__/__ :
Make necessary notifications	☐	__/__/__ :
Ensure safety of personnel involved in spill response activities	☐	__/__/__ :
Coordinate deployment of containment and recovery equipment	☐	__/__/__ :
Designate staging areas for personnel and equipment	☐	__/__/__ :
Coordinate activities of clean-up contractors	☐	__/__/__ :
Set up Command Post, if warranted	☐	__/__/__ :

Emergency Response Guide First Responder

Piping Leak

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

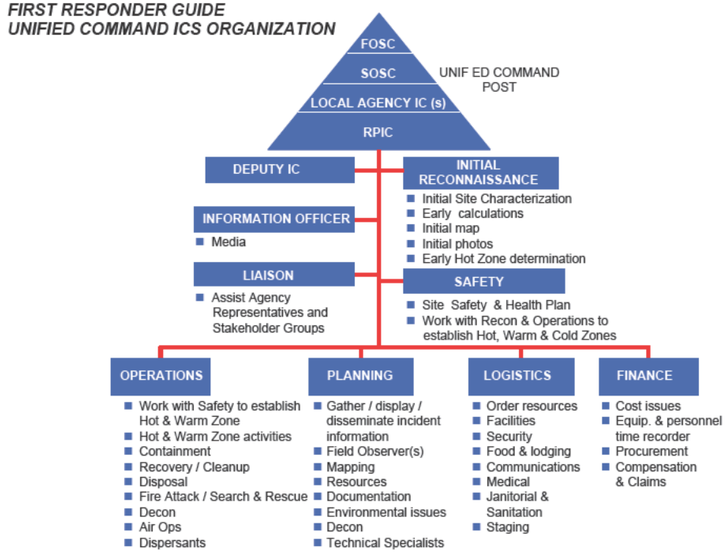
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

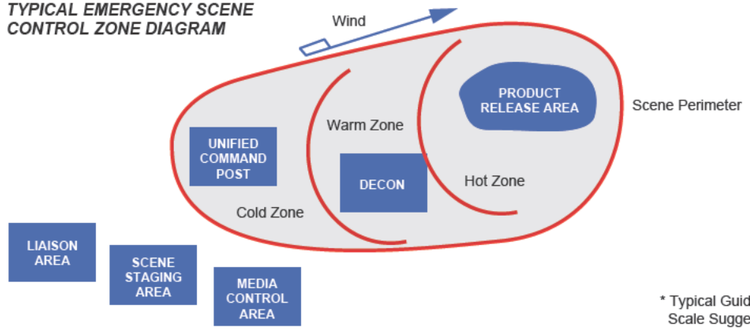
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
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Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut-off flow
- Isolate leaking section of piping
- Notify Terminal Superintendent or designee
- Place a container under the leak and attempt to temporarily plug the hole
- Initiate spill containment (if outside containment area)
- Evacuate contents of line with suction pump or flush with water to remove remaining oil
- Block and purge affected equipment
- Initiate recovery/clean-up actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Emergency Response Guide First Responder

Piping Rupture

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
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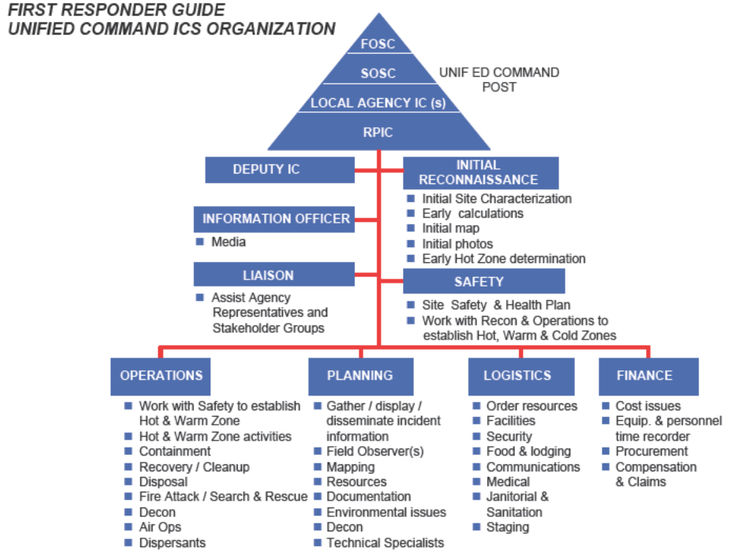
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

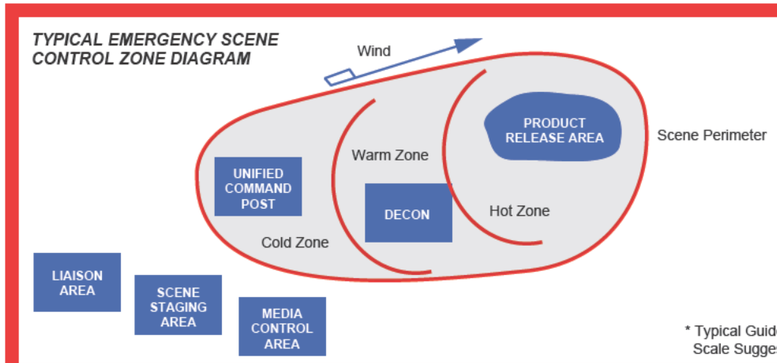
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut-off flow
- Isolate leaking section of piping
- Notify Terminal Superintendent or designee
- Place a container under the leak and attempt to temporarily plug the hole
- Initiate spill containment (if outside containment area)
- Evacuate contents of line with suction pump or flush with water to remove remaining oil
- Block and purge affected equipment
- Initiate recovery/clean-up actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Sec. II-5.9 Failure of Manifold, Mechanical Loading Arm, Other Transfer Equipment or Hoses

Equipment Failure Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ __:__
Shut off transfer pumps. Close header and tank valves.	☐	__/__/__ __:__
Notify Terminal Operations Manager and the Vessel PIC. (Marine Terminal)	☐	__/__/__ __:__
Drain remaining contents of dike to vessel tanks.	☐	__/__/__ __:__
Secure the area.	☐	__/__/__ __:__
Initiate oil spill cleanup response actions.	☐	__/__/__ __:__

Emergency Response Guide First Responder

Failure of Transfer Equip

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
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- Begin assigning ICS positions as necessary
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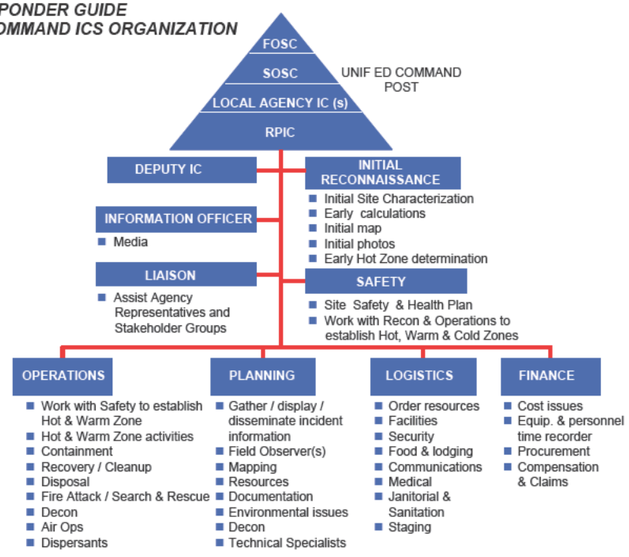
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

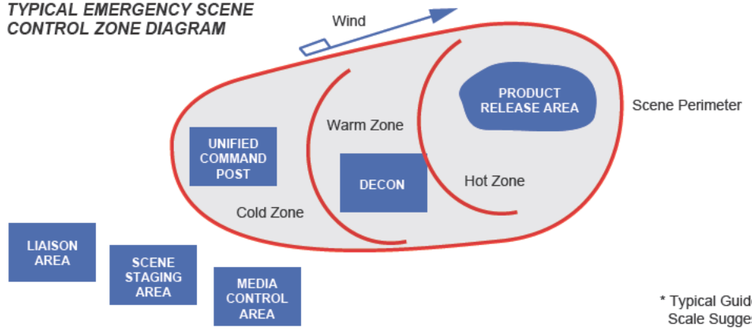
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut off transfer pumps. Close header & tank valves
- Notify Terminal Operators/Manager/Vessel
- Drain remaining contents of like to vessel tanks
- Secure area
- Initiate response actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Emergency Response Guide First Responder

Equipment Failure

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
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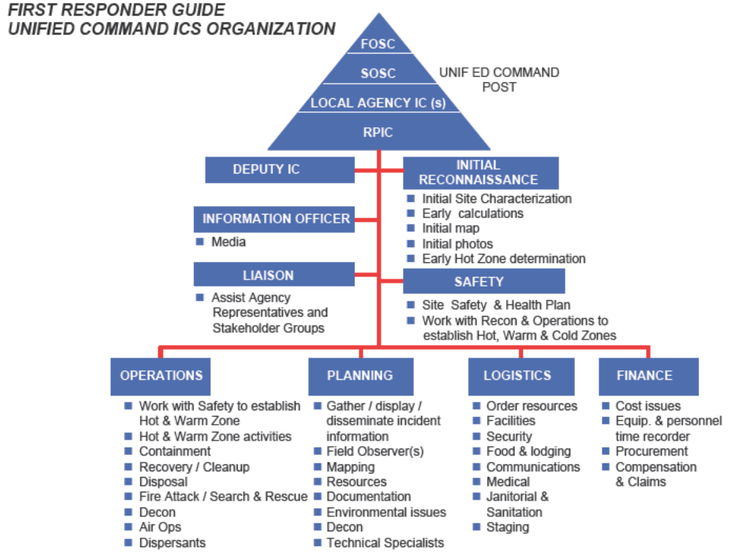
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

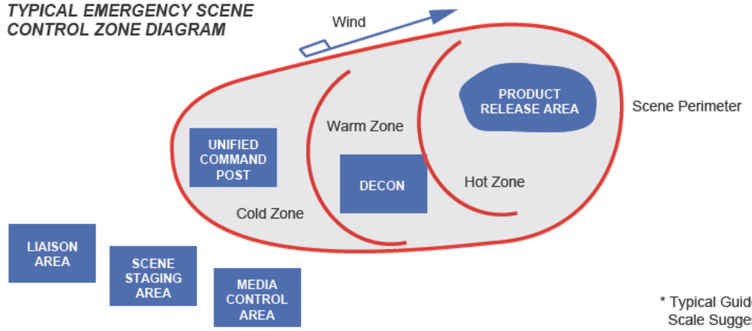
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

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Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut-off flow
- Notify Terminal Superintendent or designee
- Tighten leaky valve or fitting, if safe
- Transfer tank contents to available tankage

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Sec. II-5.10 Tank Overfill

Tank Overfill Response Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ :
Shut off flow to tank.	☐	__/__/__ :
If safe, ensure dike drains are closed (if applicable).	☐	__/__/__ :
Initiate oil spill response actions.	☐	__/__/__ :
Secure the area.	☐	__/__/__ :
Notify terminal supervisor.	☐	__/__/__ :
Begin transfer of contents to other tankage.	☐	__/__/__ :

Sec. II-5.11 Tank Failure

Tank Failure Response Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ :
Shut off flow to tank.	☐	__/__/__ :
If safe, ensure dike drains are closed (if applicable).	☐	__/__/__ :
Initiate oil spill response actions.	☐	__/__/__ :
Secure the area.	☐	__/__/__ :
Notify terminal supervisor.	☐	__/__/__ :
Begin transfer of contents to other tankage.	☐	__/__/__ :

Emergency Response Guide First Responder

Tank Overfill

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
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- Follow Notifications Procedures (Notifications Section of this Plan)

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IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
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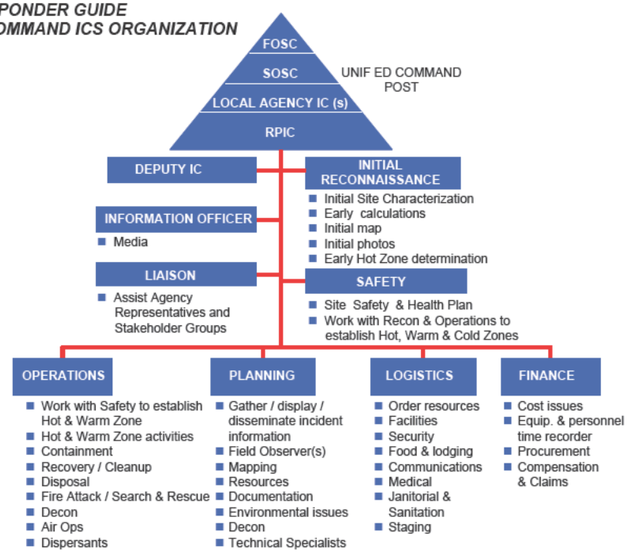
ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
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PROTECTIVE ACTIONS
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DECONTAMINATION / CLEANUP
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DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
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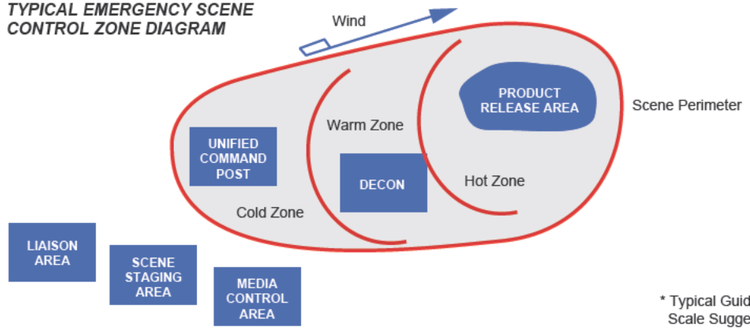
TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



FACILITY RESPONSE PLAN QUICK REFERENCE

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App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut off flow to tank
- If safe, ensure dike drains are closed
- Begin transfer of contents to other tankage
- Notify Terminal Superintendent
- Secure area
- Initiate response actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Emergency Response Guide First Responder

Tank Failure

SAFETY
1

- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY

- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS

- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

COMMAND MANAGEMENT
2

- Assume the role of Incident Commander
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- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

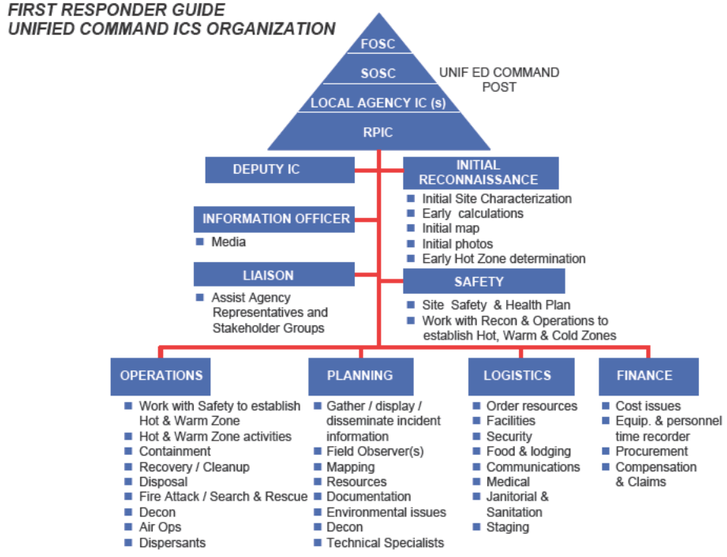
IDENTIFICATION AND ASSESSMENT

- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING

- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



PROTECTIVE EQUIPMENT
3

- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL

- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSRO's work under the Operations Section and should not freelance

PROTECTIVE ACTIONS

- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

DECONTAMINATION / CLEANUP
4

- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

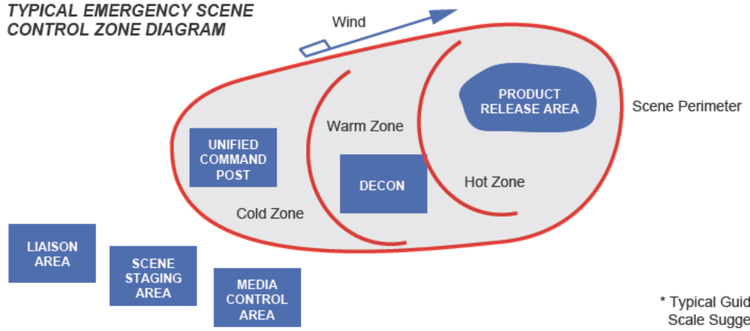
DISPOSAL

- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION

- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS

- If safe, ensure dike drains are closed
- Notify Terminal Superintendent or designee
- Secure area
- Initiate response actions

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Sec. II-5.12 Natural and Other Gas Leaks

Natural and Other Gas Leaks		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ :
Shut down and isolate flow.	☐	__/__/__ :
Evacuate the area.	☐	__/__/__ :
Eliminate sources of ignition.	☐	__/__/__ :
All equipment used when handling product must be grounded.	☐	__/__/__ :
Water spray may reduce vapors or divert vapor cloud.	☐	__/__/__ :
If exposed, make sure exposed clothing is removed and decon occurs.	☐	__/__/__ :

Sec. II-5.13 Natural and Other Gas Leak In or Near a Building

Natural and Other Gas Leaks In or Near a Building		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ :
Protect public first, then facilities.	☐	__/__/__ :
Safely evacuate building if gas is detected inside building.	☐	__/__/__ :
Always look and listen for any signs of escaped gas.	☐	__/__/__ :
All open flames are to be extinguished.	☐	__/__/__ :
Determine leak severity.	☐	__/__/__ :
Do not enter building with audible leaking gas.	☐	__/__/__ :
Test the environment to determine safe entry.	☐	__/__/__ :
Evacuate people from adjacent buildings.	☐	__/__/__ :
Shut off electrical power to building.	☐	__/__/__ :
Eliminate all other potential sources of ignition.	☐	__/__/__ :
Isolate the building from gas sources of ignition.	☐	__/__/__ :
Close necessary inlet and outlet block valves and open blowdown valves.	☐	__/__/__ :
After gas sources are shut off, utilize portable combustible gas indicator/detector to determine safe environment.	☐	__/__/__ :

Emergency Response Guide First Responder

Natural and Other Gas Leaks

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help evaluate and deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire department assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

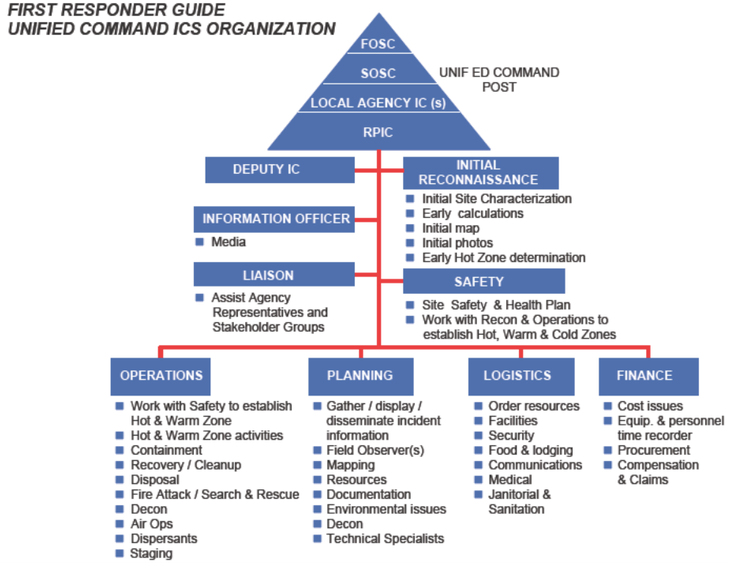
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Create an Initial Action Plan (ICS Form 201)

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Site Safety Health Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment
- OSROs work under the Operations Section and should not freelance

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on water intakes, adjoining properties, public recreation sites & sensitive sites
- Protective action tactical deployment should be part of the Unified IAP

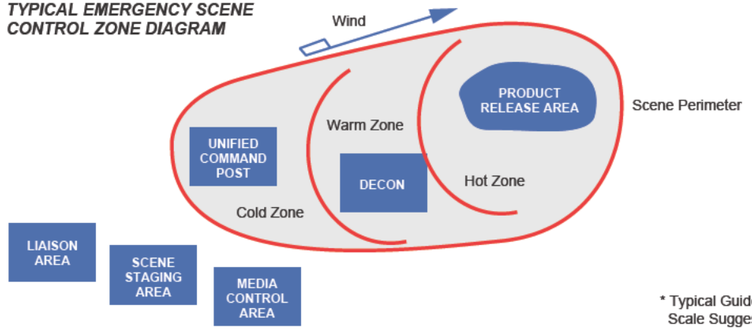
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team

DISPOSAL
- Minimal disposal issues

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident-related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE
CONTROL ZONE DIAGRAM



SAFETY FIRST

FACILITY MITIGATION/PROTECTION ACTIONS
- Shut down and isolate flow
- Evacuate the area
- Eliminate sources of ignition
- All equipment used when handling product must be grounded
- Water spray may reduce vapors or divert vapor cloud
- If exposed, make sure exposed clothing is removed and decon occurs

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 202
- Site Safety Plan
- ICS Form 215

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
LPG	119
Natural Gas	115
Crude Oil	128

Emergency Response Guide First Responder

Natural and Other Gas Leak In or Near a Building

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help evaluate and deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire department assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

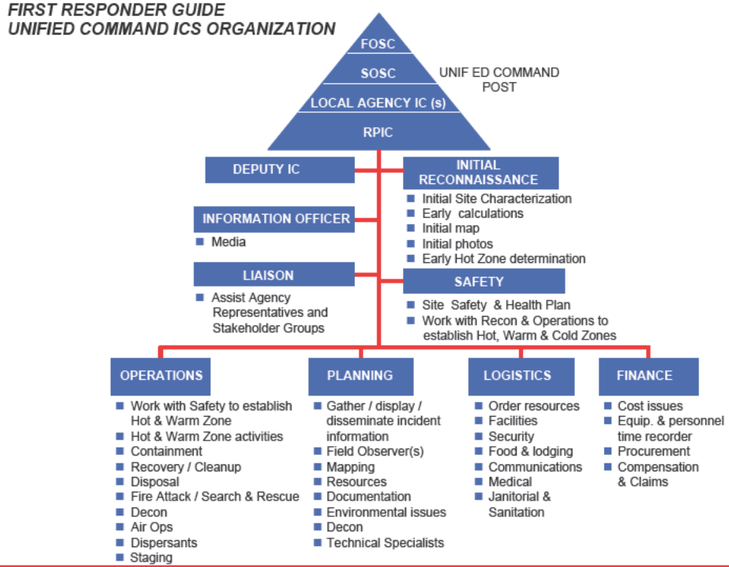
2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of potential impact on the area

ACTION PLANNING
- Create an Initial Action Plan (ICS Form 201)

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION



3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Site Safety Health Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees containment & control tactical deployment

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on area
- Protective action tactical deployment should be part of the Unified IAP

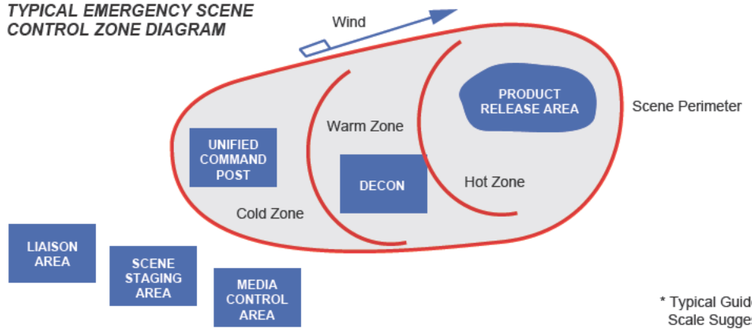
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team

DISPOSAL
- Minimal disposal issues

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident-related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



* Typical Guide/No Scale Suggested

GENERAL PROCEDURES

- Protect public first, then facilities
- Safely evacuate building if gas is detected inside building
- Always look and listen for any signs of escaped gas
- Do not open a building door if escaped gas is detected
- All open flames are to be extinguished
- Determine leak severity
- Do not enter building with audible leaking gas
- Test the environment to determine safe entry
- Evacuate people from adjacent buildings

GENERAL PROCEDURES (CONTINUED)

- Shut off electrical power to building
- Eliminate all other potential sources of ignition
- Isolate the building from gas sources if possible
- Close necessary inlet and outlet block valves and open blowdown valves
- After gas sources are shut off, utilize portable combustible gas indicator/detector to determine safe environment

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED

- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 202
- Site Safety Plan
- ICS Form 215

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
LPG	119
Natural Gas	115
Crude Oil	128

PHILLIPS 66 Transportation

Sec. II-5.14 Fire / Explosion

It is the Company's intention to comply with all applicable fire regulations. The objective of the emergency planning and response program is to produce a favorable outcome at the incident with minimal risk to the public, employees and contractors, and emergency responders.

Life safety shall be the highest priority for all personnel.

Fire / Explosion / Blowout Checklist		
Procedures	✓	Date/Time
Person in Charge – Call 911 and activate fire alarm.	☐	__/__/__ :
Eliminate all ignition sources.	☐	__/__/__ :
Begin Emergency Shut Down if necessary.	☐	__/__/__ :
If person(s) down, refer to Medical Emergency Checklist	☐	__/__/__ :
When fire is noticed at any facility, secure the source if safe to do so.	☐	__/__/__ :
Account for all personnel in the unit or area where the fire occurred.	☐	__/__/__ :
Evacuate all non-essential personnel, if necessary.	☐	__/__/__ :
Establish communications. Contact PIC.	☐	__/__/__ :
Search for and rescue missing or injured personnel as required.	☐	__/__/__ :
Use the buddy system.	☐	__/__/__ :
Ensure the Facility Operators control the process.	☐	__/__/__ :
Conduct air monitoring to ensure safety of personnel and appropriate PPE is required to respond. (For additional information, see the Site Safety and Health Plan and/or the Safety Coordinator.)	☐	__/__/__ : ____:____
Conduct initial fire fighting by IC/UC personnel (trained in the use of firefighting equipment and PPE), which may include use of monitors, deluge systems, and portable fire extinguishers.	☐	__/__/__ : ____:____
Evacuate nearby residents if required.	☐	__/__/__ :

Emergency Response Guide First Responder

Fire or Explosion

1

SAFETY
- Your safety first and then the safety of others
- Stay out of the hazard area
- If performing Recon approach up wind, up hill, up stream
- Determine the immediate hot zone
- Do not attempt to contain spilled gasoline on water

ISOLATE AND DENY ENTRY
- Evacuate the immediate area
- Deny entry to the immediate area
- Ask others to help deny entry into the area
- If on the scene, ask agency resources to help deny entry into immediate area

NOTIFICATIONS
- Contact your Supervisor
- Contact Control Center
- Dial 911 if ambulance, police or fire dept. assistance is needed
- Contact local OSRO (Notifications Section of this Plan)
- Follow Notifications Procedures (Notifications Section of this Plan)

2

COMMAND MANAGEMENT
- Assume the role of Incident Commander
- Make an announcement to all on the scene that you have assumed Command
- Establish a Unified Command Post up wind, up hill and up stream of the incident in the cold zone
- Establish a Unified Staging Area up wind, up hill and up stream of the incident in the cold zone
- Begin assigning ICS positions as necessary
- Meet, greet & brief responding Agencies as they arrive at the Unified Command Post
- Ensure Safety Officer begins and completes a Site Safety Plan

IDENTIFICATION AND ASSESSMENT
- Continue to evaluate the hot zone and adjust accordingly
- Continue to monitor evacuation activities
- Ensure safe Recon to determine extent of impact on water, air, soil, plant life & wildlife

ACTION PLANNING
- Complete an ICS Form 201 and Incident Action Plan

FIRST RESPONDER GUIDE
UNIFIED COMMAND ICS ORGANIZATION

3

PROTECTIVE EQUIPMENT
- Ensure proper levels of PPE
- Ensure PPE is in line with Job Site Safety Plan

CONTAINMENT & CONTROL
- Containment & control strategies should be developed within the Unified IAP process/follow ACP
- Operations Section Chief oversees strategies

PROTECTIVE ACTIONS
- Ensure safe Recon to assess impact on area
- Protective action tactical deployment should be part of the Unified IAP

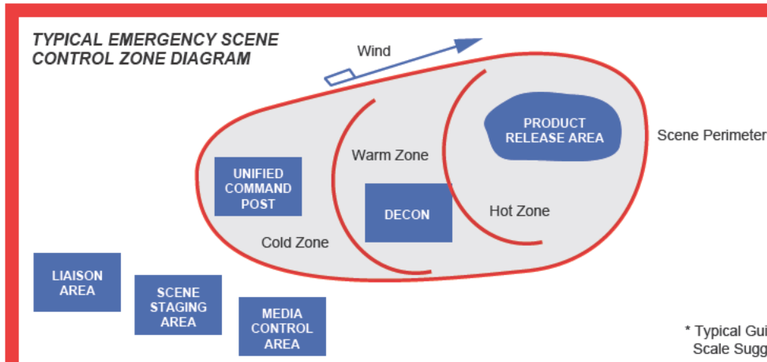
4

DECONTAMINATION / CLEANUP
- Decon activities take place under the ICS Ops Section
- Decon capabilities in place before entering Hot Zone
- Ensure proper PPE for Decon Team
- Clean up strategies should be part of the Unified IAP
- Decon runoff needs to be contained and properly disposed of

DISPOSAL
- Ensure early notification of HES
- Consult Waste Management Section of this Plan

DOCUMENTATION
- Ensure early completion of ICS Form 201 & SSHP
- Ensure proper retention of all incident related documents
- Ensure timely incident critique & record lessons learned

TYPICAL EMERGENCY SCENE CONTROL ZONE DIAGRAM



FACILITY RESPONSE PLAN QUICK REFERENCE

Sec 1	Notifications	App C	Contractor Capabilities
Sec 2	Spill Mitigation	App D	Communications Plan
Sec 3	Facility Response	App E	Site Safety Plan
Sec 4	ACP	App F	Evacuation
Sec 5	Waste Handling	App G	Definitions
Sec 6	Hazard Evaluation	App H	References
Sec 7	Spill Scenarios	App I	Wildlife
Sec 8	Training & Exercise Program	App J	Spill Protection
Sec 9	Plan Review and Update	App K	Public Relations
App A	Facility Information	App L	SPCC Plan
App B	List of Contacts		

FACILITY MITIGATION/PROTECTION ACTIONS
- Alert personnel
- Notify Terminal Superintendent or designee
- Activate alarm as required
- Notify local fire department
- Evacuate non-essential individuals
- Identify cause/source/materials involved
- Contain fire/spill/material released
- Consider potential for escalation
- Protect exposures

INITIAL ICS/NOTIFICATION FORMS THAT MAY BE UTILIZED
- Notification Fax
- ICS Form 201 (Incident Briefing)
- ICS Form 214 (Unit Log)
- Site Safety and Health Plan
- ICS Form 232 (Resources at Risk Summary)

DOT EMERGENCY RESPONSE GUIDEBOOK QUICK REFERENCE PAGES

Product	Guide #
Gasoline	128
Diesel	128
Crude Oil	128
Oil < 200°FP	171

PHILLIPS 66 Transportation

Sec. II-5.14.1 Fire Prevention

Accumulated debris, oil waste, trash, and other potential fuels can be present in all operations and will add to the fire danger. Strict control and isolation of these fuel sources should be exercised to avoid their accumulation in inhabited areas. Gasoline storage and transfer should follow applicable codes. A fire extinguisher should also be made readily available. Smoking is not allowed near flammable materials. Welding and burning require a hot work permit where hydrocarbon mixtures may exist, i.e., vessels, tanks, pipelines, etc., which may contain explosive mixtures or atmospheres. All fires should be completely extinguished before fire-fighting personnel leave the work site.

Sec. II-5.15 Pipeline Station or Manifold Fire

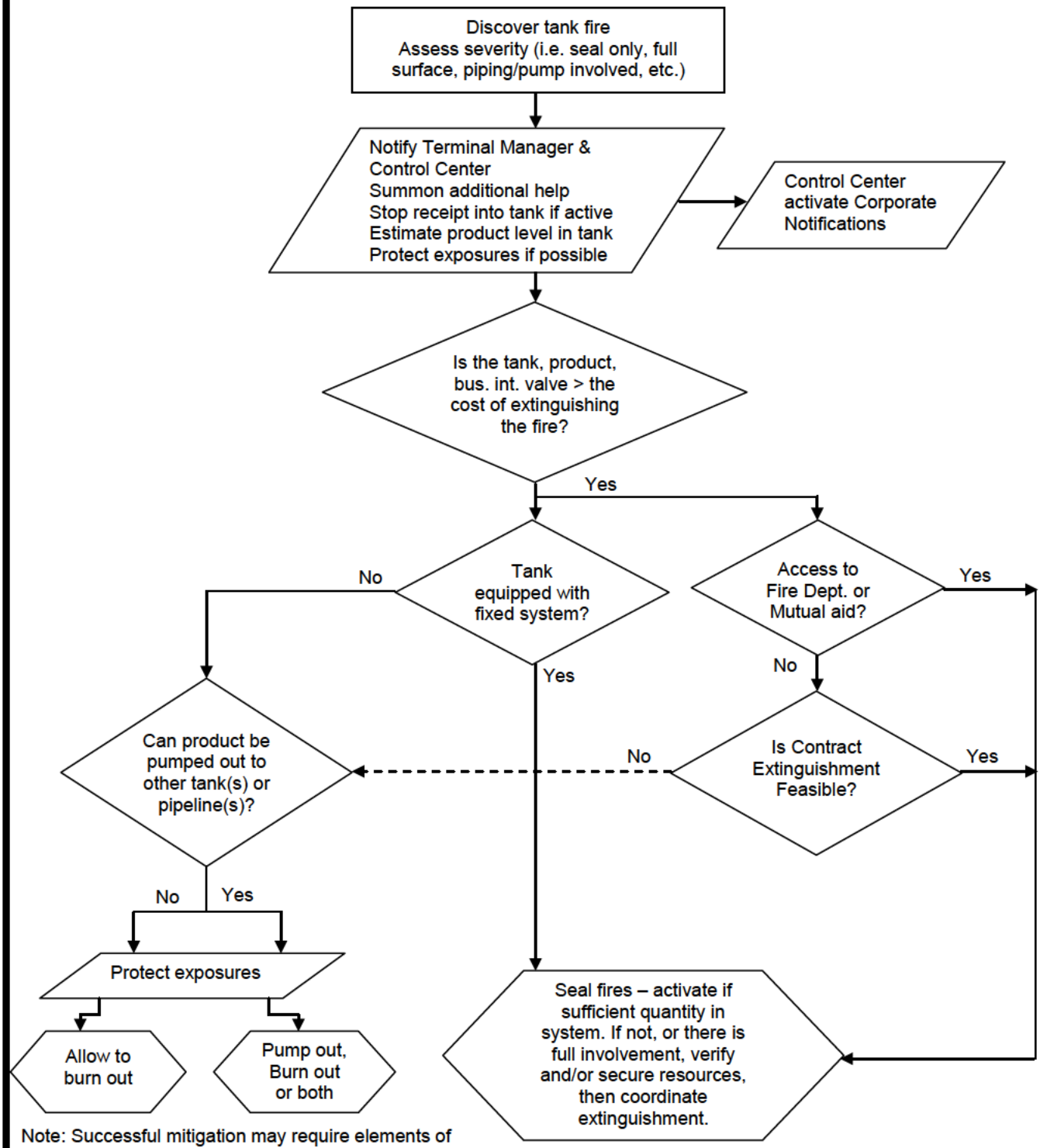
Pipeline Station or Manifold Fire		
Procedures	✓	Date/Time
Bear in mind it is better to take plenty of time in an emergency than to rush in and sustain personal injury.	☐	__/__/__ ____:____
Personnel should immediately evacuate hazardous area.	☐	__/__/__ ____:____
Extinguish fire at once, if possible, with the equipment at hand. a) If product cannot be shut off, it is better to let a controlled fire burn than to extinguish it as the fuel may spread and flashback occur.	☐	__/__/__ ____:____
If telephone is not in hazardous area, notify Supervisor and Control Center and proceed to shut down as outlined in Section II.	☐	__/__/__ ____:____
IF TELEPHONE IS IN HAZARDOUS AREA, do not attempt to use it. a) **Trip emergency shutdown control**. b) Close fuel supply valve if the emergency shutdown control fails. c) Get information to Supervisor and fire department as quickly as possible by any available means.	☐	__/__/__ ____:____
Reduce fuel supply by: a) Closing valves where possible. b) Close tank valves immediately. c) Close mainline fire gates valves on Supervisor's orders if not in the fire area. If in the fire area, the nearest upstream and downstream valves are to be closed.	☐	__/__/__ ____:____
Notify Terminal Supervisor, Operations Supervisor, and TPTN Duty Officer. Notify all off-site personnel of Facility Emergency Incident.	☐	__/__/__ ____:____
If foam is needed, contact necessary resources for assistance.	☐	__/__/__ ____:____
Post guards at gates or roadways. Call for any help deemed necessary: ambulance, sheriff (to barricade roads, etc.).	☐	__/__/__ ____:____
Isolate the fire as much as possible and control spreading to other properties by wetting with water.	☐	__/__/__ ____:____
After the fire has been extinguished or controlled, permit only authorized personnel to go near the location.	☐	__/__/__ ____:____
Public Relations: Contact EPR&S Group to request media support as needed.	☐	__/__/__ ____:____

Sec. II-5.16 Truck Loading Rack Fire

Truck Loading Rack Fire		
Procedures	✓	Date/Time
Be calm – Think first and act with care. Equipment can be replaced – lives cannot.	☐	__/__/__ :
Stop all loading on rack. **Trip emergency shutdown switch – close valves on loading riser.**	☐	__/__/__ :
Attempt to put out or control fire with dry chemical extinguisher. Prompt action can extinguish a small fire.	☐	__/__/__ :
Notify Fire Department	☐	__/__/__ :
If immediate action does not extinguish the fire, then:		
Clear rack of all truck not on fire and shut off fuel supply by closing all valves on loading lines.	☐	__/__/__ :
Advise Supervisor and/or other employees on duty of the fire.	☐	__/__/__ :
If anyone is injured or burned, remove from area.	☐	__/__/__ :
Summon help as needed: ambulance, sheriff, etc.	☐	__/__/__ :
In some cases it may be better to isolate the fire and permit it to exhaust the fuel, rather than to extinguish and risk an explosion.	☐	__/__/__ :
Water should be applied to lines, equipment and tanks in the fire and surrounding area.	☐	__/__/__ :
Good judgment is essential as to position of personnel because of potential hazard of heat-induced failure of piping and tanks.	☐	__/__/__ :
Turn off switches on electrical service in fire area.	☐	__/__/__ :
Close gates, post guards to keep spectators away, use sheriff or police to assist.	☐	__/__/__ :
Public Relations: Contact EPR&S Group to request media support as needed..		__/__/__ :

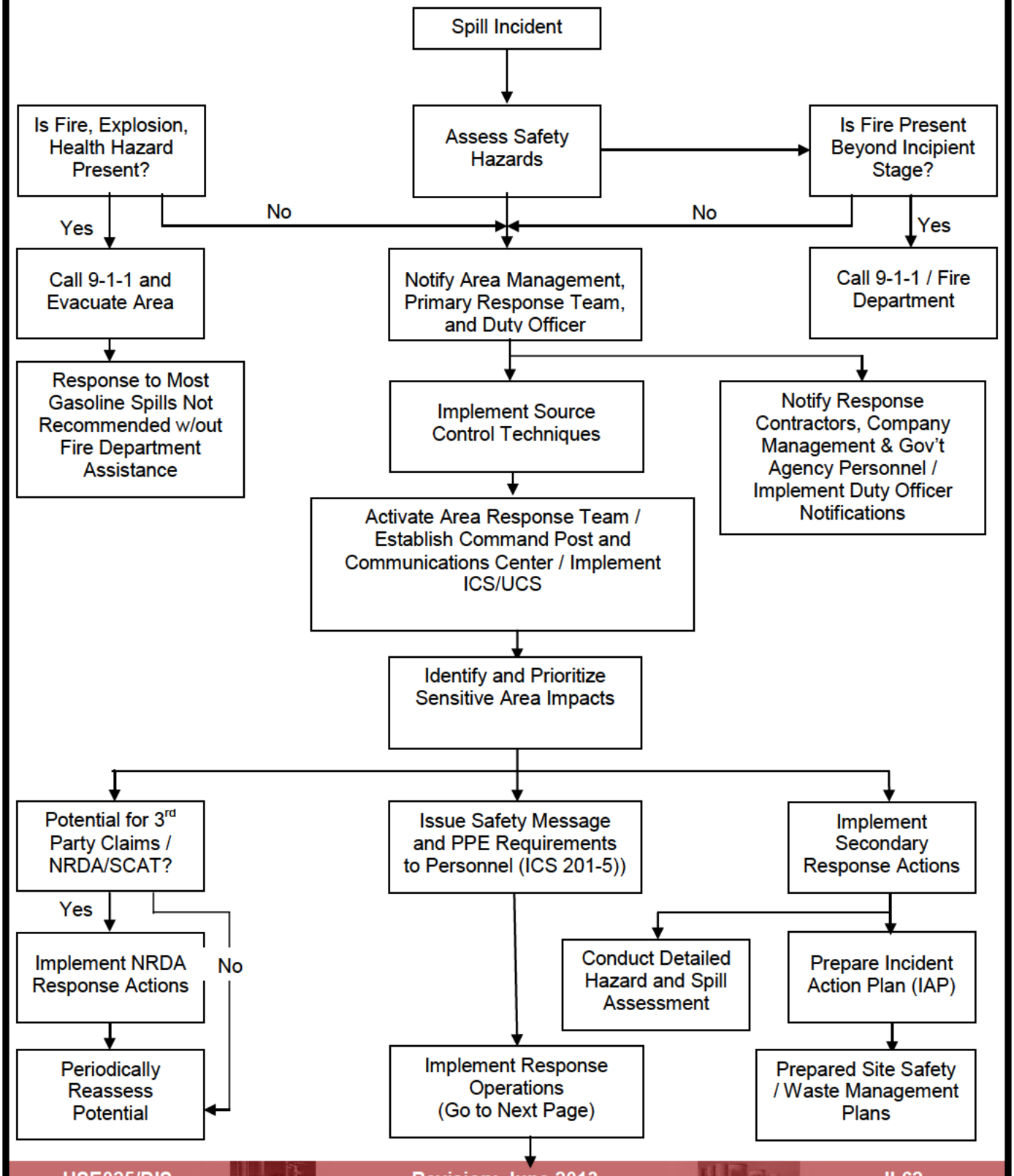
Sec. II-5.17 Tank Fire Pre-Plan / Flowchart

NOTE: REFER TO COMPANY EMERGENCY RESPONSE WEB SITE FOR A LINK TO THE TANK FIRE PRE-PLANS. DIAGRAMS AND OTHER REFERENCE MATERIALS CAN BE FOUND IN THE COMPANY OPERATIONS FIELD HANDBOOK.

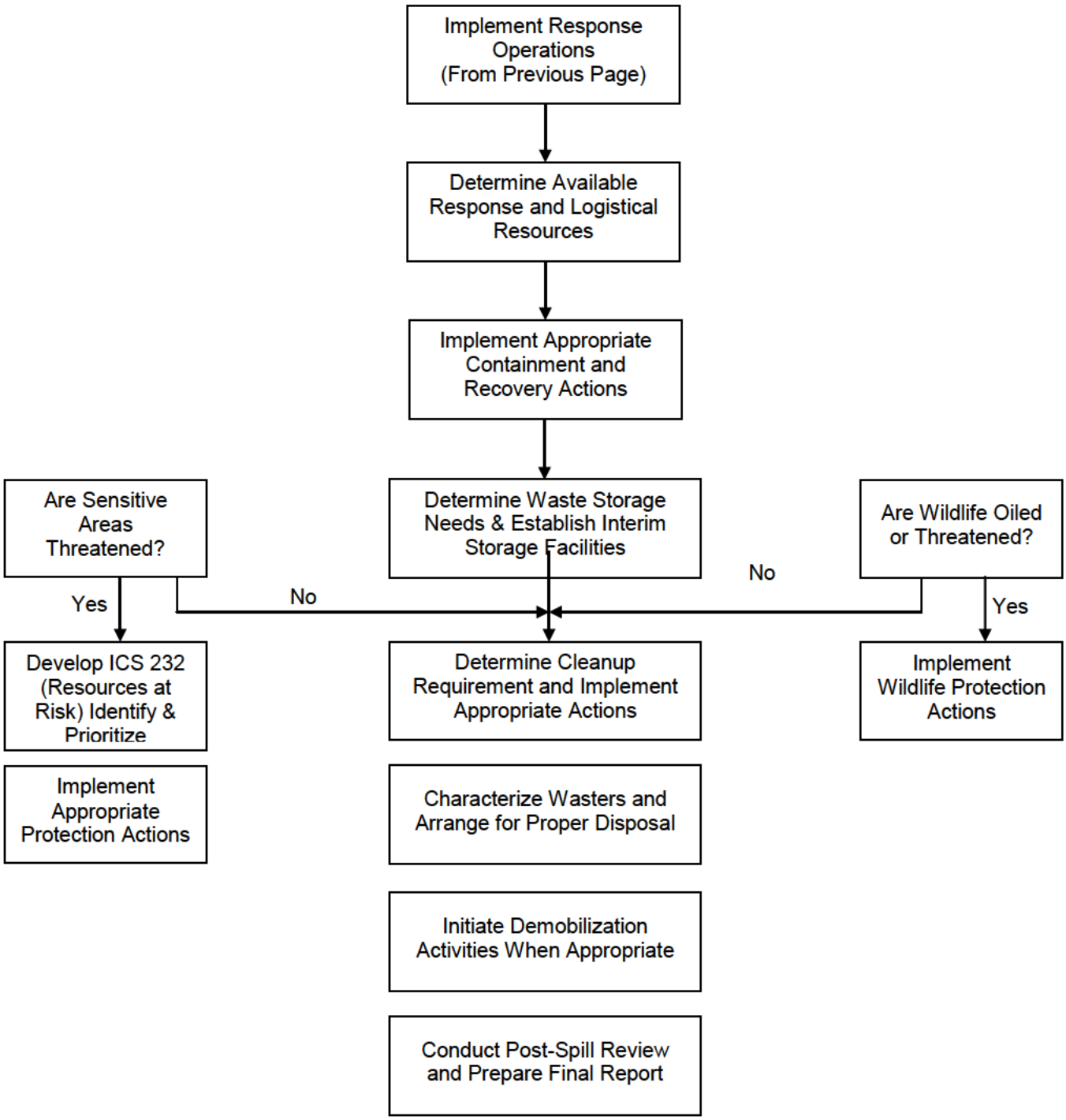


Note: Successful mitigation may require elements of all 3 options.

Sec. II-5.18 Spill Response Strategy Guide



Sec. II-5.18 Spill Response Strategy Guide (Cont'd)



Note: Pipeline Emergency Response operations dictate that the Company and Agency Incident Commanders will establish the location of the Incident Command Post and Communication Center. Factors that will be taken into account when deciding on the Incident Command Post will include but not be limited to: location of the pipeline release, personal and public safety, geography, preference of local, state and federal response personnel, weather, size of CP needed and workability.

Sec. II-5.19 Oil Spill / Release

Oil Release Checklist		
Procedures	✓	Date/Time
Consider safety of personnel.	☐	__/__/__ __:__
Shut off ignition sources.	☐	__/__/__ __:__
Stop the flow of spilled product.	☐	__/__/__ __:__
Coordinate rescue and medical response actions.	☐	__/__/__ __:__
Identify release and assess possible hazards to human health and the environment.	☐	__/__/__ __:__
Report all spills to Supervisor and Management.	☐	__/__/__ __:__

Sec. II-5.20 Oil Spill Surveillance

Spill Surveillance Guidelines	
•	Spill surveillance should begin as soon as possible to aid response personnel with assessing spill size, movement and potential impact locations.
•	Cloud shadows, sediment, floating organic matter, submerged sand banks or wind-induced patterns on the water may resemble an oil slick if viewed from a distance.
•	Use surface vessels to confirm the presence of any suspected oil slicks, if safe to do so. If possible, direct the vessels from the aircraft and photograph the vessels from the air to show their position and size relative to the slick.
•	It is difficult to adequately observe oil on the water from a boat, dock or shoreline.
•	Spill surveillance is best accomplished using helicopters or small planes. Helicopters are preferred due to their superior visibility and maneuverability characteristics.
•	If fixed-wing planes are used, high wing types provide better visibility than low-wing types.
•	Document all observations in writing and with photographs and/or videotapes.
•	Describe the approximate oil slick dimensions based on available reference points (i.e. vessel, shoreline features, facilities). Use aircraft or vessel (if safe to do so) to traverse the length and width of the slick while timing each pass. Calculate the approximate size and area of the slick by multiplying speed and time.
•	Record aerial observations on detailed maps.
•	In the event of reduced visibility, such as dense fog or cloud cover, boats may be used for patrols and documenting the location and movements of the spill. Boats will only be used if safe conditions are present, including on-scene weather and product characteristics.
•	Surveillance is also required during spill response operations in order to gauge effectiveness of response operations, to assist in locating skimmers and to continually assess size, movement and impact of spill.

Aerial Spill Surveillance Data Sheet

Incident Name:	**Date / Time:**
Environmental Conditions	
Wind Speed (kts):	Wind Direction:
Current Speed (kts):	Current Direction:
Air Temperature (°F)	Water Temperature (°F)
Comments	
Clear ☐	Partly Cloudy ☐ Cloudy ☐

Spill Location				
Leading Edge	Latitude	Deg	Min	Sec
	Longitude	Deg	Min	Sec
Trailing Edge	Latitude	Deg	Min	Sec
	Longitude	Deg	Min	Sec

Spill Description

	Barely Discernable	Silvery Sheen	Faint Colors	Bright Bands of Color	Dull Brown	Dark Brown
Length						
Width						

General Description

Sec. II-5.20 Oil Spill Surveillance (Cont'd)

Spill Volume Estimating	
Early in a spill response, estimation of spill volume is required in order to:	
•	Report to agencies
•	Determine liquid recovery requirements
•	Assess manpower and equipment requirements
•	Determine disposal and interim storage requirements

In the event that actual spill volumes are not available, it may be necessary to estimate this volume.

Spill Volume Estimation Methods	
•	**Water**: Visual observation and calibration with the A.P.I. Task Force on Oil Spill Cleanup, Committee for Air and Water Conservation's Spill Size Estimation Matrix. This matrix is included as Figure II-5.1 for spills to water. Other methods which can be used to determine size and volume of a spill include, but are not limited to: • Other methods which can be used to determine size and volume of a spill include, but are not limited to: • Vessel/line capacity formulas • Infra-red thermal imaging
•	**Land**: • Use the Transportation Spill to Land Estimation Tool • SCADA (Control Center calculation) • Tank Data Program

Figure II-5.1 – Spill Estimation Factors

Use this table to calculate the amount of an oil spill to water:

Estimated Area* (sq ft)	Estimated Amount of Spill in GALLONS**					
	Barely Discernible	Silvery Sheen	Faint Colors	Bright Bands of Color	Dull Brown	Dark Brown
1,000	< 1/8	< 1/8	< 1/8	< 1/8	< 1/8	< 1/8
5,000	< 1/8	< 1/8	< 1/8	< 1/8	< 1/8	3/8
10,000	< 1/8	< 1/8	< 1/8	< 1/8	1/4	2/5
15,000	< 1/8	< 1/8	< 1/8	< 1/8	3/8	1/2
20,000	< 1/8	< 1/8	< 1/8	1/4	2/5	1
30,000	< 1/8	< 1/8	< 1/8	1/4	3/5	1
50,000	< 1/8	< 1/8	1/4	2/5	1	3
100,000	< 1/8	1/4	2/5	3/4	3	5
300,000	3/8	3/5	1	2	6	14
600,000	1/2	1	2	4	13	29
900,000	3/4	2	3	7	20	43
1,000,000	7/8	2	4	7	22	47
1,250,000	1	2	5	9	27	59
1,500,000	1	3	5	11	32	70
1,750,000	2	3	6	13	38	82
2,000,000	2	4	7	14	43	94
4,000,000	4	8	15	30	90	95
6,000,000	5	11	22	44	132	286
8,000,000	7	15	29	58	174	377
10,000,000	9	18	36	72	216	468
12,500,000	11	23	45	90	270	585
15,000,000	14	27	54	108	324	702
17,500,000	16	32	63	126	378	819
20,000,000	18	37	72	144	432	936
22,500,000	21	41	82	164	492	1,066
25,000,000	23	45	90	180	540	1,170
27,500,000	25	50	100	200	600	1,300

*Arrived at by multiplying estimated length of spill by estimated width. Round up to next highest value.
**Calculated from guide published by the API Task Force on Oil Spill Cleanup, Committee for Air and Water Conservation.
< Means less than

Sec. II-5.20.1 Estimating Spill Trajectories

Oil spill trajectories may initially be estimated in order to predict direction and speed of the slick movement. Trajectory calculations provide an estimate of where oil slicks may impact shorelines and other sensitive areas and provide an estimate of the most likely locations for protection, containment and recovery.

The following methods may be used to predict spill movement:	
•	Vector Analysis (using wind speed/direction, tides, and current speed/direction)
•	Computer trajectory modeling programs (including but not limited to): • World Oil Spill Model (WOSM) • OilMap • General NOAA Oil Modeling Environment (GNOME)

The Company will utilize internal subject matter experts with consultants as necessary to perform trajectory analysis and fate & effect modeling.

Input variables for proper modeling include, but are not limited to:	
•	Spill location, volume, and time of spill
•	Nature of the spill - continuous or single incident
•	Wind speed & direction
•	Water movement (current) speed & direction
•	Water temperature
•	Sea state
•	Atmospheric temperature
•	Characteristics of spilled material

This information can be obtained from many sources, including but not limited to:	
•	Reports from personnel at the spill site
•	Commercial weather services
•	National Oceanic and Atmospheric Administration (NOAA)
•	Internal Company databases

Sec. II-5.20.2 Sampling and Testing

In defining an acceptable response to a spill incident, it is necessary to know certain physical and chemical characteristics of the spill material. If positive identification of the spilled material can be made without testing, product data may be obtained from a material safety data sheet (MSDS), product specification information, and/or records of product physical and chemical properties.

Occasionally a spill may occur in which the spilled material is not readily identifiable. Typically, laboratory analytical data for spill event samples will not be instantaneously available during an emergency. Therefore, it is necessary and desirable to field-categorize oils as the product reacts and changes in the environment. Although varying widely in physical and chemical properties, oil products have common basic features that permit their grouping for predictive evaluation of environmental effects and determination of control actions. In addition, as petroleum products react and change (e.g., weather) when exposed in the environment, the laboratory data may not be representative of "real-time" conditions; rather the data may instead reflect the chemical characteristics of the spilled material(s) at the time of sample collection.

The **Oil Spill Trajectory Request Form** is located in Section III of this plan.

Sec. II-5.21 Spills to Groundwater

Sec. II-5.21.1 General

Spills to bare ground will initially spread laterally on the surface and then begin migrating downward through the soil and, depending on a variety of factors and circumstances, could reach groundwater. During vertical migration the spill will spread laterally to some degree and a portion of the oil will be absorbed by the soil particles or become trapped in small pores eventually immobilizing the spill.

In general, oil will continue migrating downward until:
• Residual Saturation is reached (all of the oil is absorbed by the soil)
• Impenetrable Layer (silt, clay, sandstone, rock) is encountered
• Groundwater is reached

If a spill does reach groundwater, the oil will form a mound on the surface of the groundwater (water table) and begin to spread horizontally but preferentially in the direction of groundwater flow. For higher groundwater velocities, a narrow plume elongated in the direction of groundwater flow will form whereas for lower velocities the plume broadens and assumes a more circular pattern. The thickness of the plume or layer of oil on the water table will decrease with distance from the source.

As with vertical migration, a portion of the oil will adhere to soil particles and become trapped in small or water filled pores eventually becoming immobilized. For instantaneous or quasi-instantaneous spills, 40-70% of lateral spreading will generally occur in the first 24 hrs whereas 60-90% occurs in the first week.

Sec. II-5.21.2 Response Actions

In the event of a spill to bare ground, there are a number of actions that should be taken to assess the spill and, if groundwater is impacted, initiate recovery and limit the extent of impact. A decision guide is provided at the end of this section that outlines the general response actions that should be taken. Additional information on these response actions is also provided below.

Sec. II-5.21.3 Initial Assessment

As for any spill, the initial response actions for spills to bare ground should include the assessment of health and safety hazards. See the Site Safety and Health Plan as well as the following parameters.

Initial Assessment Parameters
• Spill Size and Product Accumulation (pooled oil) Depth
• Product Type (viscosity)
• Soil Type/Permeability/Moisture Content
• Depth to Groundwater
• Estimated Response Time to Initiation of Recovery Actions

Sec. II-5.21.4 Ground Impact Potential

Once the assessment is completed, the potential for the spill to impact underlying groundwater should be determined and generally requires some knowledge of the local hydrogeology including soil type/permeability and depth to groundwater, and groundwater flow direction. The common factors, along with selected examples, that contribute to a spill having a higher or lower potential to impact groundwater are:

Higher Potential
• Shallow Groundwater (generally <20 ft)
• Low Viscosity Oil (gasoline)
• Dry Soil with Low Oil Retention Capacity
• Highly Permeable Soils (sand, gravel, coarse grained mixed sediment)
• Large Volume
• Pooled Oil (creates hydraulic head that enhances penetration)
• Response Time (several hours before pooled oil recovery begins)

Lower Potential
• Deep Groundwater (generally >20 ft)
• Medium to High Viscosity Oil (industrial fuel oils, crude, lubricants, etc.)
• Wet or Moist Soils with High Oil Retention Capacity
• Low Permeability Soils (silts, clays, fine grained mixed sediment)
• Small Volume
• No Pooled Oil on Surface
• Response Time (expeditious recovery of pooled oil or saturated soils)

Sec. II-5.21.4 Ground Impact Potential (Cont'd)

For small spills that do not pool on the ground surface, vertical penetration into the soil is often limited to 4 to 8 inches with the exception of coarse gravels which could allow considerably deeper penetration. Depth of penetration can be estimated if you know the square footage of surface impact, soil type, depth to groundwater and spill volume. Using the above information and the table shown below, a calculation of how much oil can be adsorbed/retained by the soil between the surface and the water table. If the retention capacity is significantly greater than the spill volume, the potential for the spill to reach groundwater would be low and vice versa.

Retention Capacity

Soil Type	Oil Retention Capacity (gal / yd^3)
Stones, coarse gravel	1
Gravel, coarse san	1.6
Coarse sand, medium sand	3
Medium sand, fine sand	5
Fine sand, silt	8

Sec. II-5.21.5 Supplemental Assessment

If the potential exists for a spill to reach groundwater, additional assessment activities should be conducted to confirm groundwater has been impacted and, if so, assess the extent of impacts. In most cases, experienced remediation contractors already under contract to the Company will be utilized to conduct subsequent assessment activities.

These activities commonly include:

- **Backhoes or Excavators** – excavate pits/trenches to determine penetration depth/groundwater impacts (limited to depths of 10–20 ft)
- **Hand or Power Augers** – install borings to collect soil/water samples and can be used to install temporary wells (often limited to 15-30 ft)
- **Direct Push Drilling Rigs** – install borings to collect soil/water samples and can be used to install temporary wells (often limited to 50-100 ft)
- **Hollow Stem Auger (HAS) or rotary drill rigs -** install borings to collect soil samples and wells for groundwater samples (limited to 100-500 ft)

The type of method used often depends on equipment availability, depth to groundwater and access to the spill area. For areas with shallow groundwater and good access, backhoes or excavators are often the most expedient means of determining penetration depth and groundwater impacts. If access is limited, such as in many tank farms, hand or power augers can be used to install borings and collect samples. Direct push (Geoprobe) rigs can get into many areas but are generally truck mounted and will need road access. For areas with good access and where groundwater is deeper, hollow stem augers or rotary drill rigs are often the best equipment for subsequent assessment.

Sec. II-5.21.5 Supplemental Assessment (Cont'd)

Borings or pits should be installed, if safe to do so, in the main spill area where penetration is typically greatest. If groundwater impacts are confirmed or expected, additional borings or wells should be installed by stepping out laterally from the spill area and primarily in the down gradient direction until the groundwater impact area is delineated.

It is important to note that if intrusive activities (excavation, drilling, hand augers, etc.) are necessary, additional air monitoring of the excavation and breathing zone around the activities should be conducted to ensure additional hazards are not created by the activities. In addition, if excavation activities are conducted and it is necessary for workers to enter the excavation, confined space permitting and/or shoring regulations may apply.

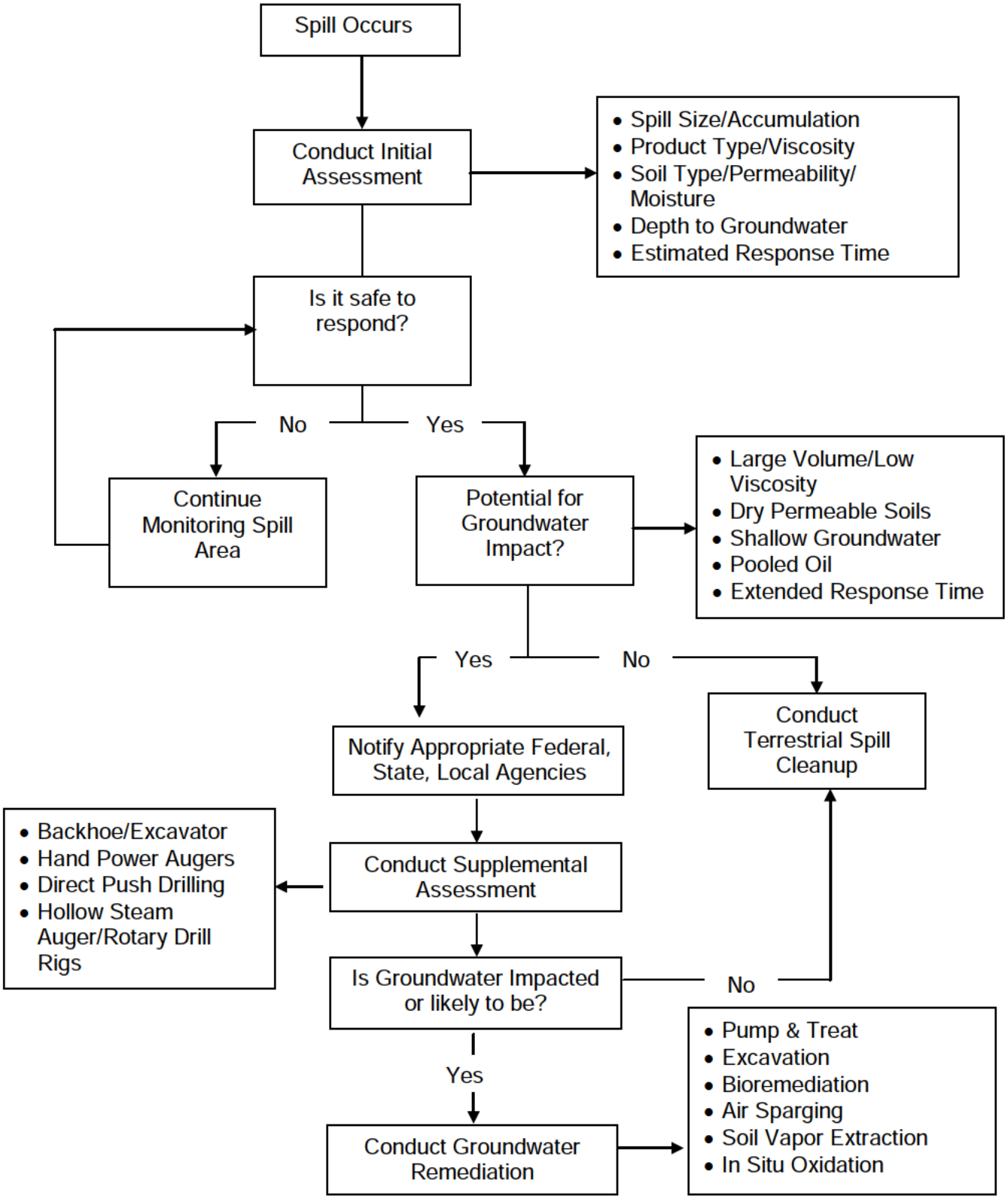
Sec. II-5.21.6 Recover/Remediation

In the event a spill does reach groundwater or the threat of reaching groundwater remains, recovery or remediation activities will need to be conducted to mitigate the impacts. The impacts could be limited to low concentrations of hydrocarbons that have dissolved into the groundwater or, for larger spills, involve a layer of oil/product floating (separate, or non-aqueous, phase hydrocarbons) on the groundwater surface (water table) accompanied by elevated concentrations of dissolved (aqueous phase) hydrocarbons in the groundwater.

Some of the more common groundwater remediation techniques include:	
•	Pump and Treat
•	Excavation
•	Bioremediation
•	Air Sparging
•	Soil Vapor Extraction
•	In Situ Oxidation

Selection of the most appropriate remediation technique will depend on a number of factors including product type, soil type, depth to groundwater, access, extent of impacts, current groundwater use, etc. The Company will utilize experienced remediation contractors to select and implement the most appropriate remediation technique(s). The local or regional remediation contractor(s) under contract to the Company are provided in the Contacts Section of this plan, along with their contact information.

Figure II-5.2 – Groundwater Spill Response Strategy Guide



Sec. II-5.22 Natural Disasters

This checklist identifies actions to be taken when the Pipeline and/or its facilities are threatened by thunderstorms, producing lightning or high winds.

Thunderstorms / Lightning / High Winds Checklist		
Procedures	✓	Date/Time
Establish communications with the Field office for weather updates.	☐	__/__/__ [00:00]
Upon notification by weather monitoring of impending severe weather conditions, notify the initial Incident Commander or the appropriate office of the situation.	☐	__/__/__ [00:00]
Personnel will be instructed to shut down all nonessential activities and take shelter where available until the storm has passed.	☐	__/__/__ [00:00]
Immediately bring personnel off vessels, tanks, pipe racks, and other elevated work areas. Suspend product loading operations and close all tank openings.	☐	__/__/__ [00:00]
Take shelter until the storm has passed.	☐	__/__/__ [00:00]

Tornado Safety Checklist		
If a ***tornado warning*** has been issued. Use the following checklist		
Procedures	✓	Date/Time
Establish communications with the Field office for weather updates.	☐	__/__/__ [00:00]
Sound the alarm.	☐	__/__/__ [00:00]
Have location personnel report to the designated area.	☐	__/__/__ [00:00]
Avoid all windows and proceed to an interior room on the lowest floor or tornado shelter, if available. • Interior stairwells will be one of the best shelters, if available.	☐	__/__/__ [00:00]
Seek shelter under a sturdy/heavy piece of furniture.	☐	__/__/__ [00:00]
Use your arms to protect the back of your head and neck.	☐	__/__/__ [00:00]
Once the all clear has sounded:		
Account for all Personnel	☐	__/__/__ [00:00]
Begin search and rescue if any personnel is missing	☐	__/__/__ [00:00]

Earthquake		
Procedures	✓	Date/Time
Assess situation and exercise caution.	☐	__/__/__ [00:00]
Emergency Shut Down, if necessary. Notify Control Center as needed.	☐	__/__/__ [00:00]
If damage has occurred, close the nearest block valves on either side of the damaged location.	☐	__/__/__ [00:00]
Conduct visual inspection of the line(s) using one or more of the following methods. ☐ Aircraft ☐ Vehicle ☐ Walking	☐	__/__/__ [00:00]
Evacuate the line for closer inspection and/or pressure test prior to resuming operations, if necessary.	☐	__/__/__ [00:00]
Inspect system integrity	☐	__/__/__ [00:00]
Check off-site areas for damage.	☐	__/__/__ [00:00]

River Flood, Severe Storm, Freeze Protection Preparedness Checklist		
Procedures	✓	Date/Time
Refer to applicable Flood, Hurricane, and Freeze Protection Preparedness Plan	☐	__/__/__ [00:00]

Sec. II-5.23 Bomb Threat

(b) (7)(F), (b) (3)

[redacted]

Sec. II-5.23 Bomb Threat (Cont'd)

(b) (7)(F), (b) (3)

[redacted]

Sec. II-5.23.1 Bomb Threat Call Checklist

(b) (7)(F), (b) (3)

Sec. II-6 Detection Procedures

Sec. II-6.1 Release Detection

The Company has a number of safety systems and practices in place to prevent the occurrence and mitigate the subsequent impact of accidental releases. The systems are designed to alert operators with alarms and provide automatic shut-in functions in the event of a release. Pipeline operators are trained to respond to the various system alarms in order to identify and control releases immediately.

The routine responsibilities that ensure releases will be detected and mitigated as soon as possible by IC/UC personnel may include, but are not limited to the following:	
•	Regularly scheduled visual and aerial monitoring.
•	Routine walk-through and monitoring of process equipment to ensure proper operation of all equipment at each facility.
•	Immediate response to alarms and signals that may indicate a possible release.
•	Identification and control of the source as soon as safely possible.
•	Notify the Person in Charge.

All pipelines operated by the Company are equipped with high and low pressure sensors. In the event of a change in pipeline pressure beyond a specified set point, the pressure sensors will trigger an alarm to the facility operator and/or shut down the pipeline and process equipment.

The Company operators will perform the following procedures when they are alerted to a potential pipeline emergency:

Procedures	✓	Date/Time
Ensure that the pipeline pressure sensing equipment is not malfunctioning.	☐	__/__/__ [00:00]
The supervisor will request a field inspection of the pipeline in question to identify the source of the suspected leak.	☐	__/__/__ [00:00]
In the event an oil leak is discovered along the pipeline, this Plan will be activated.	☐	__/__/__ [00:00]
In the event a leak is not found, an investigation into the cause of the pressure change will continue until determined.	☐	__/__/__ [00:00]

Sec. II-6.2 Discharge Detection Systems

The Company will provide a detailed description of the procedures and equipment used to detect discharges. A section on discharge detection by personnel and a discussion of automated discharge, if applicable, will be included for both regular operations and after hours operations. In addition, the Company will discuss the reliability of any automated system, how it will be checked and how frequently the system will be inspected.

Sec. II-6.3 Discharge Detection by Personnel

Sec. II-6.3.1 Routine Inspections

Terminal operators perform routinely scheduled terminal inspections. Terminal equipment and current movements are checked for evidence of leaks or spills in addition to various other observations such as security, equipment operation, etc.

Sec. II-6.3.2 Safe Fill

When pipeline receipts or transfers are made, the volumes used in the calculations for space available use a safe fill height as the maximum operating level.

Sec. II-6.3.3 Receipt Monitoring

Terminal employees coordinate all receipts with pipeline representatives. This involves determination of the volume of each product grade prior to receipt. The receipt progress, incoming volumes and high level alarm signals are monitored at all times when product is being transferred into the terminal from the pipeline by the Control Center.

Sec. II-6.3.4 Tank Gauging

Each tank scheduled to receive a receipt is gauged prior to receipt to confirm that space is available for the receipt.

Sec. II-6.3.5 High Level Alarms

All tanks are equipped with high level alarms. High level alarms are indicated by an audible signal that can be heard anywhere on the complex as well as visual indication in the Control Room. A signal is also sent to the Control Center and requires immediate contact with the facility operator. Alarms are tested periodically in accordance with company preventive maintenance procedures.

Sec. II-6.3.6 Volume Reconciliation

Tanks are gauged at month end as part of our physical inventory reconciliation program.

Sec. II-6.3.7 Pipe Testing

Belowground piping is periodically tested.

Sec. II-6.3.8 Observations and Documentation

The condition of tanks and equipment are observed when employees responsible for the operation and maintenance of the terminal are on shift. Documentation of these conditions will be logged periodically at the discretion of the local supervisor.

The following are elements of the oil inventory control system:

Sec. II-6.3.9 Physical Inventory

This currently serves as the basis for comparing an inventory-reporting period with the previous reporting period. Current practice uses end of month physical inventory [calculated in net barrels per petroleum measurement tables (ASTM D1250 80, 5B, and 6B)] as an opening inventory for the next month's reporting period.

Sec. II-6.3.10 Facility Throughput

Facility throughput is product leaving a tank primarily through a truck loading rack with meters. Meters on truck loading racks are to be calibrated according to a set interval. They are also reconciled in conjunction with physical inventory taking as well as on a standalone basis. Quantity loaded shall be determined on a net basis using temperature from temperature probes mounted at or near the loading rack and gross gallon quantities from meter pulses. These throughput quantities shall be deducted from inventory.

Sec. II-6.3.11 Product Variation

A physical inventory can be taken to compare with the book inventory quantity, if necessary. The difference between the book and physical quantity is a product variation. Variations may be positive or negative. Statistical Process Control (SPC) is the basis for determining whether this variation should trigger an investigative effort to determine whether product is unknowingly being discharged.

Sec. II-6.3.12 Statistical Process Control (SPC)

Control limits (both upper and lower) are set for each product variation based upon historical information at each facility. Product variations between the control limits are considered to be OK and do not require an investigation or documentation. These variations inside of limits are considered to be a "random" occurrence that is an inherent part of the control process. Product variations outside the control limits are to be investigated using techniques outlined in Transportation's Terminal Operation and Procedures Manual with documentation required at both the terminal and Accounting. The control limits will be periodically checked to determine if they are still valid or whether process changes or improvements have invalidated them.

If a release is detected, personnel are directed to notify the proper authorities (see the Notifications Section).

Sec. II-6.4 Automated Discharge Detection

The terminal is equipped with high level alarms, which sound an alarm locally at the terminal. Control Center also receives an alarm if this "high level" is reached. When the Company receives these alarms, immediate contact with the facility operator on duty is established. The high level alarm is set below the tank overfill height to ensure enough time to shut down the line before overfilling occurs.

The loading rack is equipped with Scully automatic equipment to shut down pumps to prevent overfilling of truck transports. All trucks must have sensors, which are compatible with our equipment. Should sensors fail, the loading rack has automatic shutdown switches (red button emergency shutdown) that the transport driver or the terminal operator may utilize to shut down transfer pumps.

Sec. II-6.5 Source Control

Company operators have been trained to respond to abnormal pipeline/facility operations. Source control will be maintained with the following systems and procedures:	
•	Company facilities are equipped with Emergency Support Systems (i.e., sumps, safety control valves, emergency shutdowns, etc.). The systems can alarm pipeline operators and shut down individual valves or the entire pipeline.
•	In the event the incident does not allow automatic control, the operator has the flexibility to control a release by manually activating shutdown devices or closing valves, etc. provided that the personnel are not exposed to the released substances.
•	In the event the source cannot be controlled by the pipeline operator or remotely with a safety system, the Company will activate this Plan and assemble a team to respond to the situation.
•	All pipelines within Company System are monitored on a regular and routine basis. All product pipelines and many crude lines are connected to the SCADA (Supervisory Control and Data Acquisition) System. Company personnel monitor and control line pressures, temperature and product flow rate, operate remotely controlled valves, operate pumps and engines, and monitor the type of product currently in the line at any given point. These control centers are operated on a 24-hour basis. Should a leak occur, the operators monitoring the lines can have the line shut down within minutes. The operators can then dispatch field personnel to physically inspect the line in the area of the suspected leak.

Sec. II-6.6 Good Engineering Practices.

The Company's approach to preventing discharges is to assure that all facilities are properly designed, constructed, maintained and operated.

Some examples of good engineering practices may include but are not limited to the following:

Engineering Practices	
•	Components in the pipeline system are designed and constructed in accordance with written specifications.
•	Components are inspected to ensure that quality is maintained during material procurement and construction.
•	Trained personnel are used during the construction of the facilities.
•	Various testing methods are used during construction of the facilities.
•	External and internal corrosion control methods are used to maintain the facilities in the best possible condition.
•	A preventive maintenance program reduces the potential for component malfunction or failure
•	Company personnel are properly trained to operate and maintain the pipeline system
•	Company has an extensive safety and drug testing program for its employees and requires the same for its contractors.
•	Company systems are designed and operated with safety factors in place. For example, the maximum operating pressure of a system is always less than the design pressure of the system and the test pressure of the system.
•	Pressures are monitored and controlled so that the maximum operating pressures are not exceeded.
•	When appropriate, internal inspection tools are used or lines are subjected to additional hydrostatic testing to determine and assure their integrity.
•	All wastes are stored in accordance with applicable regulatory requirements (DOT containers that are non-leaking, closed, in good condition, properly marked/labeled, inspected to ensure integrity, etc.)

Sec. II-6.7 Third-Party Damage Prevention

If the systems are properly designed, constructed, operated and maintained, then the most probable source of discharge is due to third-party damage. In order to minimize the risk of damage caused by a third-party a number of steps may be taken, including, but not limited to the following:

Prevention of Third-Party Damage	
•	The facilities are designed to reduce the chance of third-party damage. For example, most of the facilities are buried or located within fenced and locked areas.
•	Areas especially sensitive to third-party damage are road, railroad, and water crossings. Pipelines in these areas usually have additional wall thickness, or burial depth, or are cased to reduce the chance of damage.
•	Company facilities are normally located on well- maintained and clearly marked rights-of-way.
•	Company facilities are normally monitored by aerial or other patrol at least once per week to check for encroachment and construction activities.
•	Company participates in one-call pipeline locating and notification systems where available.
•	Company conducts education programs to reduce the possibility of third-party damage.

Sec. II-6.8 Corrosion Mitigation

For external corrosion prevention, the Company generally prevents corrosion of buried pipelines by using approved long-life pipeline coatings supplemented with cathodic protection. Aboveground facilities are generally inspected annually and provided protective coating systems to prevent corrosive deterioration. These primarily include buildings, aboveground pipelines and tanks.

In order to prevent internal corrosion of the pipelines, the Company uses chemical injection, pigging and corrosion inhibitors, and inspects pipelines located in high population density areas and environmentally sensitive areas with in-line inspection pigs, where appropriate. A large number of pipelines are hydrostatically tested.

Sec. II-6.9 Spill Mitigation

Source control and mitigation involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

Sec. II-6.10 Tank Overfill and Fire Prevention

Each tank is provided with a connection for a semi-fixed fire protection system. Individual foam laterals that run from connections outside the dike areas serve each tank. The foam laterals are controlled by manual valves. Connections to the tanks depend on roof construction. Foam fire fighting capabilities are provided by the Refinery and/or the Local Fire Department.

Each bulk storage tank is equipped with a liquid level gauging device and an independent high-level alarm system with audible and visual alerts. During product movements the operator and field personnel maintain radio communication. All tanks are also manually gauged to check the accuracy of the automatic liquid level gauging system.

Delivery personnel monitor tank levels during the filling period for small mobile/portable tanks to provide overfill protection.

Sec. II-6.10.1 Storage Tank Overfill Lines

All overflow or vent lines on bulk storage tanks, as well as the building heating oil and gasoline additive tanks, are directed into the tank's secondary containment areas. Overflow lines on the jet fuel and diesel fuel additive tanks are directed into the truck rack secondary containment.

Sec. II-6.11 Visual Tank Inspection

The visual tank inspection checklist presented below has been included as guidance for inspections and monitoring. Also included in the visual tank inspection will be an inspection of the tank foundation and associated piping. All tankage, pumping equipment, piping and related terminal equipment are inspected every working day for leakage, malfunctions of seals, etc. Storage tanks are inspected monthly and annually and findings are recorded. Example forms are included in this plan. These records shall be maintained for a minimum of five years.

Check tanks for leaks, specifically looking for:	
•	Drip marks
•	Discoloration of tanks
•	Puddles containing stored materials
•	Corrosion
•	Cracks
•	Localized dead vegetation

Check foundation for:	
•	Cracks
•	Discoloration
•	Puddles containing stored materials
•	Settling
•	Gaps between tank and foundation
•	Damage cause by vegetation roots

Check piping for:	
•	Droplets of stored material
•	Discoloration
•	Corrosion
•	Bowing of pipe between supports
•	Evidence of stored material seepage on valves and seals
•	Localized dead vegetation

Terminal operators visually inspect all tanks each working day for leaks. Daily tank gauges are reviewed for evidence of product loss that would indicate a leak in the tank. Any visible oil leaks from tank seams, gaskets, rivets and/or bolts are corrected immediately.

Sec. II-6.12 Secondary Containment Inspection

The secondary containment areas shown on the site plans will be inspected on an annual basis. The inspections will include checking for the following:

Dike or berm system:	
•	Level of precipitation in dike/available capacity
•	Operation status of drainage valves
•	Debris
•	Erosion
•	Location/status of pipes, inlets, drainage beneath tanks, etc.

Secondary containment:	
•	Cracks
•	Discoloration
•	Presence of stored materials (standing liquid)
•	Corrosion
•	Valve conditions

Retention and drainage ponds:	
•	Erosion
•	Available capacity
•	Presence of stored material
•	Debris
•	Stressed vegetation

Sec. II-6.13 Pipeline Inspections

All pipelines within the Company Pipeline System are monitored on a regular and routine basis. Control Center personnel monitor and control line pressures and product flow rate, operate remotely controlled valves, operate pumps and engines, and monitor the type of product currently in the line at any given point. These control centers are operated on a 24-hour basis. Should a leak occur, the operators monitoring the lines can have the line shut down within minutes. The operators can then dispatch field personnel to physically inspect the line in the area of the suspected leak.

Lines that are not connected to the SCADA System are generally smaller crude gathering pipelines. These lines are observed regularly by facility/pipeline maintenance personnel. In addition to these inspections, aircraft that fly the pipeline on a scheduled weekly basis inspect the lines.

Sec. II-6.14 Buried Piping

Nearly all piping has been moved above grade. Most of the remaining buried, underground lines run under roadways. Some piping appears as "buried", but is really only penetrating an elevated roadway or containment berm for a short distance, approximately 20 feet. Even though such penetrations require sealing to not compromise the containment, any leakage from short, elevated lengths would appear where the pipe penetrates the berm/roadway, rather than migrate vertically downward through compacted clay berms/roadways. This leakage would readily be detected by personnel during routine visual inspections.

There are no existing state-of-the-art leak detection devices available for retrofitting to existing buried piping. When a leak is detected from a buried pipe, the Company will excavate, examine, and evaluate the pipe for the cause of the failure. Localized pipe failures will be repaired or replaced. For extensive pipe failures requiring substantial reconstruction, the Company will upgrade to the standard specified under the DPCC regulations. For the purposes of this plan, substantial reconstruction is defined as more than 50 percent of the replacement value of an existing pipe section from valve to valve.

Facility practices generally prohibit the installation of buried pipes, other than water and sewer lines. The need for new buried product piping is evaluated on a case-by-case basis. If such a need is identified, the Company will install new buried piping to the standard specified under the DPCC regulations. Should new elevated roadway/containment berm penetrations be required for a project, they will be constructed according to current practices.

Sec. II-6.14.1 Exposed Buried Piping

If a section of buried pipe is exposed for any reason, it is carefully examined for deterioration, and, if found to be deteriorated, shall be repaired or replaced. Buried piping requiring substantial reconstruction or replacement shall be rerouted above grade, if possible, or upgraded to new buried piping standards.

Sec. II-6.14.2 Out-of-Service Pipes

If not in service for extended periods of time, terminal pipe connections are blind flanged, plugged or capped and appropriately marked. This practice applies to- all piping in the terminal where an open-ended line could exist, whether or not protected by valving.

Sec. II-6.14.3 Pipe Supports

In accordance with good engineering practice and petroleum industry standards, pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction of the pipeline.

Sec. II-6.14.4 Elevated Pipes

Elevated pipelines to the loading racks are sufficiently high and the supports adequately protected to prevent tank trucks from accidentally hitting them. Speed limit signs posted at the entrance of each loading rack bay limit any impact damage to aboveground pipelines.

Sec. II-6.15 Dike Drainage

Drainage of precipitation accumulation from dike areas is performed only after inspection of the accumulation to ensure compliance with applicable water quality standards. Any water possessing a film, sheen or discoloration on the surface is not discharged until such sheen has been physically removed with the use of absorbent pads.

Drain valves are sealed and locked at all times except when there is an operator on-site who:	
•	Inspects the water for a film, sheen, or discoloration;
•	Removes any film, sheen, or discoloration;
•	Monitors the discharge; and,
•	Records the discharge event in the SPCC plan.

Sec. II-6.16 High Level Alarms

High level alarms on storage tanks are inspected routinely to simulate actual operating conditions to ensure that overfill during tank filling operations are adequately detected. Results of high-level alarm inspections are recorded in the SPCC plan once every six months.

Sec. II-6.17 Rack Drain

Rack drains are inspected to ensure that any petroleum release from the loading facilities can be conveyed through clean, open drains into proper on-site containment. Results of the rack drain inspections are recorded in the SPCC plan every six (6) months.

Sec. II-6.18 Cathodic Protection System

Cathodic protection systems are inspected to ensure proper function. Results are updated in once every six (6) months.

Sec. II-6.19 Delivery Lines and Manifold

The facility tests the delivery lines and manifold on an annual basis with a two (2) hour recorded pressure test.

Sec. II-7 Emergency Response Equipment, Testing & Deployment

Sec. II-7.1 Response Equipment for Small Discharges

Response equipment for small discharges (< 50 barrels) will primarily come from contracted OSRO's as well as any Company equipment stored locally. Much of this equipment is utilized for day-to-day booming of vessels, as well as for immediate rapid response to all leaks/discharges by terminal personnel and contractors. The equipment can be operated by terminal personnel and/or contractor personnel listed in this Plan. The Management Response Team may authorize additional contractor-supplied equipment and personnel, as needed. This Plan discusses onsite tank storage capacity for recovered oil/water mixtures.

***All OSRO specific information will be detailed in the applicable ICP Geographical Annex.**

Sec. II-7.2 Response Equipment for Medium Discharges

Response equipment for medium (1,200 barrels) discharges again will come from Contacted OSRO's as well as from Company equipment stored locally. Other contractors may be called upon as well depending on the specific needs. These too are listed in the applicable ICP Geographical Annex.

Sec. II-7.3 Response Equipment for Worst-Case Discharges

Response equipment for a worst-case discharge at any Company operational facility/pipeline is located in the applicable ICP Geographical Annex. The Company has guaranteed through contract or other approved means the ability to ensure appropriate response capabilities to any area worst case discharge. In addition, the Company has also ensured the ability to sustain prolonged operations as well.

Sec. II-8 Waste Management Plan

Sec. II-8.1 Introduction

The following wastes may be generated and could be determined to be "hazardous":	
•	Paint Chips
•	Avgas Filters
•	Petroleum contaminated materials that are not considered “of-spec product”

Most of the wastes are "hazardous" due to the benzene concentrations in the wastes (>0.5 mg/l) or ignitability. The avgas filters are frequently determined to be "hazardous" due to the lead concentrations (>5.0 mg/l) in the filters. The paint chips are typically hazardous for lead, chromium or both (>5.0 mg/l).

The following materials are more frequently generated and are not considered a solid waste or a “hazardous waste”.

These materials are exempt from the definition of a solid waste because they are classified as an “off-spec product” destined for product reclamation.	
•	Tank bottom water
•	Loading rack runoff
•	Tank bottom sludge
•	Oil/water separate sludge

It is the purpose of the Terminal’s hazardous waste contingency plan to minimize hazards to human health and the environment in the event of an emergency. This plan is designed to address emergencies that may occur during operations at this facility involving hazardous wastes.

Sec. II-8.2 Applicability

The plan must be carried out immediately whenever there is a fire, explosion or release of **hazardous waste** that could threaten human health or the environment.

Sec. II-8.3 Amendments to Plan

The contingency plan must be reviewed and immediately amended whenever:	
•	Applicable regulations are revised
•	Plan fails in an emergency
•	Facility changes in design, construction, operation, maintenance, or any way increasing the potential for fires, explosions, or releases of hazardous waste, or changes the response necessary in an emergency
•	List of emergency coordinators changes
•	List of emergency equipment changes

Sec. II-8.4 Identification of Emergency Coordinator

The names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator are located ICP Geographical Annex 2 of this plan.

Sec. II-8.5 Emergency Procedures

Whenever there is an imminent or actual emergency situation the emergency coordinator or alternate must immediately activate the facility alarm systems or communications system. The actions that must be taken in the event of a release of hazardous waste to the air, soil or surface water at the facility are located in this Core Plan.

Sec. II-8.6 Evacuation Plan

Due to the characteristics of the hazardous wastes generated, evacuation of a facility should not be necessary. In the event evacuation is necessary, the facility evacuation plan should be followed. A description of the signal(s) to be used and evacuation routes is provided. The facility drainage plan can be located at the end of this section.

Sec. II-8.7 Notification Requirements

The only emergency that may occur with regard to the management of hazardous waste at the facility is a sudden or non-sudden release of hazardous waste. The reportable quantity (RQ) for spills of D018 waste is 10 pounds (1.2 gallons). Any spill equal to or greater than the RQ must be reported to the National Response Center. Reporting procedures should follow the guidelines provided in this Core Plan.

Sec. II-8.8 Arrangements with Agencies and Contractors

As required by 40 CFR 264.53, all Terminals will have provided the police departments, fire departments, hospitals and State and Local Emergency Response Teams that may be called upon to provide emergency services. In addition, the Company will make every effort to invite local agencies to participate, as appropriate, in any exercise or drill. .

Sec. II-8.9 Emergency Equipment

Emergency Equipment	
•	A list of all spill response equipment available in the event of a release is listed in the appropriate ICP Geographical Annex of this Core Plan. A list of spill response contractors to be used by the facility in the event of a release that could surpass the response capabilities of the facility is also located in appropriate ICP Geographical Annex of this Core Plan.
•	A list of emergency fire equipment at the facility is located in the Emergency Procedures Plan.
•	A description of the facility's communication equipment and plan is provided in this Core Plan.
•	A description of the facility's alarm systems is provided in this Core Plan.

Federal, state and local rules designed to ensure safe and secure handling of waste materials govern the waste disposal activities of the Company. To ensure proper disposal of recovered oils plus associated debris, the Company's Waste Management and Recycling Guide should be consulted/followed. The Company's Environmental Group will advise/support IC/UC on all waste management needs during an emergency response to ensure compliance with all applicable regulations and internal waste management policies and guidelines.

The Company must describe how and where the facility intends to recover, reuse, decontaminate or dispose of materials after a discharge has taken place. The appropriate permits required to transport or dispose of recovered materials according to local, State and Federal requirements must be addressed.

Material that must be accounted for in the disposal plan, as appropriate, include	
•	Recovered product
•	Contaminated equipment and materials, including drums, tank parts, valves, shovels
•	Personnel protective equipment
•	Decontamination solutions
•	Adsorbents
•	Spent Chemicals

These plans must be prepared in accordance with Federal (e.g., the Resource Conservation and Recovery Act [RCRA], State and local regulations, where applicable.

Initial oil handling and disposal needs may be overlooked in the emergency phase of a response, which could result in delays and interruptions of cleanup operations. Initially, waste management concerns should address:

Initial Waste Management Concerns:	
•	Skimmer Capacity
•	Periodic removal of contained oil
•	Adequate supply of temporary storage capacity and materials

The following action items should be conducted during a spill response:	
•	Development of a site-specific Safety and Health Plan addressing the proper PPE and waste handling procedures
•	Development of a Disposal Plan
•	Continuous tracking of oil disposition in order to better estimate amount of waste that could be generated over the short and long-term
•	Organization of waste collection, segregation, storage, transportation and proper disposal
•	Minimization of risk of any additional pollution
•	Regulatory review of applicable laws to ensure compliance
•	Documentation of all waste handling and disposal activities
•	Disposal of all waste in a safe and approved manner

Good hazardous waste management includes:	
•	Reusing materials when possible
•	Recycling or reclaiming waste
•	Treating waste to reduce hazards or reducing amount of waste generated

The management of the wastes generated in clean-up and recovery activities must be conducted with the overall objective of ensuring:

Overall Objectives	
•	Worker Safety
•	Waste Minimization
•	Cost-Effectiveness
•	Minimization of Environmental Impacts
•	Proper Disposal
•	Minimization of present and future environmental liability

Solid wastes such as sorbents, PPE, debris and equipment will typically be transported from the collection site to a designated site for:

Designated Site Activities	
•	Storage
•	Waste segregation
•	Cost-Effectiveness
•	Packaging
•	Transportation

Once this process is complete, the waste will be shipped off-site to an approved facility for required disposal.

A general flowchart for waste management guidelines is shown in Figure II-8.1. An overall checklist for containment and disposal is located in Figure II-8.2.

Sec. II-8.10 Storage

During an oil spill the volume of oil that can be recovered depends on the storage capacity available. Typical short-term storage methods are summarized in Figure II-8.3. If storage containers such as bags or drums are used, the container should be clearly marked and/or color-coded to indicate the type of material or waste contained and/or the ultimate disposal option.

Figure II-8.1 – Waste Management Flowchart

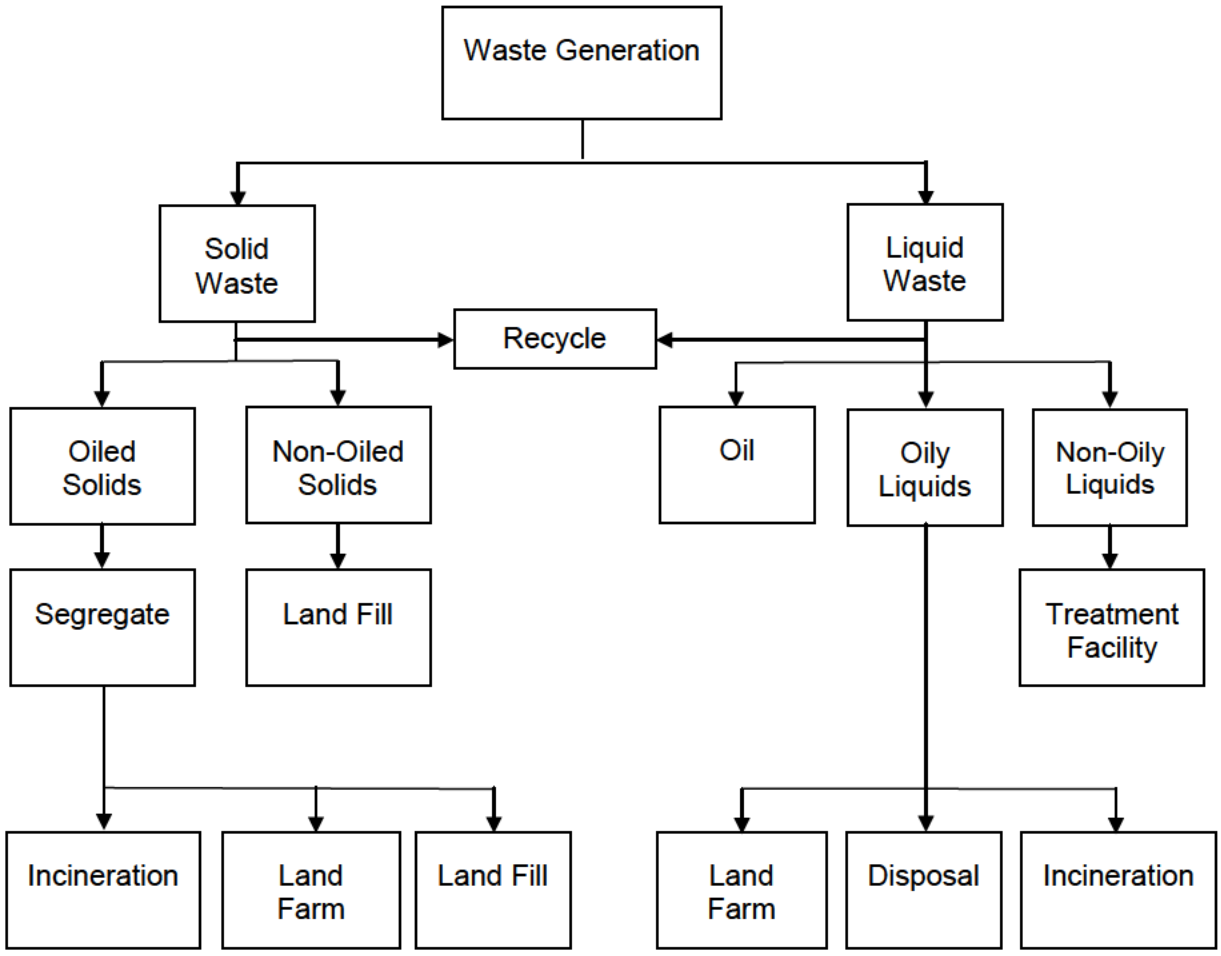


Figure II-8.2 – General Waste Containment and Disposal Checklist

Consideration	Yes / No / NA
Is the material being recovered as waste or reusable product?	
Has all recovered waste been containerized and secured so there is no potential for further leakage while the material is being stored?	
Has each of the discrete waste streams been identified?	
Has a representative sample of each waste stream been collected?	
Has the sample been sent to an approved laboratory for the appropriate analysis (i.e. hazardous waste determination)?	
Have the appropriate waste classification and waste code numbers for the individual waste streams been received?	
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	
Have the services of registered hazardous waste transporter been contracted, if waste is hazardous?	
If the waste is nonhazardous, is the transporter registered?	
Is the waste being taken to an approved disposal site?	
Is the waste hazardous or Class I nonhazardous?	
If the waste is hazardous or Class I nonhazardous, is a manifest being used?	
Is the manifest properly completed?	
Are all Federal, State and Local laws/regulations being followed?	
Are all necessary permits being obtained?	
Has a Disposal Plan been submitted for approval/review?	
Have PPE and waste-handling procedures been included in the Site Safety and Health Plan to protect the health and safety of waste handling personnel?	

Figure II-8.3 – Temporary Storage Methods

	PRODUCT						
Containment	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	**Capacity**
Drums			X	X			.2-.5 yd^3
Bags			X	X	X		1-2 yd^3
Boxes			X	X	X		1-5 yd^3
Open Top Rolloff	X	X	X	X	X	X	8-40 yd^3
Roll Top Rolloff	X	X	X		X	X	15-25 yd^3
Vacuum Box	X	X					15-25 yd^3
Frac Tank	X	X					500-20,000 gal
Poly Tank	X	X					200-4,000 gal
Vacuum Truck	X	X	X				2,000-5,000 gal
Tank Trailer	X	X					2,000-4,000 gal
Barge	X	X					3,000+ gal
Berm, 4 ft	X	X	X	X	X	X	1yd^3
Bladders	X	X					25-1,500 gal

Approved waste management facilities can be located on the Company website:
http://hse.conocophillips.net/EN/environmental/waste/program/Pages/index.aspx

Interim Storage Tracking

Interim Storage Location(s)	Location(s) Received From	Time/Date Received	Volume (Gals/Yds)	Type of Waste:
Totals				

Waste Recovery Tracking Form

Recovery Location(s)	Time Recovered		Volume (Gals/Yds)	Type of Waste:	Projected Interim Storage Demand:
	From:	To:			
Totals					

Waste Disposal Tracking Form

Incident Name: _____ Type of Waste: _____ Waste Stream#: _____

Date	Bill of Lading/ Manifest Number	Originating Site	Transporter	Disposal Facility Destination	Quantity:

Sec. II-9 Disposal Plan

Oil will be recovered and water will be disposed of as normal produced water through permitted UIC injection wells or third-party disposal wells. Solid waste recovered during clean-up activities will be stored in secure areas (lined, bermed temporary storage areas, lined pits, or tanks) until permits can be secured for proper disposal.

Disposal Options for contaminated soil, depending upon analysis, include but are not limited to the following:	
•	Surface remediation
•	Enhanced surface remediation
•	Third party recycling (adsorbents)
•	Third party disposal

These disposal options will be dependent upon laboratory analysis per current federal, state and local regulation. The Company Waste Management and Recycling Guide should be consulted for the appropriate analytical requirements for each waste stream. Necessary federal, state and local permits will be obtained by Company Environmental personnel.

Oil contaminated absorbent materials will be stored in covered secured containers and ultimately shipped for recycling.

Spilled material will be skimmed to recover product and minimize contamination of vegetation and soil. Low pressure flushing will also be used to enhance recovery of liquid product. Absorbent materials may be used to recover spilled material that vacuum trucks are unable to pick up. Absorbent materials (and booms) are then recycled and returned for potential future use. Other oil contaminated booms, boats, and boots, will be cleansed by qualified contractors or wiped down on site with rags. The rags will be disposed of properly.

The Company has contracted with USCG Certified OSROs for each ICP Geographical Annex. Contact information and response capability for each OSRO can be found in that particular ICP geographically Annex.

The OSRO(s) contracted to respond in each ICP Geographical Annex is capable of being on site and ensuring planned temporary storage and waste disposal activities are accomplished within the appropriate tier times. They will provide sufficient temporary storage to ensure enough capacity is available to respond to a worst-case discharge.

Figure II-9.1 Disposal Plan Form

Disposal Plan				**Page 1 of 3**
Date:			Location:	
Source of Release:				
Amount of Release:				
Incident Name:				
State On-Scene Coordinator:				
Federal On-Scene Coordinator:				
Time Required for Temporary Storage:				
Proposed Storage Method:				
Identified Storage Location / Staging Area:				
Disposal Priorities				
Sample Date:			Sample ID:	
Analysis Required (Type):				
Laboratory Performing Analysis:				
Disposal Options				
	Available	Likely	Possible	Unlikely
Landfill				
In-situ Bio-Remediation				
In-situ Burn				
Pit Burning				
Hydrocyclone				
Off Site Incineration				
Reclaim				
Recycle				
Resources Required for Disposal Option(s)				

Figure II-9.1 Disposal Plan Form (Cont'd)

Disposal Plan	Page 2 of 3
General Information	
Generator Name:	
US EPA ID#:	
Waste Properties:	
Waste Name::	
US EPA Waste Code:	
State Waste Code:	
EPA Hazardous Waste:	
Waste Storage and Transportation:	
Proposed Storage Method:	
Proposed Transportation Method:	
Permits Required for Storage:	
Permits Required for Transportation:	
Estimated Storage Capacity:	
Number and Type of Storage Required:	
Local Storage Available for Temporary Storage of Recovered Oil:	
PPE Required for Waste Handling:	
Waste Coordinator	Date:

Figure II-9.1 Disposal Plan Form (Cont'd)

Disposal Plan		Page 3 of 3
Sample Information		
Incident Name:		
Sample Number:	Date Sent:	
Source of Sample:		
Date Sample Data Received:		
Waste Hazardous? (Circle One)	YES	NO
Permits/Variances Requested:		
Approval Received on Waste Profile:		
Date Disposal Can Begin:		
Disposal Facilities:		
Profile Number:		
Storage Contractors:		
Waste Transporters:		
PPE Designated and In Accordance With Site Safety Plan:		
Additional Information:		
Waste Coordinator	Date:	

Sec. II-10 Containment and Recovery

Sec. II-10.1 General

Containment and recovery refers to the techniques or methods that can be employed to contain and recover petroleum spills on water or the containment of petroleum spills flowing overland. Recovery of terrestrial spills is often very similar, or uses the same techniques as shoreline cleanup.

The following considerations should be taken into account when planning or implementing containment and recovery operations:	
•	Containment is most effective when conducted near the source of the spill where the oil has not spread over a large area and the contained oil is of sufficient thickness to allow effective recovery and/or cleanup.
•	Feasibility is generally dependent on the size of the spill, available logistical resources, implementation time, and environmental conditions or the nature of the terrain in the spill area.
•	Aquatic (water) containment is primarily conducted through the use of oil spill containment booms.
•	Skimmers are usually the most efficient means of recovery of aquatic spills, although pumps, vacuum systems, and sorbents can also be effective, particularly in smaller waterways.
•	Terrestrial (land) containment typically involves berms or other physical barriers.
•	Recovery of free petroleum from the ground surface is best achieved by using pumps, vacuum sources, and/or sorbents.

Sec. II-10.2 Technique Selection - Terrestrial Containment and Recovery

The primary factors influencing terrestrial containment and recovery are:	
•	**Size** - Most containment techniques provide limited storage capacity.
•	**Slope** - Berms and barriers are generally less effective on steeper slopes and accessibility may be limited.
•	**Surface texture** - Rough surfaces with natural ridges and depressions enhance containment and should be taken advantage of whenever possible.
•	**Substrate permeability** - Highly permeable sediments will allow rapid penetration of oil into the substrate, thus complicating containment and recovery.
•	**Existing drainage courses** - Oil is more easily contained and recovered if it is flowing within, or can be diverted to, existing natural or manmade drainage structures.
•	**Stormwater runoff** - Runoff generally requires the containment of larger quantities of liquids and complicates oil recovery.

Sec. II-10.3 Technique Selection - Aquatic Containment and Recovery

Selection of an appropriate aquatic containment, protection and recovery technique depends on a number of factors including:	
•	**Current speed** - Surface currents greater than 1 knot can cause boom failure or entrainment of oil beneath the boom when the boom is deployed perpendicular to the current. If deployed at an angle, boom can generally be effective up to 2-3 knots.
•	**Water depth** - Depths greater than 50 feet can complicate boom anchor placement, whereas depths less than 2 feet can preclude effective boom use.
•	**Channel width** - Widths of more than 200 to 300 feet will generally preclude using booms to completely contain oil floating in the waterway, particularly if strong currents are present.
•	**Slick thickness** - Recovery effectiveness with pumps/vacuum systems and skimmers decreases as slick thicknesses decline, becoming relatively ineffective for very thin slicks or sheens.
•	**Shoreline access** - Obstacles (rocks, debris, man- made structures, etc.) in the water or steep or densely vegetated shorelines could restrict access and present safety and operational problems.
•	**Anchor points** - Soft bottom substrates can complicate boom anchor placement.
•	**Safety** - High currents and winds, large obstacles, and other dangerous conditions could present safety hazards and preclude certain techniques.

The OSRO(s) contracted to respond in each ICP Geographical Annex is capable of being on site and ensuring spill containment activities are accomplished within the appropriate tier times. They will provide sufficient containment equipment to ensure enough capacity is available to respond to a worst-case discharge.

Sec. II-10.4 Protection Technique Selection

Technique	Description	Primary Logistical Requirements	Use Limitations[1]	Potential Environmental Effects
Spills on Land				
A. Containment / Diversion Berms	Construct earthen berms ahead of advancing surface spill to contain spill or divert it to a containment area.	Equipment* 1 backhoe, bulldozer, front-end loader, or set of hand tools Personnel 4-8 Workers	• Steep Slopes • Porous substrate	• Disturbance to surface soils and vegetation • Increased oil penetration
B. Storm Drain Blocking	Block drain opening with sediments, plastic sheet, boards, etc. and secure prevent oil from entering drain.	Equipment* Misc. hand tools, 1 board, plastic sheet, mat, etc. Personnel 1-2 Workers	• May be advantageous for oil to enter drain • Heavy precipitation	• Increased oil penetration • Oil can spread to other areas
C. Blocking Dams	Construct dam in drainage course/stream bed to block and contain flowing oil. Cover with plastic sheeting. If water is flowing, install inclined pipes during dam construction to pass water underneath.	Equipment* 1 backhoe, bulldozer, front-end loader, or set of hand tools, 1 plastic sheeting roll Personnel 4-6 Workers	• Upstream storage capacity • Flowing water	• Increased oil penetration
D. Culvert Blocking	Block culvert opening with plywood, sediments, sandbags, etc. to prevent oil from entering culvert	Equipment* Misc. hand tools, misc. plywood, sandbags, etc Personnel 3-4 Workers	• Upstream storage capacity • Flowing water	• Increased oil penetration
E. Interception Trench	Excavate ahead of advancing surface/ near-surface spill to contain oil. Cover bottom and downgradient side with plastic.	Equipment* 1 backhoe or set of hand, tools, misc. plastic sheeting Personnel 3-6 Workers	• Slope • Depth to near-surface flow	• Increased oil penetration • Disturbance to surface soils and vegetation

Sec. II-10.4 Protection Technique Selection (Cont'd)

Technique	Description	Primary Logistical Requirements	Use Limitations[1]	Potential Environmental Effects
Spills on Water				
F. Diversion Booming	Boom is deployed from the shoreline at an angle towards the approaching slick and anchored or held in place with a work boat. Oil is diverted towards the shoreline for recovery.	Equipment* 1 boat, 3 anchor systems (min), 100 feet boom (min) Personnel 3 workers plus boat crew	• Currents >2-3 kts • Waves > 1-2 ft • Water depth >50 feet (anchoring) • Sensitive shorelines	• Minor substrate disturbance at anchor points • Heavy oiling at shoreline anchor point
G. Narrow Channel Containment Booming	Boom is deployed across entire river channel at an angle to contain floating oil passing through channel.	Equipment* 1 boat, vehicle, or winch; 1-2 booms (1.2 x channel width each); 2-10 anchor systems Personnel 2-3 Workers	• Currents >2-3 kts • Water depth >50 feet (anchoring) • Sensitive shorelines	• Minor substrate disturbance at anchor points • Heavy shoreline oiling at downstream anchor point
H. Sorbent Barriers	A barrier is constructed by installing two parallel lines of stakes across a channel, fastening wire mesh to the stakes, and filling the space between with sorbents.	Equipment* (per 100 ft of barrier): misc. hand tools, 1 boat, 20 fence posts, 200 ft wire mesh, 200 ft^2 sorbents, misc. fasteners, support lines, additional stakes, etc. Personnel 2-3 Workers	• Water depths >5-10 feet • Currents >0.5 kts • Soft substrate	• Minor substrate disturbance at post and shoreline anchor points • High substrate disturbance if boat is not used
I. Exclusion Booming	Boom is deployed across or around sensitive areas and anchored in place. Approaching oil is excluded from area.	Equipment* (per 500 ft of boom): 1 boat, 6 anchor systems, 750 ft boom (min) Personnel 3 workers plus boat crew	• Currents >1-2 kts • Waves >1-2 feet • Water depth >50 feet (anchoring)	• Minor substrate disturbance at anchor points

Sec. II-10.4 Protection Technique Selection (Cont'd)

Technique	Description	Primary Logistical Requirements	Use Limitations[1]	Potential Environmental Effects
Spills on Water (Cont'd)				
J. Deflection Booming	Boom is deployed from the shoreline away from the approaching slick and anchored or held in place with a work boat. Oil is deflected away from shoreline.	Equipment* 1 boat, 5 anchor systems, boom (200 feet) Personnel 3 workers plus boat crew	• Currents >2-3 kts • Waves >1-2 feet • Water depth >50 feet (anchoring) • Onshore winds	• Minor substrate disturbance at anchor points • Oil is not contained and may contact other shorelines
K. Inlet Dams	A dam is constructed across the inlet or channel using local shoreline sediments to prevent oil from entering inlet. Dam can be covered with plastic to minimize erosion.	Equipment* 1 backhoe, bulldozer, front-end loader, or set of hand tools, 1 plastic sheeting roll Personnel 2-6 workers	• Water outflow • Inlet depth >5 feet • Excessive inlet width	• Sediment/vegetation disturbance at borrow areas • Inlet substrate disturbance • Increases suspended sediments • Water in inlet can become stagnant
L. Debris / Ice Exclusion	Install fence barrier upstream of containment site to exclude debris/ice	Equipment* (per 100 ft of barrier): misc. hand tools, 1 boat, 10 fence posts, 100 feet cyclone fence, misc fasteners, support lines, etc. Personnel 2-3 workers	• Water depth >5-10 feet • Currents >3-4 kts • Soft substrate	• Minor substrate disturbance at post an anchor points

[1] In addition to implementation and accessibility.
* Need to establish a safe perimeter and follow safety precautions as appropriate before work begins.

Sec. II-10.5 Shoreline and Terrestrial Cleanup

Sec. II-10.5.1 General

In the event that terrestrial sediments do become oiled or that petroleum contacts and becomes stranded on a shoreline, cleanup operations should be undertaken to minimize the environmental effects of the petroleum. In most instances, cleanup efforts are not subject to the same time constraints as containment, recovery, and protection operations. As a result, better planning and greater attention to detail is possible. The exception is where there is a high probability of stranded oil becoming remobilized and migrating to previously unaffected areas. In this case, cleanup operations should be implemented immediately.

The following items should be considered in detail:	
•	Documentation of the location, degree, and/or extent of oil conditions
•	Evaluation of all environmental, cultural, economic, and political factors
•	Cleanup technique selection
•	Mitigation of physical and environmental damage associated with cleanup technique implementation
•	Cost-effectiveness

The shoreline or terrestrial oil conditions can range from those which require immediate and thorough cleanup to lightly oiled areas where no action may be the most environmentally sound option. The amount and type of oil, shoreline sensitivity, substrate or shoreline type, intrusive nature of the candidate techniques, and shoreline exposure are all factors that influence technique selection and whether or not cleanup will be required.

Sec. II-10.5.2 Cleanup Technique Selection - Shoreline

The selection of an appropriate shoreline cleanup technique is primarily dependent on the following factors:	
•	**Substrate type** - Finer-grained sediments typically require different techniques than coarse- grained sediments.
•	**Oil conditions** - Heavier oil conditions and larger areas may require more intrusive or mechanical methods, whereas lighter conditions may not require any form of cleanup. For example – removing lighter oils in a marsh area or wetland may cause more harm to the environment than allowing for natural attenuation and biodegrading.
•	**Shoreline slope** - Heavy equipment may not be usable on steeper shorelines.
•	**Shoreline sensitivity** - Intrusive techniques may create a greater impact than the oil itself.
•	**Oil penetration depth** - Significant penetration can reduce the effectiveness of several techniques.

Sec. II-10.5.3 Cleanup Technique Selection - Terrestrial

The selection of an appropriate terrestrial cleanup technique is primarily dependent on the following factors:	
•	**Size** - Larger areas will generally require the use of mechanical methods, whereas manual techniques can be used for smaller areas.
•	**Slope** - The use of heavy equipment is often restricted to gradually sloped areas, and manual techniques may be considered unsafe if used on steep terrain.
•	**Sediment type** - Softer sediments may reduce trafficability for heavy equipment and the presence of coarser sediments and bedrock could also restrict the use of certain types of heavy equipment.
•	**Oil penetration depth** - Significant penetration may require the use of heavy equipment or special subsurface remediation techniques.
•	**Impacted groundwater** - Special subsurface remediation techniques would likely be required.

Detailed containment and recovery guidelines, including diagrams and descriptions are described in the **Company's Operations Field Response Manual.**

The OSRO(s) contracted to respond in each ICP Geographical Annex are capable of being on site and ensuring spill recovery activities are accomplished within the appropriate tiered response times. They will provide sufficient recovery equipment to ensure enough capacity is available to respond to a worst-case discharge.

Sec. II-10.6 Non-Mechanical Response Options

Non-mechanical response options that could be used in responding to a spill include:	
•	Chemical treatment / dispersants
•	Bioremediation
•	In-situ Burning

Although the physical control and recovery of spilled oil is advocated and generally preferable, such actions are not always possible or practical because of factors including safety hazards, remote spill sites, or weather. When non-mechanical methods can result in reduced human hazard or environmental damage, consideration of their use is appropriate but will require regulatory approval.

Sec. II-10.7 Dispersants – Criteria for Use

Consideration of dispersant use during a spill must account for all aspects of the situation including:	
•	Nature of the oil
•	Resources at risk
•	Adequacy of cleanup techniques
•	Natural dispersion
•	Time
•	Logistics
•	Economics
•	Chemical dispensability of the oil
•	Nature of the oil/dispersant mixture

Special considerations such as threatened or endangered species, critical habitats, historical or cultural sites, and other structures must also be considered in the decision process.

Sec. II-10-7.1 Approval Process

All pre-approved dispersants are found in the NCP product schedule. This list is updated on a monthly or bimonthly basis. When considering dispersant use, only a product on this list may be used except during an emergency situation such as an immediate threat to human life. The Federal On-Scene Coordinator (FOSC) may authorize the use of dispersants when concurrence has been received by the RRT. In the case where dispersants are necessary due to an immediate threat, the FOSC may authorize their use and inform the RRT of the action by the most rapid mean of communication available.

Sec. II-10.8 In-situ Burning

When mechanical recovery of spilled oil is not feasible, in-situ burning should be considered as a potentially viable option. Since burning presents a potential safety and air pollution hazard to the surrounding area, approval from appropriate regulatory agencies is required.

In-situ burning alters the composition of the spilled oil by eliminating anywhere from 90 to 99 percent of the original volume of oil provided it is controlled within a fire resistant boom or other containment system. A portion of the original oil is released into the atmosphere as soot and gaseous emissions. Solid or semi-solid residues typically remain following a burn but are relatively easy to retrieve. They can be further reduced in volume through repeated burns, and ultimately are collected and removed from the marine environment.

Sec. II-10.8.1 Evaluation

In-situ burning generates a thick black smoke that contains primarily particulates, soot, and various gases (carbon dioxide, carbon monoxides, water vapor, nitrous oxides and PAHs). The components of the smoke are similar to those of car exhaust. Of these smoke constituents, small particulates less than 10 microns in diameter, known as PM-10, (which can be inhaled deeply into the lungs) are considered to pose the greatest risk to humans and nearby wildlife. Each affected area is considered on a case-by-case basis.

Decisions to burn or not to burn oil in areas considered case-by-case are made on the basis of the potential for humans to be exposed to the smoke plume, and pollutants associated with it. PM-10 exposure is generally limited to 150 micrograms per cubic meter. Smoke plume modeling is done to predict which areas might be adversely affected. In addition, in-situ burning responses require downwind air monitoring for PM-10. Aerial surveys are also conducted prior to initiating a burn to minimize the chance that concentrations of marine mammals, turtles and birds are in the operational area and affected by the response. SMART (Special Monitoring for Applied Response Technologies) protocols are used. They recommend that sampling is conducted for particulates at sensitive downwind sites prior to the burn (to gather background data) and after the burn has been initiated. Data on particulate levels are recorded and the Scientific Support Team forwards the data and recommendations to the Unified Command.

The potential for implementing a successful burn of spilled oil depends upon the knowledge and experience of those responsible for the assessment of the spill situation. Review of the spill conditions, together with the above spill checklist, will ensure that the safety issues, the benefits, and the environmental impacts will have been examined carefully. While steps may be taken to move critical equipment into position for a possible burn, there will be no attempt to ignite spilled oil without prior authorization from both Federal and/or State On-Scene Coordinators.

Before a spill on water is ignited, several factors must be considered:	
•	Oil type, amount and condition
•	Environmental conditions
•	Availability of personnel and equipment
•	Timing
•	Human safety
•	Danger of fire spreading
•	Presence of explosive vapors
•	Damage to nearby habitats that may prolong natural recovery

Sec. II-10.8.2 Approval Process and Monitoring

When a request for an in-situ burn is made:	
•	The burn must be outside the corporate city limits, except as deemed necessary by the local fire department.
•	Wind direction should move the smoke away from the city and/or populated Areas
•	Burning must be at least 300 feet from any adjacent properties.
•	Burning should commence between the hours of 9:00 am and 5:00 pm of the same day.
•	Wind speed should be between 6 and 23 mph during the burn period.
•	Burn should not be conducted during persistent atmospheric thermal inversions.

In general, SMART is conducted when there is a concern that the general public may be exposed to smoke from the burning oil. It follows that monitoring should be conducted when the predicted trajectory of the smoke plume indicates that the smoke may reach population centers, and the concentrations of smoke particulates at ground level may exceed safe levels. Monitoring is not required, however, when impacts are not anticipated.

Execution of in situ burning has a narrow window of opportunity. It is imperative that the monitoring teams are alerted of possible in situ burning and SMART operations as soon as burning is being considered, even if implementation is not certain. This increases the likelihood of timely and orderly

The monitoring teams are deployed at designated areas of concern to determine ambient concentrations of particulates before the burn starts. During the burn, sampling continues and readings are recorded both in the data logger of the instrument and manually in the recorder data log.

After the burn has ended and the smoke plume has dissipated, the teams remain in place for sometime (15-30 minutes) and again sample for and record ambient particulate concentrations. During the course of the sampling, it is expected that the instantaneous readings will vary widely.

However, the calculated time-weighted average readings are less variable, since they represent the average of the readings collected over the sampling duration, and hence are a better indicator of particulate concentration trend. When the time-weighted average readings approach or exceed the Level of Concern (LOC), the team leader conveys this information to the In-Situ Burn Monitoring Group Supervisor (ISB-MGS) who passes it on to the Technical Specialist in the Planning Section (Scientific Support Coordinator, where applicable), which reviews and interprets the data and passes them, with appropriate recommendations, to the Unified Command.

SMART activities are directed by the Operations Section Chief in the ICS/UCS. It is recommended that a "group" be formed in the Operations Section that directs the monitoring effort. The head of this group is the Monitoring Group Supervisor. Under each group there are monitoring teams. At a minimum, each monitoring team consists of two trained members: a monitor and assistant monitor. An additional team member could be used to assist with sampling and recording. The monitor serves as the team leader. The teams report to the Monitoring Group Supervisor who directs and coordinates team operations, under the control of the Operations Section Chief.

Communication of monitoring results should flow from the field (Monitoring Group Supervisor) to those persons in the ICS/UCS who can interpret the results and use the data. Typically, this falls under the responsibility of a Technical Specialist on in-situ burning in the Planning Section of the command structure. The observation and monitoring data will flow from the Monitoring Teams to the Monitoring Group Supervisor. The Group Supervisor forwards the data to the Technical Specialist. The Technical Specialist or his/her representative reviews the data and, most importantly, formulates recommendations based on the data. The Technical Specialist communicates these recommendations to the ICS/UCS. Quality assurance and control should be applied to the data at all levels. The Technical Specialist is the custodian of the data during the operation, but ultimately the data belongs to the ICS/UCS incident files. This will ensure that the data is properly archived, presentable, and accessible for the benefit of future monitoring operations.

Sec. II-10.9 Bioremediation

Sec. II-10.9.1 General

Bioremediation is the process of applying nutrients (fertilizer containing nitrogen and phosphorus) or genetically engineered bacteria to oiled terrestrial or shoreline areas to accelerate the natural biodegradation process. During this process, micro-organisms (bacteria) oxidize hydrocarbons, ultimately converting them to carbon dioxide and water. Biodegradation occurs primarily at the oil/water or oil/air interface and is limited by oxygen, moisture, and nutrient availability. It is also sensitive to temperature; the lower the ambient temperature, the lower the rate. If nutrients are used, they must be supplied in such a way that they will not be washed away by tides or any water runoff.

Sec. II-10.9.2 Evaluation

The decision to use bioremediation treatment should be based on the type of spill, the character of the area impacted, and the local political jurisdiction. In some cases, other forms of cleanup may be required in conjunction with nutrient addition to achieve the desired enhancement rate. Extensive efforts to achieve more acceptance of this technology are underway. As in the case of other oil spill response chemicals, approval must be obtained from the FOSC and SOSC before the nutrients are applied and the products must be listed on government product schedules where required. An expert should be consulted.

The use of biological additives is regulated under Subpart J of the NCP (40 CFR 300.900). Under the NCP, options for the authorization of biological agents are outlined, including a provision for conditional preapproval for use under certain conditions and in certain locations. Consult with the FOSC to determine whether an applicable preauthorization has been approved. The current application and approval procedure includes state approval and does not preempt the States from having their own testing criteria.

The Incident Commander will be responsible for providing the FOSC and SOSC with incident specific information needed to approve the conduct of bioremediation operations.

Sec. II-11 Water Quality and Sediment Quality Analysis

If the situations requires, following a release of oil to a waterway, Company will attempt to gather background data to determine the current conditions of the impacted waterway and sediments. An attempt will be made to collect samples ahead of the plume to determine current background conditions. Water quality data and sediment quality data will also be collected from within the impacted area to determine the changes in conditions. Following cleanup efforts, additional sampling will be conducted to demonstrate the effectiveness of the cleanup operations.

The sampling protocol will be determined by the volume and type of material spilled. In general, near surface water samples will be obtained along with sediment samples. In some cases, depending on spill-specific conditions, stratified sampling may be required. The following EPA analytical methods may be utilized to determine if oil from the Company release exists on the bottom sediments or within the water column. This is not intended to be an exhaustive list, but may be used as a guideline when deciding which methods to use.

Sec. II-11.1 EPA Analytical Methods**

Product	Constituent	Possible EPA Methods
GASOLINE	Benzene	8020, 8240
	Toluene	8020, 8240
	Ethylbenzene	8020,8240
	Xylenes	8020, 8240
DIESEL	Polynuclear Aromatic Hydrocarbons	8100, 8270, 8310
	BTEX	8020, 8240
OILS	Total Petroleum Hydrocarbons	418.1, Modified 8015

** Contact your Environmental Representative for assistance in selecting the proper analytical methods.

Sec. II-12 Drainage Plan

In addition to automated alarms and routine inspections to tanks and dikes, procedures are in place to further ensure the safety of personnel, equipment and protection of the environment. These procedures are intended to be followed at all times to maintain the safety of the facility and to mitigate or prevent the damage potential of a large-scale discharge.

The following elements will be addressed under general facility, storage tanks, the truck rack area, tank water draining, or facility piping and valves as appropriate:	
•	Available containment volume
•	Route of drainage
•	Drainage through construction materials
•	Type/quantity of valves and separators
•	Sump pump capacities
•	Weir/boom containment capacity and location
•	Other cleanup material
•	General Facility: The available containment volume of this facility is location in ICP Geographical Annex 1 of this plan.

Sec. II-12.1 Storage Tanks

Each storage tank has a diked area. However, adjacent tanks share common dike walls and accumulated liquids can be drained from one diked area to another through valve regulated drain lines. Accumulated water is removed from diked areas through locked drain valves as necessary. Water accumulation within diked areas is visually inspected for petroleum products and any accumulation of oil is removed with sorbent materials before the water is removed. Drain valves are locked closed when not in use.

Drainage from undiked areas is controlled as follows: The two dock loading/unloading areas are equipped with spill pans for catching spilled oil. These pans are covered when there is no barge loading in order to minimize the amount of rainwater that collects in the pans. The pans are piped into a quick drain system, consisting of large containment pits that would channel any spilled product into a 10,000-gallon storage tank. After a rain event, the water in the containment pit is visually inspected prior to being pumped out.

Inspections and drainage events are recorded in the terminal SPCC logbook that is retained for a period of three years.

Sec. II-12.2 Truck Rack Area

There is an aboveground sump for the truck loading rack area. The sump will handle a small amount of storm run-off and has the petroleum containment capacity of a tank truck compartment. The loading rack is covered in order to reduce the amount of rainfall entering the system. Accumulated oil and water is hauled to a company approved treatment facility. All other non-contact storm water leaves the facility via sheet flow.

Sec. II-12.3 Tank Water Drains

Discharge from tank water drains are prevented by:	
•	Procedures require terminal personnel to be present at all times during the water draining operation.
•	All water from the tank is drained into a water collection tank for disposal under guidelines established by applicable pollution control laws, rules and regulations.

Sec. II-13 Detection/Mitigation Procedures

Sec. II-13.1 Discharge Detection

The Company has a number of safety systems and practices in place to prevent the occurrence and mitigate the subsequent impact of accidental discharges. The systems are designed to alert operators with alarms and provide automatic shut-in functions in the event of a discharge. Pipeline operators are trained to respond to the various system alarms in order to identify and control releases immediately.

SAFETY SYSTEM LIST	
•	Prevention practices and procedures
•	Pipeline and breakout tank inspection and testing procedures
•	Discharge detection equipment and procedures
•	Recognition of emergency conditions and prediction of the consequences
•	Leak response actions
•	Public education

The detection of a discharge from the Company pipeline system may occur in a number of ways, including:	
•	Discharge detection by Company personnel, pipeline patrols, or the general public
•	Automated discharge detection by the Supervisory Control and Data Acquisition (SCADA) system at the Control Center which monitors flow and pressure on most lines as well as breakout tank oil levels.
•	Various other procedures and practices

Sec. II-13.2 Discharge Detection by Personnel

All pipelines operated by the Company are equipped with high and low pressure sensors. In the event of a change in pipeline pressure beyond a specified set point, the pressure sensors will trigger an alarm to the facility operator and/or shut down the pipeline and process equipment.

The routine responsibilities that ensure releases will be detected and mitigated as soon as possible by IC/UC personnel may include, but are not limited to the following:	
•	Regularly scheduled visual and aerial monitoring.
•	Routine walk-through and monitoring of process equipment to ensure proper operation of all equipment at each facility.
•	Immediate response to alarms and signals that may indicate a possible release.
•	Identification and control of the source as soon as safely possible.
•	Notify the Initial Incident Commander.

The Company operators will perform the following procedures when they are alerted to a potential pipeline emergency:		
Procedures	✓	Date/Time
Ensure that the pipeline pressure sensing equipment is not malfunctioning.	☐	__/___/___ [00:00]
The supervisor will request a field inspection of the pipeline ROW in question to identify the source of the suspected leak.	☐	__/___/___ [00:00]
In the event an oil leak is discovered along the pipeline, this Plan will be activated.	☐	__/___/___ [00:00]
In the event a leak is not found, an investigation into the cause of the pressure change will continue until determined.	☐	__/___/___ [00:00]

Right-of-way (ROW) marker signs are installed and maintained at road crossings and other noticeable points and provide an emergency 24-hour telephone number to be used by any person wishing to report a pipeline leak.

Sec. II-13.3 Automated Discharge Detection

Sec. II-13.3.1 Pressure and Flow Monitors

Most pipelines have hi-low pressure and flow monitors that exercise local control or transmit data to the Control Center or both. These systems are set to alarm or shut down on preset deviations of pressure or flow. In case of an alarm, the Control Center will take action in accordance with Operating Instructions.

Sec. II-13.3.2 System Shutdown

An employee who discovers an outage, receives a report that an outage has occurred, or observes other hazardous conditions shall request shutdown of the affected system and notify the Area Supervisor if he is satisfied that a Company line is involved.

Sec. II-13.3.3 Overfill Alarm

Breakout tanks are equipped with high- and low-level alarms. Overfill or complete loss will trigger alarms transmitted to both the Control Center and local area office.

Sec. II-13.4 Leak Detection Systems, Devices, Equipment, or Procedures

Sec. II-13.4.1 Leak Detection and System Shutdown

The Company's leak detection and response guidelines cover those facilities, controls, and actions required to detect a leak or spillage from the pipeline and to minimize the extent of such leak or spillage and its effect on public safety, the environment, and property.

Levels of Leak Detection	
The Company currently uses the following three types of leak detection systems:	
•	Level I – Volume Balance
•	Level II – Flow Rate and Pressure Deviation
•	Level III – Pressure and Equipment Status Change

In determining the proper level to assign to a given pipeline system, a system analysis is required. In making such an analysis, consideration should be given to:	
•	Material characteristics
•	System physical condition
•	System size, throughput, and operating conditions
•	Existing controls
•	Evaluation of leak/hazard/response scenarios
•	Public safety
•	Environmental pollution exposure
•	Potential property losses
•	Cost/benefit

Sec. II-13.5 Leak Detection Systems, Devices, Equipment, or Procedures

Sec. II-13.5.1 Leak Detection and System Shutdown

The primary consideration in selecting the leak detection system is public safety. Environmental pollution and property losses are important considerations, but since restoration and compensation means are available, these effects should be considered secondary to public safety.

(b) (7)(F), (b) (3)

[redacted]

Sec. II-13.6 Leak Detection Systems, Devices, Equipment, or Procedures

Sec. II-13.6.1 Leak Detection and System Shutdown

(b) (7)(F), (b) (3)

[redacted]

Sec. II-13.7 Leak Detection Systems, Devices, Equipment, or Procedures

(b) (7)(F), (b) (3)

[redacted]

General Pipeline Leak Response Actions	
Travel to Suspected Site of Leak	
•	A means of locating the leak site is necessary for minimum travel time. The general location of the leak may be known from reports.
•	If precise directions are not available for finding the site, air surveillance and assistance from a helicopter or other aircraft may be necessary. Areas should maintain a list of companies with aircraft for charter.
Find Leak	
•	If oil continues to escape from the line, the leak may be detected visually.
•	If underwater, the leak can be found by having a diver survey the line. The line may have to be pressured up to force gas or oil out of the leak to aid in locating the leak.
Determine Extent of Damage	
•	In determining the extent of damage, three basic conditions of the line must be determined: • Degree of damage to the line • Length of damaged line • Misalignment angle if an underwater pipeline
Report to Area Supervisor	
•	Once the extent of damage has been determined, the following information should be reported: • Location of leak • Size of the Line • Type of coating • Length of damaged section • Misalignment angle • Water depth (if appropriate) • Local terrain conditions
Begin Repair Preliminaries	
•	Perform whatever repair preliminaries are possible if it safe to do so.

Sec. II-13.8 Source Control

This section provides guidelines for controlling a release near the source and mitigating the associated consequences. Source control and mitigation involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

In the event of a spill involving a pipeline leak or rupture, the initial mitigation actions will likely consist of:	
•	Shutting down the pipeline
•	Relieving the pressure on the affected line section
•	Isolating the line section by closing the appropriate valves
•	Evacuating the remaining contents of the affected line section
•	Exposing the leak or rupture and installing a temporary patch

If the incident were to involve a breakout tank leak or overfill, the initial mitigation actions may include:	
•	Terminating transfer operating to the tank, if in progress
•	Ensuring associated secondary containment system drain valves are closed
•	Transferring the tank contents into available tankage or back into the pipeline
•	Patching the leak if feasible and safe
•	Water flooding the containment area, if applicable, to minimize soil penetration

Source control measures are implemented as close as possible to the source of a spill to minimize the extent of the affected area and generally involve:	
•	Construction of barriers, trenches, or earthen berms for containment
•	Construction of berms or trenches for diverting spill to containment area
•	Deployment of containment booms in waterways down current of the source
•	Deployment of recovery equipment (pumps, vacuum trucks, skimmers)

Sec. II-13.9 Good Engineering Practices

The Company's approach to preventing discharges is to assure that all facilities are properly designed, constructed, maintained and operated in accordance with applicable codes, regulations and good engineering practices.

Some examples of good engineering practices may include but are not limited to the following:

Engineering Practices	
•	Components in the pipeline system are designed and constructed in accordance with written specifications.
•	Components are inspected to ensure that quality is maintained during material procurement and construction.
•	Trained personnel are used during the construction of the facilities.
•	Various testing methods are used during construction of the facilities.
•	External and internal corrosion control methods are used to maintain the facilities in the best possible condition.
•	A preventive maintenance program reduces the potential for component malfunction or failure
•	Company personnel are properly trained to operate and maintain the pipeline system
•	Company has an extensive safety and drug testing program for its employees and requires the same for its contractors.
•	Company systems are designed and operated with safety factors in place. For example, the maximum operating pressure of a system is always less than the design pressure of the system and the test pressure of the system.
•	Pressures are monitored and controlled so that the maximum operating pressures are not exceeded.
•	When appropriate, internal inspection tools are used or lines are subjected to additional hydrostatic testing to determine and assure their integrity.
•	All wastes are stored in accordance with applicable regulatory requirements (DOT containers that are non-leaking, closed, in good condition, properly marked/labeled, inspected to ensure integrity, etc.)

Sec. II-13.10 Third-Party Damage Prevention

If the systems are properly designed, constructed, operated and maintained, then the most probable source of discharge is due to third-party damage. In order to minimize the risk of damage caused by a third-party a number of steps may be taken, including, but not limited to the following:

Prevention of Third-Party Damage	
•	The facilities are designed to reduce the chance of third-party damage. For example, most of the facilities are buried or located within fenced and locked areas.
•	Areas especially sensitive to third-party damage are road, railroad, and water crossings. Pipelines in these areas usually have additional wall thickness, or burial depth, or are cased to reduce the chance of damage.
•	Company facilities are normally located on well- maintained and clearly marked rights-of-way.
•	Company facilities are normally monitored by aerial or other patrol at least once per week to check for encroachment and construction activities.
•	Company participates in one-call pipeline locating and notification systems where available.
•	Company conducts education programs to reduce the possibility of third-party damage.

Sec. II-13.11 Corrosion Mitigation

For external corrosion prevention, the Company generally prevents corrosion of buried pipelines by using approved long-life pipeline coatings supplemented with cathodic protection. Aboveground facilities are generally inspected annually and provided protective coating systems to prevent corrosive deterioration. These primarily include buildings, aboveground pipelines and tanks.

In order to prevent internal corrosion of the pipelines, the Company uses chemical injection, pigging and corrosion inhibitors, and inspects pipelines located in high population density areas and environmentally sensitive areas with in-line inspection pigs, where appropriate. A large number of pipelines are hydrostatically tested. For further details regarding the Corrosion Prevention program, refer to the Company Pipeline Integrity Management Program.

Sec. II-13.12 Spill Mitigation

Source control and mitigation involve anything from shutdown of operations to patching a leak, containing a spill, dispersing a vapor cloud, protecting a sensitive area, recovering the spilled material, or other such activities that are involved in an emergency response. Because of the infinite number of circumstances under which an incident could occur and the variety of equipment that could be involved, it is impractical to describe procedures that should be followed in all foreseeable emergency situations.

Sec. II-13.13 Breakout Tanks

The visual tank inspection checklist presented below has been included as guidance for inspections and monitoring. Also included in the visual tank inspection will be an inspection of the tank foundation and associated piping. All tankage, pumping equipment, piping and related terminal equipment are inspected every working day for leakage, malfunctions of seals, etc. Storage tanks are inspected monthly and annually and findings are recorded. Example forms are included in this plan. These records shall be maintained for a minimum of five years.

Check tanks for leaks, specifically looking for:	
•	Drip marks
•	Discoloration of tanks
•	Puddles containing stored materials
•	Corrosion
•	Cracks
•	Localized dead vegetation

Check foundation for:	
•	Cracks
•	Discoloration
•	Puddles containing stored materials
•	Settling
•	Gaps between tank and foundation
•	Damage cause by vegetation roots

Check piping for:	
•	Droplets of stored material
•	Discoloration
•	Corrosion
•	Bowing of pipe between supports
•	Evidence of stored material seepage on valves and seals
•	Localized dead vegetation

Tank roof drains and firewall drains are normally kept closed.

The Company's major tanks have tank gauges which transmit oil heights to the Operations Control Center, where tank levels are monitored continuously. The tank gauges have alarms set for each tank for high tank level, low tank level, and emergency low tank level. Each tank also has an independent device which gives an alarm for emergency high tank level.

Sec. II-13-14 Response Procedures

A person evaluating a situation must assess the circumstances surrounding an event, to determine if an emergency situation exists, and respond accordingly. Company personnel are trained in hazards or emergency recognition procedures as described below.

An emergency in pipeline and facility operations often originates with the unexpected release or spill of commodities. Uncontained commodities and high vapor concentrations present substantial hazards for fires or explosions until they dissipate to safe levels. In these situations, sources of ignition must be controlled to eliminate fire and explosion hazards. The Company has strict rules for controlling sources of ignition within tank farm property to avoid such explosions or fires. Potential sources of ignition become more difficult to control on public property. Early detection and quick response are the best actions to reduce the hazards.

The purpose of this section is to identify the response checklist/procedures to follow based on the type of incident that could occur along the Pipeline System. The checklists below are developed to allow the field personnel the ability to make sound decisions during the initial response of an incident. The checklists are not meant to substitute for emergency response knowledge, training, or sound judgment calls and do not account for all circumstances. In the event of any type of incident, it is imperative that the safety of all personnel be considered first, and then the protection of property second.

Sec. II-14 Evacuation

Evacuation plans will be located in the applicable ICP Geographical Annex. All evacuation directives will be communicated through an audible signal, either through voice by the Emergency Response Coordinator, or by the activation of an alarm system. All facility personnel are trained routinely in evacuation and emergency response procedures. The facility contains no critical equipment that requires employees to continue to operate after the evacuation notification is made.

The purpose of the evacuation plan is to provide some guidance in the event shutdown and evacuation are necessary. In the event of an incident, the Terminal Operator will stop the flow of product by normal operating procedures. The facility supervisor shall be notified immediately of the emergency. Any terminal personnel who are not trained as Hazardous Material Technicians will evacuate the terminal. The Fire Department will be notified if there is a fire. Arriving personnel, equipment and fire resources will be met at the main terminal gate of the Facility, unless deemed unsafe to do so. Tactical deployment of arriving resources will depend on the current situation.

Evacuating personnel shall proceed in an orderly manner. The Operations Supervisor will account for all employees and arrange for medical assistance as required.

Sec. II-14.1 Training

The Company believes that constant training of its employees is the cornerstone of effective emergency response and mitigation of threats to human health and the environment. Personnel evacuation direction is further defined as follows:

- **Facility Employees** - All Company employees who are not directly involved with the abatement of the emergency will immediately evacuate the area of the emergency. They will proceed via an unthreatened route to the facility main gate and remain in a "stand by" mode until instructed by the Emergency Response Coordinator to do otherwise. Should access to the facility main gate be threatened by the emergency, proceed to a location on the facility unthreatened by the emergency and notify the Emergency Response Coordinator of your whereabouts as soon as practical.

- **Contractors, Freight Haulers, Vendors and Other Visitors** - All non-company personnel will immediately evacuate the plant when notified of an emergency. All material loading or unloading will cease. Personnel will proceed to the facility main gate via an unthreatened route. Non-Company personnel will exit immediately upon approval of the Emergency Response Coordinator. Should access to the facility main gate be threatened by the emergency, proceed to a location on the facility unthreatened by the emergency and notify the Emergency Response Coordinator of your whereabouts as soon as practical. After personnel evacuation was initiated, emergency response agencies and teams would be notified (either from on-site or off-site immediately after the evacuation was completed), and immediate response actions would be initiated to minimize threats to human health and the environment.

- **Community** - In the unlikely event that evacuation plans were required beyond the boundary of the facility, the Emergency Response Coordinator or designee would communicate further directives. These plans will include guidance of where to move potentially affected parties to minimize threats to human health and the environment.

When the alarm is sounded or a signal to evacuate is given all personnel should:

Evacuation Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ [00:00]
Check the wind direction.	☐	__/__/__ [00:00]
Move upwind or cross wind.	☐	__/__/__ [00:00]
Check the wind again.	☐	__/__/__ [00:00]
Initial Incident Commander will conduct a head count to account for all personnel known to be at the facility.	☐	__/__/__ [00:00]
Initial Incident Commander will assist in alerting and escorting personnel, including visitors and contractors to the appropriate evacuation point.	☐	__/__/__ [00:00]
Initial Incident Commander will notify the TPTN Duty Officer.	☐	__/__/__ [00:00]
Initial Incident Commander will assist in hazard control activities as requested.	☐	__/__/__ [00:00]
Initial Incident Commander will initiate search and rescue of missing persons. Injured personnel will be transported to the nearest emergency medical facility.	☐	__/__/__ [00:00]
All other personnel will remain at the evacuation point until the "All Clear" signal is given.	☐	__/__/__ [00:00]
Note: Evacuation should be carried out in an orderly manner. Personnel should WALK, not run or panic.		

(b) (7)(F), (b) (3)

[redacted]

Security measures need to be established early in the incident to provide the following:

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

[redacted]

Sec. II-16 Site Safety and Health Plan

Sec. II-16.1 Introduction

This document describes the health and safety guidelines developed for the Response Operations to protect personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes. The procedures and guidelines contained herein are based upon the best available information at the time of the plan's preparation. Specific requirements will be reviewed and revised when new information is received and/or conditions change.

The Site Safety & Health (SS&H) Plan is designed to comply with applicable Federal, State OSHA regulations for Response Operations covered in 29 CFR 1910.120 and Company H&S Policies. Specifically, this program provides procedures and information for program administration, safety and health considerations, personal protective equipment, medical surveillance, training, site control, industrial hygiene monitoring programs, personal hygiene, sanitation, housekeeping, and the decontamination of both personal protective equipment and equipment utilized during the response.

The ICS Forms for the Site Safety and Health Plan (ICS 201-5 and ICS 208) and the Job Safety Analysis form are located in the Forms Section of this plan.

Sec. II-16.2 Scope

All spill response and remedial activities will be conducted in accordance with this SS&H Plan. This plan will cover all personnel, including Company employees, contractors, subcontractors, government employees, and visitors. The SS&H Plan will be modified as necessary and where applicable will address multiple work environments. A copy of this program will be posted at all command, operations, and field centers for the duration of the clean-up activity. It is the responsibility of each manger, supervisor, and crew foremen to be familiar with this plan and to assist in its implementation.

Sec. II-16.3 Program Administration

The Safety and Health Officer will administer the SS&H Plan. The Safety and Health Officer will be available to answer questions regarding effective implementation of the Program Plan. The Safety and Health Officer is supported by other staff personnel advisors in Safety, Industrial Hygiene, Occupational Medicine, Environmental, Operations and Legal.

It is the responsibility of the Safety and Health Officer to monitor the effectiveness of the SS&H Plan and to contact the appropriate support staff for guidance if changes to the plan are necessary.

All employees who may be directly involved in any clean-up activities are required to have completed HAZWOPER Training and to have been briefed on the contents of this SS&H Plan. All employers and employees will be responsible for adhering to all Federal, State and Local regulations that may not be specifically outlined in this program.

The Safety and Health Officer will enforce compliance with the SS&H Plan and all other requirements. Any deviations from the stipulated requirements, which are noted by the Safety and Health Officer or any other Company personnel, will be communicated to the responsible contractor. The contractor will take immediate actions to correct the deviations and prepare a written corrective action report to be submitted to the Safety and Health Officer.

Sec. II-16.4 Daily Safety Briefings

Site safety meetings/briefings are the first step in maintaining site safety. Daily meetings will be held at the start of each shift to ensure that all personnel understand site conditions and operating procedures, to ensure that personal protective equipment is being used correctly, to address worker health and safety concerns and to communicate any changes or revisions to the Site Safety and Health Plan.

Briefing Attendance Forms shall be used to document that individuals working the Response Operation recognize the hazards present and the policies and procedures required to minimize exposure or adverse effects of these hazards.

Sec. II-16.5 Visitor Policy

All visitors must provide all required training documentation prior to arrival on-site, if possible. The On-Scene Coordinator and Public Affairs Advisor, or their designee, must approve the site visit and shall coordinate visitor tours with the Spill Containment/Clean-up Organization. The SS&H shall designate a safe route through the site and away from the on-going operations, and provide for visitor escorts. The Team Leader/Foreman at the task site must be notified when the visitor approaches. The Team Leader-Foreman shall acknowledge visitor arrival onsite and communicate approval of the visit and acceptable duration for the visitor onsite.

Visitors are expected to dress appropriately for a field visit and when required, shall wear personal protective equipment (PPE) consistent with that used by workers at the Response Site.	
•	All visitors shall be approved prior to arrival at the Incident Site
•	All visitors to be escorted.

Sec. II-16.6 Response

During the initial response phase the ICS 201-5 form is used to ensure hazards are identified, evaluated and managed; and would typically be used for a Tier 1 response. The ICS 201-5 form may be supported by attachments such as the released product Safety Data Sheet, a Phillips 66 Job Safety Analysis form (JSA) and other topics at the Safety Officers discretion. In a Tier 1 response the safety officer transitions to the ICS 208 form at their discretion

The Tier 2 response would typically use the Safety Data Sheet, ICS 208 form and Medical Plan form. The ICS 201-5 form would be in place until the Tier 2 Safety team can transition from the Tier 1 team. The ICS 208 form can also be supported with attachments of Safety Data Sheets, a Phillips 66 JSA and Medical Plan, at the Safety Officers discretion. Safety Data Sheets are available at the facility or may be accessed via the netMSDS intranet website at http://w3apps.phillips66.com/netmsds/ or the webMSDS internet website at: http://corpapps.phillips66.net/webmsds/MSDSViewer.aspx. When a response has transitioned to the "project phase" the project is usually turned over to a remediation project group. At that time a SSHP will be developed based on company safety and health procedures.

Sec. II-16.7 Site Safety and Health Plan Evaluation Checklist

SITE SAFETY & HEALTH PLAN EVALUATION CHECKLIST	
Name of Program Reviewed:	
Program Drafted By (Name/Organization):	
Program Reviewed By:	**Date of Review:**
Review Includes (check those appropriate):	
☐	Comprehensive Work Plan (post-emergency)
☐	Safety & Health Program (for planning not site-specific)
☐	Site-Specific Site Safety & Health Plan (post-emergency)
☐	Emergency Response Plans (emergency phase & routine sites)
Comprehensive Work plan [1910.120(b)(3)]	
☐	Work tasks, and objectives defined
☐	Methods of accomplishing tasks & objectives defined
☐	Personnel requirements for work plan accomplishments
☐	Training requirements identified (see 1910.120(e))
☐	Informational programs implemented (see 1910.120(i))
☐	Medical surveillance programs (see 1910.120(f))
Safety and Health Program [1910.120(b)]	
General:	
☐	A written safety and health program [1910.120(b)(1)]
☐	Organizational structure [1910.120(b)(1)(ii)(A)]
☐	Safety and health training program
☐	Medical surveillance program
☐	Employer SOP on safety and health
Organization Structure [1910.120(b)(2)]:	
☐	Chain of command identified
☐	Responsibilities of supervisors and employees
☐	Identifies supervisor
☐	Identifies site safety and health officer(s)
☐	Other personnel functions and responsibilities
☐	Lines of authority / responsibility / communications
Site-Specific Safety & Health Plan [1910.120(b)(4)]	
For spill response operations (as opposed to those that start from a remedial action) these plans will vary in detail as the response progresses. During the initial emergency phase, responders rely on generic emergency response plans - contingency plans - while a site-specific plan is being developed. As the response progresses into post-emergency phase recovery operations, a basic site-specific plan is used and may become quite detailed for prolonged or large cleanups. Finally, a spill response may become a fully controlled site cleanup (e.g., remedial cleanups) where a fully developed site-specific plan is developed, including detailed emergency response plans for on-site emergencies.	

SITE SAFETY & HEALTH PLAN EVALUATION CHECKLIST (CONT'D)

Site-Specific Safety & Health Plan [1910.120(b)(4)] (Cont'd)

General – Identify and/or specify:

❒	Risks for each task in work plan	❒	Employee training assignments
❒	Protective equipment for each task/objective	❒	Medical surveillance requirements
❒	Frequency and types of air monitoring	❒	Frequency and types of personnel monitoring
❒	Sampling techniques	❒	Air monitoring instruments to be used
❒	Maintenance and calibration for instrumentation	❒	Site control measures
❒	Site map	❒	Work zones
❒	Use of "buddy system"	❒	Alerting means for emergencies
❒	Safe working practices	❒	Nearest medical assistance
❒	Decontamination procedures	❒	Emergency response plan
❒	Confined space entry procedures	❒	Spill containment program
❒	Pre-entry briefings [1910.120(b)(4)(iii)	❒	Provisions for continual evaluation of plan

Site Characterization and Analysis:

❒	Spill sites shall be evaluated to identify specific site hazards and determine appropriate safety and health controls.

Preliminary Evaluation – Performed by a qualified person, prior to site entry, to identify and/or specify:

❒	Protection methods and site controls	❒	All inhalation/skin hazards
❒	Location and approximate size of site	❒	Description of response activity
❒	Duration of response activity	❒	Site topography and accessibility (include air and ground accessibility)
❒	Safety and health hazards anticipated	❒	Pathways for hazardous substance dispersion
❒	Status of emergency response units (rescue, fire, hazmat)		

Risk Identification [1910.120(c)(7):

❒	Employees on site are informed of identified risks	❒	All information concerning chemical, physical and toxicological properties of each substance available to the employer are made available to the responders

Detailed Evaluation [1910.120(c)(2)]:

❒	Immediately after preliminary evaluation, a detailed evaluation is conducted to determine safety controls and protection needed.

Monitoring [1910.120(h)]:

❒	Monitoring performed during initial entry	❒	Monitoring performed periodically
❒	Personnel monitoring performed		

Illumination Requirements [1910.120(m)]

❒	Areas accessible to employees are lighted to levels not less than the intensities outlined in Table H-120.1

Sanitation Requirements [1910.120(n)]:

❒	Potable(n)(1) / Non-potable water(n)(2)	❒	Toilet facilities (n)(3)
❒	Washing facilities (n)(6)	❒	Shower and change rooms (n)(7)

SITE SAFETY & HEALTH PLAN EVALUATION CHECKLIST (CONT'D)	
Emergency Response Plans [1910.120(l) and (q)] for emergency response operations (e.g., contingency plans used prior to site safety plan development), routine sites (e.g., emergency plans for remedial sites)	
Purpose is to prepare for anticipated emergencies:	
❒	Plan is written and available for inspection
Elements [1910.120(l)(2)(i-ix) to be specified	
❒	Pre-emergency planning
❒	Personnel roles, lines of communication
❒	PPE and emergency equipment
❒	Emergency recognition and prevention
❒	Safe distances and places of refuge
❒	Site security and control
❒	Evacuation routes and procedures
❒	Emergency medical treatment and first aid
❒	Emergency decon procedures
❒	Emergency alerting and response procedures
❒	Critique of response and follow-up
Additional Elements [1910.120(l)(3)(i)(A-B)]:	
❒	Site topography, layout and prevailing weather conditions
❒	Procedures for reporting incidents to: local, state, and federal government agencies
❒	Employee alarm system is installed to notify persons of an emergency situation
Additional Requirements [1910.120(l)(3)(ii-viii)] Emergency Response Plan shall be:	
❒	A separate section of Site Safety and Health Plan
❒	Compatible with federal, state and local plans
❒	Rehearsed as part of on-site training
❒	Current

Sec. II-16.8 Site Exposure Monitoring Plan

Site Name:	Date / Time:

	A. Monitoring Plan
➢	Air monitoring at the spill site and surrounding areas will be done to ensure site worker and community safety.
➢	Air monitoring will be done during work shift site characterization and on each work shift during cleanup activities until results indicate no further monitoring is required.
➢	All monitoring done at the cleanup site will be documented and the data maintained by qualified personnel on site.
➢	Monitoring will be done in accordance with OSHA 29 CFR 1920.120. Monitoring will be done: ❒ During initial site entry and characterization; ❒ If a new potential inhalation hazard is introduced into the work area; ❒ During cleanup activities, on each work shift; ❒ If a new task is begun that may involve potential inhalation exposure.
➢	Noise monitoring, radiation monitoring, etc. will be conducted as needed.
	B. Initial Site Monitoring
➢	Monitoring will be done during initial site entry. The monitoring will include checking for: ❒ Oxygen (O_2) deficiency using a direct reading oxygen meter; ❒ Flammable atmospheres (%LEL) using a combustible gas indicator; ❒ Benzene, hydrogen sulfide, hydrocarbons, and combustion by-products (SO_2, CO), as needed, using direct-reading instruments, colorimetric indicator tubes, and/or other valid methods.
➢	Instruments will be calibrated prior to and following use.
➢	All monitoring will be documented. (See attached form for example)
	C. Post-Emergency Monitoring (On-Going)
➢	Monitoring for benzene, hydrogen sulfide, hydrocarbons and combustion by-products will be done during each work shift on an on-going basis, as needed. Repeat initial site monitoring if any significant changes occur (i.e., temperature increases, more material released, wind direction changes, etc.)
➢	Checks for oxygen deficiency and flammable atmospheres will be made if confined spaces are encountered, or as required.
➢	Exposure monitoring shall be done as necessary. Personnel samples will be collected under the direction of the industrial hygiene personnel. Samples will be analyzed by a laboratory accredited by the American Industrial Hygiene Association.
➢	Results of site monitoring will be made available to site workers' supervision for informing all affected employees. Results will be available to the Command Center for review by regulatory agencies.

Sec. II-16.9 Industrial Hygiene HAZMAT Information – Field Data Form

Date:	Time	Wind Dir.	Wind Speed	Temp.
Event Description:				

Location Description	Time	PID / FID	H_2S	SO_2	CO	LEL	O_2	Benzene	Other	Comments
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										

Sec. II-17 Personal Protective Equipment

All work shall be conducted in accordance with procedures established during pre-entry briefings and the attached Work Plan. Personal Protective Equipment shall be selected and used to protect personnel from hazards that are likely to be encountered as identified during the initial site characterization and subsequent monitoring.

The Safety and Health Officer will determine the PPE requirements for each task associated with the incident based on the work to be conducted, associated hazards, and the following criteria:

1. PPE Use and Limitations

Several factors must be considered when selecting and using PPE:

- The protective clothing, gloves and boots must be resistant to permeation or penetration by oil and other chemicals that may be encountered on the site.
- Protective clothing and gloves should be durable for heavy work.
- Protective clothing and glove materials must maintain protection and flexibility in hot or cold weather conditions.
- Protective clothing must be large enough to fit over other clothing without ripping and tearing.
- For respirator use, procedures must be in place for the proper selection, use, care, and fit testing of the respirators. Additionally, wearer must be advised as to respirator cartridge expected life and of monitoring for contaminant breakthrough, etc.
- Protective footwear must have non-slip soles. Additionally, conditions may require the use of steel toe and/or steel shank footwear.

2. Work Duration

The work duration is expected to last for the full shift and will involve moderate to heavy physical exertion during cleanup activities.

3. PPE Maintenance and Storage

PPE will be maintained and stored by an assigned work crew. Protective clothing and gloves will be evaluated during and at the end of each shift and will be replaced as necessary. Boots and other PPE may be decontaminated for re-use.

4. PPE Decontamination and Disposal

PPE may be decontaminated in designated areas by assigned crews using soap or other suitable cleanser and rinse water. The cleaning solution used will be disposed of in properly labeled containers according to applicable regulations. Contaminated protective gloves and any other PPE to be disposed of will be placed in properly labeled bags and disposed of according to applicable regulations.

5. PPE Training and Proper Fitting	
All site cleanup workers, supervisors and others entering the contaminated zone will be given training in proper use of PPE. The training will include:	
➢	How to use PPE
➢	When and where to use the PPE
➢	How to inspect PPE to determine if it is working properly
Care will be taken to ensure employees are provided properly fitted PPE.	
6. PPE Donning and Doffing Procedures	
Prior to starting work, all site cleanup workers and others required to wear PPE will be instructed on proper procedures for donning and doffing PPE. Doffing of contaminated clothing, gloves and boots must be done in a manner to prevent skin exposure to the oil or chemicals.	

Personal Protective Equipment (PPE)	
Respiratory:	Wear a positive pressure air supplied respirator in situations where there may be potential for airborne exposure above exposure limits. If exposure concentration is unknown or if conditions immediately dangerous to life or health (IDLH) exist, use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Skin:	The use of thermally resistant gloves is recommended.
Eye/Face:	Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended. Depending on conditions of use, a face shield may be necessary.
Other Protective Equipment:	A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.
	Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

Sec. II-18 Decontamination

Decontamination is the systematic removal of residual chemicals from personnel and equipment after exposure to toxic, flammable and/or hazardous products.

The benefits of Decontamination include:	
•	Enhancing the safety of responders and other personnel.
•	Decreasing the hazard of environmental contamination.
•	Restricting contamination to the immediate area and minimizes the potential for injury to others.
•	Each step in the process reduces the amount of residual product on the clothing until safe and acceptable levels area achieved.

Non-Emergency / Routine vs. Emergency Decontamination	
•	**Routine decontamination** is designed to reduce the amount of residual product on the clothing until safe and acceptable levels are achieved.
•	**Emergency decontamination** is designed to remove the patient from the hazardous area, remove contaminated clothing and flush the product off the patient. This will be accomplished taking into account any medical considerations. Water should be used to perform the emergency decontamination of the patient. There is less regard for runoff retention, and the emphasis is to expedite emergency medical treatment.

Decontamination Methods	
There are many methods for decontamination. The proper method will be determined by the situation and materials involved.	
Dilution	The application of water to reduce the concentration of product to a point that it no longer presents a hazard.
Absorption	Mechanically pulled in or soaked up by the sorbent.
Chemical Degradation	Altering the chemical composition of the material to the point that it is less hazardous or easier to remove. For example, emulsifying a gasoline spill.
Disposal	Easiest form of “decontamination”.
Note: Contaminated products require proper disposal – incineration, burial, etc.	

Factors Influencing Methodology	
•	Product(s) involved
•	Hazards associated with the product(s)
•	Degree or extent of contamination
•	Physical and chemical properties of the product(s)

Sec. II-19 Claims

"Phillips 66 Company" Claims Information

Tiers of Oil Spill Claim Events	
•	Tier 1 Claims Event – 1 – 20 oil spill claims are expected or anticipated
•	Tier 2 Claims Event - 20 – 100 oil spill claims are expected or anticipated
•	Tier 3 Claims Event – More than 100 oil spill claims are expected or anticipated

II-19.1 Oil Spill Claims Management

Management of all claims will be provided by the Managing Counsel of Phillips 66 Company's Legal Department Claims Center. Outside contractors may be hired to support claims processing during Tier 1 & Tier 2 events, but management and oversight of the process will continue to be provided by the company resources.

Phillips 66 Company Legal Claims Center: Scott A. Bilger, Managing Counsel
Telephone: (918) 977-7159
Fax: (918) 977-2282
Email: Scott.A.Bilger@p66.com

II-19.2 Insurance

Phillips 66 Company is self-insured against claims to varying amounts depending on the nature of the loss. A spill that originates from an onshore facility is self insured to $125,000,000. Spills originating from a vessel that involve responsibility of Phillips 66 would be covered by a different policy that includes a $250,000 deductible. Insurance at Phillips 66 Company, including insurance for oil spill related claims, is managed by the company's Corporate Insurance department.

Phillips 66 Company Corporate Insurance: Brian Mullen, Manager
Telephone: (832) 765-1801
Fax:
Email: Brian.P.Mullen@p66.com

II-19.3 Claims Handling Process

After an oil spill occurs, Phillips 66 Company will provide information as it is developed to the public via the following number: 855-843-2198. Information, including the establishment of a claims process, will be communicated via this number. Additional communication of a claims process will be made via an advertisement for claims following the information provided in Section II-19.4. In addition to this advertisement in local newspapers, claims process information will be communicated via a press release designed to communicate the process in local radio on television media, through social media on the Phillips 66 Facebook and Twitter, and via the internet on the Phillips 66 website. Further details on these various communication tools are provided in Section II-19.4 below. All communications will direct claimants to report their claims via the toll free Claims line to ensure a uniform process, provide quality control, and to ensure the most efficient handling of the claim.

Sec. II-19 Claims (Cont'd)

II-19.3 Claims Handling Process (Cont'd)

Once a claim is reported via the toll free Claims line, the claimant will be contacted by a claim representative that will become the point of contact for the claimant on a go forward basis. At this time the claimant will be provided with phone, fax and email contact information for the claim representative. If at any time, the claim representative is not responsive to the needs of the claimant, the claimant may call the toll free Claims line to request a reassignment of the claim. A review of the file will be conducted and, if warranted, a reassignment will be made. In good faith, Phillips 66 Company is committed to working with claimants to help them understand the type and amount of documentation that might be required to support their claim, but ultimately the responsibility to prove their claim remains with them. Examples of documentation needed for various types of claims can be found in Section II-19.10. Section II-19.9 explains the claims adjudication process at Phillips 66 Company and provides related timeframes.

Depending on the number of expected or anticipated number of claims related to the spill, Phillips 66 Company may or may not establish local claim centers (see II-19.6). Claims related to the reimbursement of Uncompensated Oil Spill Removal Costs will be accepted by Phillips 66 Company up to 6-years from the date cleanup was completed. All other types of claims will be accepted up to 3-years from the date that Phillips 66 Company began advertising for claims or 3-years from the date that the injury or damage being claimed was reasonably discovered – whichever date is earlier. Resource Damage (NRD) claims are handled separately from other claims, and may be accepted by Phillips 66 Company in a manner and timeframe agreed to by the company and the lead federal and/or state trustee agency.

Claims will be managed by the Managing Counsel of our company's Legal Department Claims Center. Contact information is provided below.

II-19.4 Claim Advertisements

Phillips 66 Company will advertise for claims after being advised to do so by our legal department, or within 15-days after being designated as the Responsible Party for an oil spill by the USCG or EPA Federal On-Scene Coordinator (FOSC) or the USCG National Pollution Funds Center (NPFC). More than any other factor, the geographic extent of the oil spill will dictate the publications that claim advertisements will run. At minimum, Phillips 66 Company is committed to advertising for oil spill claims in the Olympian (Olympia, WA) and the Tacoma News Tribune (Tacoma, WA). Additional publications will be considered on a spill-specific basis. The length of time paid advertisements will run in local publications will be based on recommendations provided by our legal department or the length of time specified by FOSC or the NPFC. The following is an example of how paid advertisements for oil spill claims could appear in local publications:

Advertisement for Oil Spill Claims

CompanyX
Oil Spill - January 24, 2010
4300 Gallons Heavy Oil
Budd Inlet (Olympia, WA)
South Puget Sound

The U.S. Coast Guard National Pollution Funds Center has designated CompanyX as the Responsible Party for an oil spill that occurred around 7:00AM (PST) on January 24, 2010, impacting the waters of Budd Inlet and South Puget Sound. An estimated 4,300 gallons of heavy fuel oil was released from our facility on Boston Harbor Road (in Olympia) into Budd Inlet and South Puget Sound.

CompanyX is receiving claims related to this incident. Information about claims and the claims process is available on-line at the CompanyX website (see link below). You can also call, email, or mail us if you need additional assistance or information.

Website: www.companyx.com\claims.htm
Email: claims@companyx.com
Phone: (360) 407-0007 (Mon-Sat, 8am to 5pm PST)
Mail: CompanyX – Oil Spill Claims
PO Box 4912876, Olympia, WA 98503

Sec. II-19 Claims (Cont'd)

II-19.4 Claim Advertisements (Cont'd)

Additional communication of a claims process is described in Section II-19.3. Specifics on these various communication methods are detailed here:

Website: http://www.phillips66.com/EN/response/Pages/index.aspx
Phone: 855-843-2198 – Incident Information Line
FaceBook: http://www.facebook.com/phillips66co
Twitter: http://twitter.com/p66_operations

Information will also be provided to print and electronic media for further distribution to the public via radio, television and internet sources.

II-19.5 Claims Contact Information

As described in Section II-19.3, Claims Contact information will be communicated by the company in a variety of manners. Examples include local newspapers, via a press conference designed to communicate the process in local radio on television media, through social media on the Phillips 66 Facebook and Twitter, and via the internet on the Phillips 66 website. All communications will direct claimants to report their claims via the toll free Claims Line to ensure a uniform process and provide quality control to the claimant. During this initial reporting process, information from the claimant will be recorded into an electronic database and a claim number will be assigned. Once a claim is reported via the toll free Claims line, the claimant will be contacted by a claim representative that will become the point of contact for the claimant on a go forward basis. At this time the claimant will be provided with phone, fax and email contact information for the claim representative. If at any time, the claim representative is not responsive to the needs of the claimant, the claimant may call the toll free Claims line to request a reassignment of the claim. A review of the file will be conducted and, if warranted, a reassignment will be made.

II-19.6 Local Claim Centers

The establishment of a local claim center, or multiple centers, will only be considered if there is a significant community need or the number of expected or anticipated claims warrants it. If necessary, Phillips 66 Company is committed to establishing a single claim center within the community most greatly impacted by the spill for a period necessary to sufficiently address the needs of those impacted by the spill and as warranted by workload and community need.

Sec. II-19 Claims (Cont'd)

II-19.7 Claim Forms (Internal & External)

During the reporting of a claim via the toll free Claims line, claimants can expect to provide the initial information contained in the Phillips 66 Company Claim Form (Form# CL1), attached hereto. This form may be included on the website to allow the claimant to compile the information in advance. However, to ensure a common process, to expedite processing and to ensure that all claims are addressed as timely as possible, ALL claims will be established/reported via the toll free Claims line. At some point in time during the process, a claimant can expect to be required to establish a "sum-certain" monetary amount being claimed. Additional information on various components of this "sum-certain" and the basis thereof are included in the examples of Documentation found in Section II-19.10.

Copies of the form used by Phillips 66 Company are provided at the end of this section:

- Form# CL-1 Claim Form (example of the type of initial information required during phone reporting)
- Phillips 66 Company uses an internal database to track and manage all claims

II-19.8 Submitting Claims to Phillips 66 Company

To ensure a common process, to expedite processing and to ensure that all claims are addressed as timely as possible, ALL claims will be established/reported via the toll free Claims line. Claims related to the reimbursement of Uncompensated Oil Spill Removal Costs will be accepted by Phillips 66 Company up to 6-years from the date cleanup was completed. All other types of claims will be accepted up to 3-years from the date that Phillips 66 Company began advertising for claims or 3-years from the date that the injury or damage being claimed was reasonably discovered – whichever date is earlier. Resource Damage (NRD) claims are handled separately from other claims, and may be accepted by Phillips 66 Company in a manner and timeframe agreed to by the company and the lead federal and/or state trustee agency.

Questions regarding claims, or the status of claims already submitted, will be handled by the claims representative assigned to the claim. Contact information, including phone number, fax number and email address, will be provided during the initial contact from the claims representative. A process for requesting re-assignment of the file to a new claims representative is addressed in Section II-19.3.

Sec. II-19 Claims (Cont'd)

II-19.9 Claims Adjudication and Timeframes

Phillips 66 Company will process claims in the order they are reported. . During the initial reporting, each claim will be assigned a unique "claims file number" which will be used to track the claim internally. Each claimant will be assigned a representative and a contact name will be provided. All claimants will be contacted after this initial call and provided with contact information (phone number, fax number and email address) for the representative assigned to their claim. The claims file number can also be used by claimants who wish to provide additional information to support their claim, or those inquiring about the status of a claim. Phillips 66 Company will review each claim received to ensure, as much as possible, that all needed information to make a claim decision has been provided by the claimant. If additional information is needed, we will request that the claimant forward that information to us so it can be added to the claim and considered during adjudication. If the information requested is not received within 90 days, Phillips 66 Company will adjudicate the claim with the information it has available. This may result in a reduction of possible claim compensation or an outright denial of the claim. Once Phillips 66 Company sends the claimant a claim determination, the claimant must either accept or reject the offer within 60 days. If they accept the offer, the claimant must sign a release before Phillips 66 Company will process the offer for payment. If the claimant takes no action within 60 days after receiving the claim determination, Phillips 66 Company's offer to pay the claim will be voided and the claim will be closed. If the claimant rejects the offer, they can provide additional information and ask Phillips 66 Company to reconsider the claim determination; typically, this would start an entirely new review process with another claim determination made as a result of the reconsideration - "reconsideration" is not "negotiation." Claims submitted to Phillips 66 Company will be paid in the order that accepted offers (with signed releases) are received. Claims are usually paid with 30-days from the date Phillips 66 Company's receives the claimant's signed release.

II-19.10 Claims Documentation

The amount and type of proof and documentation needed by Phillips 66 Company to make a decision on a claim depends on many factors, including the claim type and the monetary amount claimed. Resource Damage (NRD) claims will be handled separately from other claims, and may only be submitted to Phillips 66 Company by a federal or state trustee agency. Phillips 66 Company is committed to working with trustee agencies directly in the NRD process.

The following types of claims may be submitted to Phillips 66 Company after an oil spill occurs, where Phillips 66 Company accepts or is designated as the "Responsible Party" for the oil spill. Example types of documentation are also included below within the listing of each claim type. The examples provided are for reference only; they may or may not represent everything needed by Phillips 66 Company to adjudicate a claim.

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

Removal Costs: Costs to prevent, minimize, mitigate, or clean up the oil spill.

Examples of Proof and Documentation that may be needed:

- Proof that actions were coordinated with the Coast Guard or EPA's Federal On-Scene Coordinator (FOSC) for the incident or approved by Phillips 66 Company in advance.
- Witness statements
- Detailed description of actions
- Dates on which work was performed
- Pictures of area, damage, and spill
- Receipts, invoices, or similar records with description of work
- How rates were determined and any comparison of rates
- Daily records of personnel costs including details on labor rates, hours, travel, and transportation
- Daily records of equipment costs including description and use
- Signed disposal manifests and proof of payment for disposal
- Payroll verification of hourly rate at the time of spill
- Verification of equipment rates for equipment used

Property Damage: Injury to or economic loss resulting from destruction of real property (land or buildings) or other personal property; injury to or economic loss resulting from damage to a boat.

Examples of Proof and Documentation that may be needed:

- Proof of ownership or leasehold interest in the property; lease or rental agreement of any substitute property used
- Proof or evidence that property was injured, destroyed, or not usable because of the oil spill
- Proof of value of property both before and after the spill or injury
- Documented cost of repair or replacement of the property
- Proof of value of property before and after the spill
- Witness statements
- Copy of title, deed, lease, or license to property in claimant's name
- Pictures or videotape of property and/or damage
- Professional property appraisals for the value of the property prior to and after the spill, actual selling price of the property, and evidence connecting the depressed selling price to the oil spill rather than to other economic or real property factors
- Copies of bills paid for repair of damage or estimates showing activities and costs to repair the damage

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

Loss of Profits or Earning Capacity: Damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of property or natural resources

Examples of Proof and Documentation that may be needed:

- Proof that property or natural resources that were damaged, destroyed or lost, resulted in claimant's loss
- Proof the claimant's income was reduced due to the damage or loss of the property or natural resources and how much it was reduced
- Documentation showing the amount of profits and earnings in similar time periods
- Documentation showing any alternative employment or business during the period claimed and any income received during that period
- Documentation showing savings to overhead costs or other normal expenses - those not paid as a result of the spill (commuting costs, utility fees, employee salaries)
- Statements on how the spill led to loss of business income or earning capacity; explain any earnings anomalies
- Statement on how the spill caused a loss in income
- Affidavit from claimant's employer about the impact the spill had on an employee's work or income, and if the employer intends to file a claim for lost profits or earning capacity
- Copies of pay stubs, receipts, timesheets from before, during, and after the spill
- Personnel records from claimant's employer before, during, and after the spill, showing employment
- Claimant's description of efforts to reduce loss, including job search
- Copies of any job-hunting expenses (e.g., travel costs)
- Signed copies of income tax returns and schedules for at least two years prior to spill
- Details of employment expenses not paid during period being claimed (e.g., commuting costs)
- Copies of pay stubs, receipts, timesheets from alternative employment during time of spill (including unemployment compensation)
- Description and documentation of business losses due to spill
- Copies of letters of business cancellations caused by the spill damage
- Financial statements for at least two years prior to spill and from the year of the spill
- Signed copies of business income tax returns and schedules for at least three years prior to spill
- Details on efforts to mitigate business losses or why no efforts were taken
- For hotels, daily and monthly occupancy information for two years prior to spill and the year of the spill
- Description of marine charter business losses caused by the spill
- Evidence that charter vessel(s) was in the area impacted by the spill and were unable to carry on their business due to the spill
- Signed copies of income tax returns (for charter boat business) and schedules for at least three years prior to spill
- Details on expenses not paid out during period being claimed (e.g., wages)
- Booking records for three years prior to spill and year of spill

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

- List of charter rates, including any services the business specializes in (e.g., sport fishing)
- Copies of any logs relating to boating activities for the year prior to and the year of the spill
- Registration documents for the vessel

Loss of Subsistence Use of Natural Resources: Loss of subsistence use claim if natural resources claimants depend on for subsistence use purposes that have been injured, destroyed, or lost by an oil spill Event.

Examples of Proof and Documentation that may be needed:

- Proof that injury, destruction, or loss of natural resources would have been used by the claimant to obtain food, shelter, clothing, medicine, or other minimum necessities of life.
- Documentation identifying each specific natural resource for which compensation for loss of subsistence use is being claimed
- Description of the actual subsistence use you make of each specific natural resource you identify;
- Description of how and to what extent claimant's subsistence use of the natural resource was affected by the injury to, destruction of, or loss of, each specific natural resource;
- Description of claimant's efforts to mitigate subsistence use loss
- Description of alternative source(s) or means of subsistence available to claimant during the period

Loss of Government Revenue: Net loss by Federal, State, or Local Governments of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources.

Examples of Proof and Documentation that may be needed:

- Information showing that the loss of revenue was caused by the injury to, destruction of, or loss of real or personal property or natural resources caused by the discharge
- Information showing the amount, identity, and description of the revenue loss for which compensation is claimed, including the applicable authority for collecting the revenue, method of assessment, applicable rate, and dates of collection or periods of loss
- Documentation showing expenditures saved because revenue was not collected
- The total assessment or revenue collected and related expenditures for comparable revenue periods, typically covering two years
- Description of what revenues were impacted and how the spill caused a loss of revenues
- Copies of statutes, regulations, ordinances, etc., outlining applicable authority to raise such revenues, property affected, method of assessment, rate of assessment, and method and dates of collection of assessment
- Government financial reports showing total assessment or revenue collected for comparable periods, typically covering two years
- Details of any expenses not paid out by government

Sec. II-19 Claims (Cont'd)

II-19.10 Claims Documentation (Cont'd)

Increased Public Service Costs: Net costs by State & Local Governments for providing increased or additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by a discharge of oil or directly attributable to response to the oil spill Event.

Examples of Proof and Documentation that may be needed:

- Documentation showing justification for the public services provided, including documentation of what specific services were provided and the relationship to the spill.
- Documentation showing when services were provided during and after the oil spill removal.
- Documentation showing services were in addition to services normally provided
- Documentation showing the net cost for the services and the methods used to compute those costs
- Reports showing the increased public services were required and if the services were due to fire, health, or safety hazards
- Detailed description of what increased services were necessary and why, including a distinction between removal activities, safety acts, and law enforcement acts, and if the increase was actually incurred or if normal resources were diverted for use
- Daily reports on the activities of the government personnel and equipment involved Government Labor and Equipment Rates:
- Payroll verification of the government hourly rate at the time
- Verification of the standard government equipment rates for any equipment claimed
- Signed and dated records of the spill including hourly rates for labor and equipment
- Explanation as to whether rates are fully loaded or not and formulas used
- Certification that rates used reflected actual costs incurred and did not include punitive damages or fees

Sec. II-19 Claims (Cont'd)

II-19.11 Call Information Sheet – EXAMPLE

[INCIDENT]
[DATE]

Today's Date: _____ Time of call:_____

Name of Caller (verify spelling): _____

SSN: _____ DOB: _____

Address: _____

_____

Phone Numbers
Home:_____ Work:_____ Cell: _____

Details of claim (What happened):

_____

_____

_____

_____

Any prior contact with Phillips 66 representative? If so, who?_____

_____

What type of claim: Personal Injury, Property Damage, Buisness Loss, Sustinence_____

Dollar Amount, if know at this time_____

Have you commenced a legal proceeding regarding this claim or 'signed-up' with an attorney to represent you in regard to this claim:_____

If so, who_____

Description of how the injury or damage was caused_____

_____

What actions did you take, if any, to minimize the injury or damage_____

_____

_____

Sec. II-19 Claims (Cont'd)

II-19.11 Call Information Sheet – EXAMPLE (Cont'd)

If Personal Injuries are included, provide names and ages of all family members affected: _____

_____

_____

_____

Where were the individuals located at the time of the alleged injuries: ___

_____

_____

What was the Time they were there: _____

Was Medical Treatment sought: Yes ☐ No ☐

Hospital: _____

Physician (if not at hospital): _____

Wintesses Names and Contact information (to include):

Name:
Address:
Telephone Number:

Sec. II-20 Response Termination and Follow-up Procedures

Termination activities are divided into three phases: debriefing the incident, post-incident analysis, and critiquing the incident. The extent to which these phases are undertaken depends on the nature and magnitude of the spill or release. Even a small product release could elicit very detailed termination activities. For example, a release of H_2S resulting with subsequent employee, or public, negative impact. Additionally, some spills or releases trigger outside agency reporting. These events would trigger the formal termination procedures outlined in this section.

Sec. II-20.1 Debriefing the Incident

Debriefings should begin as soon as the "emergency" phase of the operation is completed. Ideally, this should be before first responders leave the scene, and it should include the hazmat response team, sector officers, and other key players such as public information officers and agency representatives who the Incident Commander determines would benefit from being involved.

Debrief Checklist

Procedures	✓
Use safety meeting attendance forms and or memoranda to document the debriefing.	☐
Inform responders exactly what hazardous materials they were (possibly) exposed to and the signs and symptoms.	☐
Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation	☐
Assign information-gathering responsibilities for a Post-Incident Analysis and critique.	☐
Summarize the activities performed by each sector, including topics for follow-up.	☐
Reinforce the positive aspects of the response.	☐

Debrief Performed By:	Date/Time

Sec. II-20.2 Post-Incident Analysis: (PIA)

Response Termination
Termination activities are divided into three phases: debriefing the incident, post-incident analysis, and critiquing the incident. The extent to which these phases are undertaken depends on the nature and magnitude of the spill or release. Even a small product release could elicit very detailed termination activities. For example, a release of H_2S with subsequent employee or public negative impact. Additionally, some spills or releases trigger outside agency reporting. These events would trigger the formal termination procedures outlined in this section.

General Information	
Debriefing the Incident	
❒	Debriefings should begin as soon as the "emergency" phase of the operation is completed. Ideally, this should be before first responders leave the scene, and it should include the hazmat response team, sector officers, and other key players such as public information officers and agency representatives who the IC determines would benefit from being involved.
❒	Inform responders exactly what hazardous materials they were (possibly) exposed to and the signs and symptoms.
❒	Identify equipment damage and unsafe conditions requiring immediate attention or isolation for further evaluation.
❒	Assign information-gathering responsibilities for a Post-Incident Analysis (PIA) and critique.
❒	Summarize the activities performed by each sector, including topics for follow-up.
Safety meeting attendance forms and or memoranda may be utilized to document the debriefing.	

Post-Incident Analysis:	
	PIA is the detailed, step-by-step review of the incident to establish a clear picture of the events that took place during the incident. It is conducted to establish a clear picture of the emergency response for further study.
	The PIA is not the same as investigations conducted to establish the probable cause of the accident for administrative, civil, or criminal proceedings. Those are usually conducted utilizing root cause or hazard and operability methodologies. One person or (or office) should be designated to collect information about the response during the debriefing. Additional data may be obtained from Command post logs, incident reports and eyewitness interpretations.
	Once all available data has been assembled and a rough draft report developed, the entire package should be reviewed by key responders to verify the available facts are arranged properly and actually occurred. The PIA should focus on four key topics: *Command and Control, Tactical Operations, Resources and Support Services.*
	Command and Control – Was command established and sectors organized? Did information flow from operations personnel through Sector Officers to the Incident Commander? Were response objectives communicated to the personnel expected to carry them out?
	Tactical Operations – Were the tactical options ordered by the IC and implemented by emergency response personnel effective? What worked? What did not?
	Resources – Were the resources adequate for the job? Are improvements needed to apparatus and/or equipment? Were personnel trained to do the job effectively?
	Support Services – Were the support services received from other organizations adequate? What is required to bring support to the desired level?

Critiquing the Incident:	
A commitment to critique an all hazardous material response will improve IMT performance by improving efficiency and pinpointing weaknesses. Use the tool as a valuable learning experience (everyone came to the incident with good intentions) A good critique promotes:	
	Trust in the response system as being self-correcting.
	Willingness to cooperate through teamwork.
	Continuing training of skills and techniques.
	Pre-planning for significant incidents.
	Sharing information between response agencies.

Critique Format:	
A critique leader is assigned. This can be anyone who is comfortable and effective working in front of a group. The critique leader should:	
❒	Control the critique. Introduce the players and procedures. Keep it moving and end on schedule.
❒	Ensure that specific questions receive detailed answers.
❒	Ensure that all participants follow the critique rules.
❒	Ensure that each operational group presents their observations.
❒	Keep notes of important points.
❒	Sum up the lessons learned.
❒	Follow up.
❒	Following the critique, forward the written comments to management. They should highlight suggestions for improving response capabilities and alternative solutions.
❒	When larger incidents are involved or injuries have occurred, formal reports shall be circulated so that everyone in the response system can understand the "lessons learned."

Section III – Table of Contents

Sec III-1 Overall Training

Experienced, well-trained people are essential for successful implementation of this Emergency Response Plan. Exercises are performed to check the effectiveness of the training and to test the Plan. An ongoing training and exercise program will be carried out at the facility. In addition to maintaining maximum familiarity with all aspects of the Plan, the training and exercise program is intended to provide members of the spill response team with the basic knowledge, skills and practical experience necessary to perform safe and effective spill response operations in accordance with the plan.

In order to have a successful exercise program, it is important for responders to be aware of and knowledgeable of the policies set forth in the Area Contingency Plan (ACP) and the use and location of Geographic Response Plans (GRPs) as applicable. Training on the contents of the ACP and use of the GRPs is conducted with annual ICS/UCS training, as applicable.

OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) rule (29 CFR 1910.120) became law on March 6, 1990. It sets minimum training and/or competency requirements for people associated with an oil spill emergency. HAZWOPER requirements are described in the following section. Additional training and exercise requirements are discussed in the balance of this section.

The training coordinator will devise a training plan and schedule in response to governmental regulations and the specific requirements of the Company, and implement the training plan in cooperation with local oil spill response co-ops and selected contractors. Representatives of governmental agencies and other interested parties may be invited to observe or participate in these activities as determined appropriate.

Sec. III-2 Response Training

As required in the DOT regulation 49 CFR Appendix A to part 194 the company has developed a program for facility response training. Please refer to the appropriate training documentation, which is maintained and available in this section of the Core Plan.

Sec. III-2.1 Description of Response Training

The following summarizes the response training elements for all Facilities:	
•	Incident Command System (ICS) Training Program
•	Classroom Training
•	HAZWOPER Response Qualifications

Sec. III-3 Incident Command System (ICS)/HAZWOPER Training Program

Background

The Incident Command System (ICS) was first developed as a result of wild fires in southern California in the 1970s. In 1980, the ICS (originally developed by an entity called Firescope) made the transition into a national program called the National Incident Management System (NIMS). At that time, ICS became the backbone of a wider-based system for all Federal agencies with wildland fire management responsibility.

The NIMS ICS has also now been adopted by the U.S. Coast Guard for response to all oil and hazardous substance spills and has been integrated into the National Response System and therefore the National Contingency Plan of the U.S. The U.S. Federal Emergency Management Agency (FEMA) is adopting the ICS, as well as industry entities such as the National Fire Protection Association (NFPA).

In summary, the company ICS/UCS organizations and the associated training program was developed directly from NIMS.

Training Requirements

It is important to have well trained Spill Management Team. New Employees will complete ICS 100 and ICS 200 Level Training. Persons filling key roles in the ICS/UCS Organization (i.e. Command Staff Officers and General Staff Section Chiefs) will also complete ICS 300 Level Training and comply with one of the following:

Command and General Staff Additional Requirements	
•	Observe position a minimum of one WCD exercise
•	Serve as Deputy (position) a minimum of one WCD exercise
•	Serve previously in (position) in a WCD exercise or actual response

ICS 100, ICS 200, and ICS 300 Level Training can be achieved through various mediums including:

1. For ICS 100 and ICS 200 Level Training courses are available on-line through the FEMA Independent Study Courses through the Emergency Management Institute. A certificate will be provided upon completing each course. http://www.training.fema.gov/IS/crslist.asp:
   - IS-100 Introduction to Incident Command System, I-100
   - IS-200.a ICS for Single Resources and Initial Action Incidents

2. The Company also offers ICS 100, ICS 200, and ICS 300 internally online through Computer Based Training (CBT), via the Company Learning Management System. A certificate will be provided upon completing each course.

Training Requirements (Cont'd)

3. Instructor Lead Courses- ICS 100, ICS 200, and ICS 300 are also available though a class room setting. Contact the Company's Emergency Management Coordinator to scheduling the course internally. In addition the course being offered through the company, both the Emergency Management Institute and the National Fire Academy sponsor NIMS compliant ICS-300 Level Training. Please contact your local or State's Emergency Management Agency or State Fire Academy for details about when and where these courses will be available.

Personnel Response Training Logs

The Company will conduct Emergency Response Plan training annually for their personnel to meet the requirement for "personnel response training logs". **The actual retention of this activity's documentation is maintained in the Company Learning Management System.** Please consult the training coordinator for further information on these records.

Sec. III-3.1 Classroom Training

The Company conducts training at this facility. The topics applicable to response training may consist of, but are not limited to, the following:	
•	Facility Response Plan/OPA (annual). FRP Training will include, but not be limited to: • Personnel responsibilities under the plan • Notification processes, including critical phone numbers (NRC, QI, Operator, etc. as identified in Annex 2; refer to the Emergency Notifications Contact List)) • Characteristics of products handled on site
•	SPCC/HWCP Training (annual)
•	PPE Use, Care and Maintenance
•	Biannual Boom Deployment Exercises (If owned and maintained at the facility)
•	Tabletop Drills per this ERP
•	Fire Extinguishing School
•	First Aid/CPR

Sec. III-3.2 HAZWOPER Response Qualifications

Certain designated Company employees are required to obtain qualifications to meet different levels of initial training (each require 8 hours of annual refresher training) in accordance with OSHA 1910.120 or HAZWOPER. The five (5) levels of HAZWOPER qualification applicable to Company employees are:	
•	First Responder - Awareness (Level 1) (Sufficient hours of training to demonstrate competencies)
•	First Responder - Operations (Level 2) (8 hours initial)
•	Hazardous Material Technician (Level 3) (24 hours initial)
•	Hazardous Material Specialist (Level 4) (24 hours initial)
•	"On-Scene" Commander or Incident Commander (Level 5) (24 hours initial)

Sec. III-3-3 HAZWOPER Levels

First Responder Awareness Level	
First responders at the Awareness Level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the Awareness Level shall have sufficient training or have had sufficient experience to objectively demonstrate competency in the following areas:	
•	An understanding of what hazardous substances are, and the risks associated with them in an incident.
•	An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
•	The ability to recognize the presence of hazardous substances in an emergency.
•	The ability to identify the hazardous substances, if possible.
•	An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.
•	The ability to realize the need for additional resources, and to make appropriate notifications to the communication center.

Sec. III-3.3 HAZWOPER Levels (Cont'd)

First Responder Operations Level

First responders at the Operations Level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release.

Their function is to contain the release from a safe distance, keep it from spreading and prevent exposures. First responders at the Operational Level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level and the employer shall so certify:

•	Knowledge of the basic hazard and risk assessment techniques.
•	Know how to select and use proper personal protective equipment provided to the first responder operational level.
•	An understanding of basic hazardous materials terms.
•	Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and PPE available with their unit.
•	Know how to implement basic decontamination procedures.
•	An understanding of the relevant standard operating procedures and termination procedures.

Hazardous Materials Technician

Hazardous Materials Technicians are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. Hazardous Materials Technicians shall have received at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:

•	Know how to implement the employer's emergency response plan.
•	Know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment.
•	Be able to function within an assigned role in the Incident Command System.
•	Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.
•	Understand hazard and risk assessment techniques.
•	Be able to perform advance control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.
•	Understand and implement decontamination procedures.
•	Understand termination procedures.
•	Understand basic chemical and toxicological terminology and behavior.

Sec. III-3.3 HAZWOPER Levels (Cont'd)

Hazardous Materials Specialist	
Hazardous Materials Specialists are individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician, however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The Hazardous Materials Specialist would also act as the site liaison with Federal, state, local and other government authorities in regards to site activities. Hazardous Materials Specialists shall have received at least 24 hours of training equal to the technician level and in addition have competency in the following areas and the employer shall so certify:	
•	Know how to implement the local emergency response plan.
•	Understand classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment.
•	Know of the state emergency response plan.
•	Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.
•	Understand in-depth hazard and risk techniques.
•	Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.
•	Be able to determine and implement decontamination procedures.
•	Have the ability to develop a site safety and control plan.
•	Understand chemical, radiological and toxicological terminology and behavior.

On Scene Incident Commander	
Incident Commanders, who will assume control of the incident scene beyond the First Responder Awareness Level, shall receive at least 24 hours of training equal to the First Responder Operations Level and in addition have competency in the following areas and the employer shall so certify:	
•	Know and be able to implement the employer's Incident Command System.
•	Know how to implement the employer's emergency response plan.
•	Know and understand the hazards and risks associated with employees working in chemical protective clothing.
•	Know how to implement the local emergency response plan.
•	Know of the state emergency response plan and of the Federal Regional Response Team.
•	Know and understand the importance of decontamination procedures.

Sec. III-3.4 Refresher Training

Those employees who are trained in accordance with the above descriptions shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly.

Sec. III-3.5 HAZWOPER Training Certification and Documentation

The Company will certify that its spill management response team members assigned to all HAZWOPER levels have received the required training or equivalent and are competent. The Company will train and maintain its spill management team members to HAZWOPER per 29 CFR 1910.120(q) as a minimum. Upon receiving the initial HAZWOPER training, response team members will be issued a certificate indicating that they have completed the required amount of HAZWOPER training and can function as a response team member. A copy of the certificate is included in this Section. Documentation of specific training received by each employee is maintained within the Learning Management System.

Refresher training must satisfy the OSHA requirement to maintain competency and at least 4 hours[1] of refresher training must be completed. In order to maintain competency, the annual refresher may consist of any of the classes or combinations of classes listed in the Company approved HAZWOPER Courses Table outlined in this section.

[1]*Facilities located in the state of Washington require a minimum of 8-hours of refresher training annually.*

The Learning Management System may be queried to determine the amount of HAZWOPER training that an employee has received, as well as, to verify that the annual refresher training requirement has been met. The designated Facility Supervisor will determine the specific refresher training provided for each employee.

By completing one of these options, the company considers the individual certified per 29 CFR 1910.120(q)(8)(ii).

Sec. III-3.6 Response Contractors

All contractors responding to a spill/release that involves the Company will be required by their contracts to satisfy the HAZWOPER training requirements of 29 CFR 1910.120 for their position.

Sec. III-3.7 Other Response Personnel

Sec. III-3.7.1 Skilled Temporary Support Personnel

Company and other response support personnel whose skills are needed temporarily to perform immediate emergency support work (such as truck drivers and crane operators) are not required to meet the training requirements discussed above. However, these personnel must be briefed on the potential hazards and the duties to be performed at the site before participating in response operations. They must also receive instruction in the use of any safety and personal protective equipment needed and be provided with all other appropriate safety and health precautions.

Sec. III-3.7.2 Specialist Employees

Specialist employees are experts who would provide technical advice or guidance during response to a spill incident. Examples of such specialists might include chemists, biologists, industrial hygienists, physicians, or others with skills useful during a spill response operation. Such persons must receive appropriate training or demonstrate competency in their specialty annually. There are no specific requirements on training content or hours of training for these persons except that it entails whatever is necessary to maintain competency in their specific area of expertise. Training and demonstration of competency for skilled support personnel and specialists should be documented.

Sec. III-3.7.3 Casual Laborers

Casual laborers will generally not be hired, but may be employed by the Company's response contractors or other response organizations. Contractors will be responsible for providing the appropriate HAZWOPER training to these laborers prior to their involvement in response operations.

Sec. III-3.7.4 Volunteers

Normally, the Company will not hire and/or train volunteers for work on an oil spill response incident. Consequently, the company will refer volunteers to appropriate state and/or local agencies or organizations that are set up to handle volunteers. In addition, the Company will refer volunteers to appropriate wildlife rescue agencies or contractors, such as the International Bird Rescue Research Center, which may be contracted by the Company to work on the spill cleanup.

In the event that the Unified Command approved "volunteers" the Incident Action Plan will include them as resources with scope of work, training and PPE as required.

Sec. III-3.8 Waste Handling Training

Field operations personnel receive extensive regulatory-required training in HAZWOPER, HAZCOM, emergency response, fire fighting, and other areas as described in this section. Employees at sites which generate hazardous waste receive additional orientation and training specific to hazardous waste regulatory requirements, and hazardous waste emergency response. Site emergency coordinators (qualified individuals) also receive additional training on incident command systems.

Sec. III-3.9 Training Records

Training records will be maintained as long as personnel have duties under the Response Plan. Training documentation may be verified in the Company Learning Management System.

Sec. III-3.10 Company Approved HAZWOPER Courses

The following courses may be used for annual HAZWOPER Refresher Certification. A minimum of four (4) hours credit must be accrued annually to maintain HAZWOPER Refresher Certification. *(The state of Washington requires a minimum of 8-hours refresher training annually).*

Title	Area	Credit Hours	Frequency	References
Incident Command System (ICS)	ER	3.0	Initial/Annual	ERP
OPA '90 Plan Review	ER	1.0	Initial/Annual	ERP: EPA, DOT and USCG (PowerPoint or classroom)
OPA '90 Exercise - Table Top Exercise	ER	4.0	Annual	ERP
OPA '90 Exercise - Equipment Deployment	ER	3.0	Annual/ Semi-Annual	ERP
Security Training - Facility Personnel	ER	1.0	Initial & Changes	FSP (PowerPoint or classroom)
Security Training - Marine Facility Security Officer (FSO)	ER	4.0	Initial & Changes	FSO Training Program (PowerPoint or classroom)
Security - Facility Exercise	ER	2.0	Annual	FSP
Security - Marine Facility Quarterly Drill	ER	1.0	Initial & Quarterly	FSP
Combined Spill Response and Security Exercise	ER	4.0	Annual	ERP & FSP
Spill Prevention Control and Countermeasure Plans (SPCC)	ENV	1.0	Initial & Changes	ERP & SPCC
Spill Prevention Meeting	ER	1.0	As needed	ERP & FSP
Asbestos Communication of Hazard to Employees	HS	1.0	As needed	OSHA 1910.1001
Benzene	HS	1.0	Initial	OSHA 1910.1028
Field Survey Instruments & Equipment	HS	1.0	Annual	OSHA 1910.120
Fire Protection Equipment - Classroom	HS	1.0	Annual	OSHA 1910.155, 157, 158, 160, 164
Fire Protection Equipment – Hands-on	HS	1.0	Every 2 years	OSHA 1910.155, 157, 158, 160, 164
Hazard Communication	HS	2.0	Initial/As needed	OSHA 1910.1200
HAZWOPER – First Responder Awareness Level	ER	2.0	Initial/Annual	OSHA 1910.120
HAZWOPER – First Responder Operations Level	ER	2.0	Initial/Annual	OSHA 1910.120
HAZWOPER – General Training	ER	2.0	Initial/Annual	OSHA 1910.120
HAZWOPER – Hazardous Materials Technician	ER	24.0	Initial/Annual	OSHA 1910.120
HAZWOPER – On-Scene Incident Commander	ER	24.0	Initial/Annual	OSHA 1910.120
Hot Work Permits	HS	0.5	Initial/3-Years	OSHA 1910.120

Sec. III-3.10 Company Approved HAZWOPER Courses (Cont'd)

Title	Area	Credit Hours	Frequency	References
Hydrogen Sulfide – H2S	HS	1.0	Initial/3-Years	OSHA 1910.1028
Lead Awareness	HS	1.0	Initial/Changes	OSHA 1910.1025
Lockout/Tagout	HS	1.0	Initial/3-Years	OSHA 1910.147
Medical Services and First Aid - CPR	HS	6 Hours	Per Certification	OSHA 1910.151; Requires a Certified Instructor Course to be taught (determined locally)
NPDES Permitting and Hydrostatic Testing	ENV	1.0	As needed	Environmental Training Guideline
Occupational Exposure to Blood borne Pathogens	HS	1.0	Initial	OSHA 1910.1030
Occupational Noise Exposure	HS	12.0	Initial/ Annual (For Program Participants)	OSHA 1910.95
Permit-Required Confined Space Entry – General Awareness	HS	2.0	Initial/Periodically	OSHA 1910.146
Personal Protective Equipment	HS	1.0	Initial/As Needed	OSHA 1910.132, 133,135; OSHA 1926.500-503
RCRA-Personnel Training for Generators of Hazardous Waste Who accumulate waste on-site Storage	ENV	4.0	Initial/Annual	40 CFR 264.16 and 262.34
Respiratory Protection	HS	2.0	Initial/Annual	OSHA 1910.134
Safe Transportation of Hazardous Materials – Air	DOT	2.0	Initial/2 Years	IATA
Safe Transportation of Hazardous Materials – General Awareness	DOT	2.0	Initial/2 Years	49 CFR 172.704
Safe Transportation of Hazardous Materials – Highway	DOT	2.0	Initial/3 years	49 CFR 172.704
Safe Transportation of Hazardous Materials – Rail	DOT	2.0	Initial/3 years	49 CFR 172.704
Safe Transportation of Hazardous Materials – Water	DOT	2.0	Initial/3 years	49 CFR 172.704
Safety Related Work Practice - Electrical Hazards - Unqualified	HS	1.0	3-Years	OSHA 1910.331-.335
Security – General Awareness (Global)	SEC	1.0	Annual	
Specifications for Accident Prevention Signs and Tags	HS	1.0	As needed	OSHA 1910.145
Trenching and Excavation - Awareness	HS	1.0	Initial & Reg. Changes	OSHA 1926.651

Refer to the Learning Management System for additional course information and documentation.

Sec. III-4 Response Exercise Program

Experienced, well-trained people are essential for successful implementation of this Emergency Response Plan. Exercises are performed to check the effectiveness of the training and to test the Plan. An ongoing training and exercise program will be carried out at the facility. In addition to maintaining maximum familiarity with all aspects of the Plan, the training and exercise program is intended to provide members of the spill response team with the basic knowledge, skills and practical experience necessary to perform safe and effective spill response operations in accordance with the plan.

The Company exercise program is designed to be consistent with the exercise requirements as outlined in the National Preparedness for Response Exercise Program (PREP) Guidelines developed by the U.S. Coast Guard in conjunction with the Pipeline Hazardous Materials Safety Administration (PHMSA) and the U.S. Environmental Protection Agency (EPA). Participation in this program ensures that the Company meets all federal exercise requirements mandated by OPA '90.

The primary elements of the Company exercise program are notification exercises, tabletop exercises, facility-owned equipment deployment exercises, contractor exercises, unannounced exercises by government agencies and area-wide exercises conducted by industry and government agencies. The exercise year for all Company facilities will be from January 1 to December 31. The Facility Manager is responsible for implementing the exercise program.

All exercises and actual release event responses will be critiqued. If appropriate, the information derived from the post-exercise or post-event evaluation will be incorporated into the Emergency Response Plan. The IC will cause the facility plan to be updated as necessary and updates will be forwarded to Company Emergency Response & Security Group.

Sec. III-4.1 Exercise Format and Procedures

Exercises serve to evaluate the thoroughness and effectiveness of the emergency response component of the Emergency Response Plan by testing under simulated conditions. Exercises will be conducted in consistence with the PREP Guideline to maintain maximum effectiveness of the plan.

The following is a list of suggested organizations that should be invited to table top and equipment deployment exercises:	
•	Federal Agencies having jurisdictional responsibility during a spill or emergency (i.e. USCG, EPA, DOT).
•	State agencies having jurisdictional responsibility during a spill or emergency.
•	Local agencies having jurisdictional reasonability during a spill or emergency (i.e. Local Fire Department, LEPC, Law Enforcement, Health Department).
•	Other interested entities that may play a critical role during a spill or fire (i.e. Local Utilities).

Sec. III-4.2 Coordination with Local Emergency Services

During an event meetings should be conducted with all local emergency services departments. If possible, a single source of contacts with these departments should be appointed. Lines of communication to this source must be determined to allow quick contact. If the situation is expected to be of longer duration, off-duty police or security personnel may be required to assist. These people will be very useful in traffic control including ingress and egress from the site, and preventing unauthorized personnel from entering the area.

To ensure coordination between Fire, Police, and other appropriate Public Officials is possible during an emergency, the Area Supervisors are responsible for establishing liaisons with public officials to learn their responsibilities and resources for responding to an emergency. Field Operations are encouraged to involve local officials in drills/training programs, where appropriate.

Company personnel will coordinate with local emergency service officials as necessary to:	
•	Provide the officials with current information on all Company facilities within their jurisdiction
•	Exchange information about responsibilities and resources (both for Company and the officials) available for responding to hazardous liquid pipeline emergencies, and to discuss (preplan) possible responses to be made during potential emergency situations
•	Ensure that the names, addresses, and telephone numbers for the officials are current

Sec. III-4.3 Company Terminal Requirements

The program is on a 3-year cycle with different scenario requirements for the exercises throughout the cycle.

Each year a terminal will be required to conduct the following exercises:	
•	Four Notification Exercises which can be exercised in conjunction with a Tabletop and/or Equipment Deployment or separately.
•	One Tabletop Exercise (TTX) [1] which can be exercised alone or in conjunction with an Equipment Deployment.
•	Two Facility Equipment Deployments (EDX)[1] (if there is facility-owned spill response equipment on site). If the facility relies upon the pipeline area response equipment, that equipment should follow the pipeline response plan and equipment exercise program.
•	An Agency unannounced exercise, if initiated by jurisdictional agency.
•	An area exercise, if required by jurisdictional agency.
•	Document that primary OSRO contractors listed in the OPA '90 plan have conducted training consistent with the PREP guidelines.
•	Self-certification and documentation. (Credit may be taken for responses to actual events, as long as it is properly documented.

[1] *Annually, one exercise, either TTX or EDX must be unannounced.*

Sec. III.4.4 Company Pipeline Requirements

The program is also on a 3-year cycle with different scenario requirements for the exercises throughout the cycle.

Each year a pipeline response area will be required to conduct the following exercises:	
•	Four Notification Exercises which can be exercised in conjunction with a Tabletop and/or Equipment Deployment or separately.
•	One Tabletop Exercise (TTX) [1] which can be exercised alone or in conjunction with an Equipment Deployment.
•	One Pipeline Equipment Deployment (EDX)[1] (if the pipeline area has pipeline-owned spill response equipment.
•	An Agency unannounced exercise, if initiated by Jurisdictional agency.
•	Document that primary OSRO contractors listed in the OPA '90 plan have conducted training consistent with the PREP guidelines.
•	Self-certification and documentation. (Credit may be taken for responses to actual events, as long as it is properly documented.

Sec. III-4.5 Guiding Principles

Internal Exercises

Internal exercises are those that are conducted wholly within the Company. The internal exercises test the various components of the response plan to ensure the plan adequately meets the OPA '90 requirements for spill response.

The internal exercises include:	
•	Incident Commander (IC) Notification Exercises (Terminals)*
•	Internal Notification Exercises (Maintenance Groups)*
•	Spill Management Team Tabletop Exercises
•	Equipment Deployment Exercises (Facility-Owned Equipment)
•	Equipment Deployment Exercises (Response Contractors)
•	Government Initiated Unannounced Exercises

All of the internal exercises, with the exception of the government initiated unannounced exercises, will be self-evaluated and self-certified.

*The Qualified Individual is the Incident Commander for the Company. Refer to the job positions identified in the QI Delegation of Authority Letter located in the Introduction section of this plan that may serve as Incident Commander. Other delegated personnel in a supervisory position (i.e. a pump station supervisor, may act as the Incident Commander should a spill occur at his pump station). For the purposes of exercises, generally, the Terminal Supervisor or the Area Supervisor should be the contact person.

External Exercises

The external exercises go outside the Company to test the interaction of the Company with the response community. The external exercises will test the Company's entire plan and the coordination with members of the response community necessary to conduct an effective response to a pollution incident.

The external exercise includes: Area Exercises

An area exercise is conducted by EPA, the Coast Guard, DOT and industry working in cooperation to exercise the area contingency plan. This is a large-scale exercise that is planned and evaluated by all parties involved.

Sec. III-4.6 Triennial Cycle of Exercising the Entire Response Plan

Every three years all components of the entire response plan must be exercised. The purpose of this requirement is to ensure that all components of the plan function adequately for response to an oil or hazardous substance spill. By complying with the PREP Guidelines as set forth in this section, the Company meets this requirement.

Sec. III-4.7 Credit for Conducting an Exercise

When lesser-included exercises occur as part of larger exercises or a real event, the Company facility will receive credit for that lesser included exercise or real event when properly documented. For example, if a terminal responds to an actual spill, the activities involved in the spill response (i.e., the IC notification, the equipment deployment, etc.) will satisfy the requirements of these two exercises, provided the actual response activities meet the objectives of the exercises and are properly documented.

Credit for an Area Exercise will be given to the Company facility or facilities for an actual response to a spill in the Area if the plan was utilized for response to the spill and the objectives of the Area Exercise were met, properly documented and certified. The caveat to this statement is that if a The Company facility plan was scheduled for an Area Exercise and an actual spill occurred in the Area for which the facility's plan was not used (i.e., another company's plan was used or an agency plan was used), then the Company facility would not receive credit for the spill response.

Objectives that are not successfully met during an exercise will be tested again. Plan deficiencies identified during an exercise will be addressed and amended as appropriate.

Sec. III-4.8 Proper Documentation

Proper documentation includes documentation, which lists the exercise conducted, the objectives met and the results of the exercise evaluation. This documentation must be in writing and signed by an individual having responsibility for the asset conducting the exercise. All spill response exercise documentation records should be maintained on file at the facility for a minimum of five years.* This Section describes the proper exercise ICS/UCS documentation forms that should be used to document the corresponding exercises. All ICS forms in this section may be utilized to document exercises as well as assisting with actual response. Forms are found in the following locations:

- Section IV of this plan contains Company Forms.
- ERAP contains Initial Response Forms
- Company Website contains all Company and ICS Forms

*Note: Electronic documentation may be located on the Company Emergency Response website.

Sec. III-4.9 Certification Process

The Incident Commander or Exercise Facilitator certifies the response exercise.

Following an exercise or actual event, the responders should complete a critique of their response. The evaluation form located in this section should include the Company facility name, exercise date, type of exercise conducted, response plan or zone exercised and participants. This form is to be signed by the Incident Commander or Exercise Facilitator; then filed and retained for a minimum of five years at the facility.

Sec. III-4.10 EPA

EPA Regulated Facilities	
QI Notification Exercises	
Applicability	Facility
Frequency	Quarterly
Initiating Authority	Company policy
Participating Elements	Facility personnel and qualified individual
Scope	Exercise communications between facility personnel and qualified individual
Objectives	Contact must be made with a qualified individual or designee, as designated in the response plan.
Certification	Self-certification.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years
Location	Records to be kept at the facility
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Spill Management Team Tabletop Exercises	
Applicability	Facility spill management team
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Spill management team as established in the response plan.
Scope	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.
Objectives	Exercise the spill management team in a review of" • Knowledge of the response plan; • Proper notifications • Communications system • Ability access an OSRO; • Coordination of internal organization personnel with responsibility for spill response; • An annual review of the transition from a local team to a regional, national and international team, as appropriate • Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS.) • Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc. At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a worst-case discharge scenario.
Certification	Self-certification.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years
Location	At each facility
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with facility owned and operated response equipment.
Frequency	Semi-annually
Initiating Authority	Company policy
Participating Elements	Facility Personnel
Scope	Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either (1) the minimum amount of equipment for deployment as described in "Guiding Principles", or (2) the equipment necessary to respond to a small discharge at the facility, whichever is less. All of the facility personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturers' recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.
Objectives	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure equipment is in proper working order.
Certification	Self-certification.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years
Location	At each facility
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Note: If a facility with facility owned and operated equipment also identified OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with OSRO response equipment cited in their response plan.
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Facility owner or operator and OSRO.
Scope	Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment for deployment as described in "Guiding Principles." All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for equipment deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO is documented. The OSRO must provide inspection and maintenance information to the owner or operator. Plan holders must ensure that when a regional OSRO is identified in the response plan, the OSRO conducts annual equipment deployment exercises in each operating environment for each CG or EPA Contingency Planning Area, or EPA sub-area (where identified).
Objectives	Demonstrate the ability of the personnel to deploy and operate response equipment. Ensure the response equipment is in proper working order.
Certification	The facility owner or operator should ensure that the OSRO identified in the response plan provides adequate documentation that the requirements for this exercise have been met.
Verification	Environmental Protection Agency (EPA)
Records	
Retention	5 years, kept at the facility.
Evaluation	Self-evaluation.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Note: If a facility with facility owned and operated equipment also identified OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.

Sec. III-4.10 EPA (Cont'd)

EPA Regulated Facilities	
Government-Initiated Unannounced Exercises	
Applicability	EPA-regulated facility response plan holders within the region.
Frequency	Triennially, if successfully completed. A facility deemed by the CG/EPA not to have successfully completed the exercise may be required to participate in another government initiated unannounced exercise at the discretion of the exercising agency. (Plan holders who have successfully completed a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise).
Initiating Authority	EPA
Particip. Elements	EPA-regulated facility response plan holders.
Scope	Unannounced exercises are limited to a maximum of 10% of response plan holders per EPA region per year. Exercises are limited to approximately 4 hours in duration. Exercises should involve response to a small discharge scenario (assume 2,100 gallons outside secondary containment and discharged into or on navigable waters and adjoining shorelines.) Exercise would involve deployment of response equipment identified in the facility response plan to respond to spill scenario. PHMSA and MMS will cover unannounced exercises for pipelines and offshore facilities not a part of a complex in their exercise programs.
Objectives	Conduct proper notifications to respond to unannounced scenario of a small discharge. Demonstrate that the response is: • Timely as defined in Section 1 of these Guidelines; • Conducted with adequate amount of equipment for scenario; and • Properly conducted.
Certification	EPA
Verification	EPA
Records	
Retention	5 years, kept at the facility.
Evaluation	Evaluation to be conducted by initiating agency.
Credit	Credit may be granted by the initiating authority for an actual spill response when the PREP objectives are met, the response is evaluated by the initiating authority and a proper record is generated. Plan holders participating in this exercise may take credit for notification and equipment deployment exercises, if criteria for those exercises are met, the response is evaluated by the plan holder and a proper record is generated.

Sec. III-4.11 Coast Guard

Coast Guard Marine Transportation-Related (MTR) Facilities	
QI Notification Exercises	
Applicability	Facility
Frequency	Quarterly
Initiating Authority	Company policy.
Participating Elements	Facility personnel, qualified individual
Scope	Exercise communication between facility personnel and qualified individual.
Objectives	Contact must be made with a qualified individual or designee, as designated in the response plan.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. For plan holders handling both oil and hazardous substances, a single QI notification will satisfy exercise requirements for both plans, if both plans rely on the same QI. If the plan holder uses two different QIs, the plan holder is required to exercise both separately.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Emergency Procedures Exercises (Optional)	
Applicability	Facility
Frequency	Quarterly
Initiating Authority	Facility owner or operator.
Particp. Elements	Facility personnel
Scope	Exercise the emergency procedures for the facility to mitigate or prevent any discharge or a substantial threat of such discharge or oil/HAZSUB resulting from facility operational activities associated with oil transfers.
Objectives	Conduct an exercise of the facility's emergency procedures to ensure personnel knowledge of actions to be taken to mitigate a spill. This exercise may be a walk-through of the emergency procedures. Exercise should involve one or more of the sections of the emergency procedures for spill mitigation. For example, the exercise should involved a simulation of a response to an oil spill. The facility should ensure that spill mitigation procedures for all contingencies at the facility are addressed at some time.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. **This section describes an option exercise to provide facilities with an exercise that may be conducted <u>unannounced</u> to fulfill the internal unannounced exercise requirement.** At facilities covered by both oil and hazardous substance plans, separate oil and hazardous substance exercises are not required. However, the shipboard personnel should alternate oil and hazardous substance scenarios each quarter.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Spill Management Team Tabletop Exercise	
Applicability	Facility spill management team
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Spill management team as established in the response plan.
Scope	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.
Objectives	Exercise the spill management team in a review of: • Knowledge of the response plan; • Proper notifications; • Communications system; • Ability to access an OSRO/HSRO; • Coordination of internal organization personnel with responsibility for spill response; • An annual review of the transition from a local team to a regional, national, and international team, as appropriate; • Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS); • Ability to access information in the Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc. • At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a worst-case discharge scenario.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. Plan holders are responsible for ensuring that SMTs are familiar with Area Committees/Regional Response Teams (*RRTs) and Area Contingency Plans in every area in which the plan holder operates. While it is not practicable to require an SMT to exercise in every area/region in which they offer cover each year, each SMT is expected to review ACPs annually and the make-up of Area Committees/RRTs in all areas in which they offer coverage. Self-certification for exercise credit should include SMT certification that the SMT has completed annual review and is familiar with the ACPs and Area Committees in all areas in which the plan holder operates.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with facility owned and operated response equipment.
Frequency	Semiannually
Initiating Authority	Company policy
Particp. Elements	Facility personnel
Scope	Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either (1) the minimum amount of equipment for deployment as described in "Guiding Principles", or (2) the equipment necessary to response to an average most probably discharge at the facility, whichever is less. All of the facility's personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility's equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.
Objectives	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure equipment is in proper working order. Deployment should also include testing ACP containment, protection and diversion strategies.
Certification	Self-certification.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. **Note: If a facility with facility owned and operated equipment also identifies OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.**

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Equipment Deployment Exercises	
Applicability	Facilities with OSRO/HSRO response equipment cited in their response plan.
Frequency	Annually
Initiating Authority	Company policy
Participating Elements	Facility owner or operator and OSRO/HSRO.
Scope	Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment as described in "Guiding Principles." All of the OSRO/HSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO/HSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for equipment deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO/HSRO is documented. The OSRO/HSRO must provide inspection and maintenance information to the owner or operator. Plan holders must ensure that when a regional OSRO/HSRO is identified in the response plan, the OSRO/HSRO conducts annual equipment deployment exercises in each operating environment for each CG Contingency Planning Area.
Objectives	Demonstrate ability of personnel to deploy and operate equipment. Ensure the response equipment is in proper working order. Whenever feasible, equipment deployment should also include ACP containment, protection and diversion strategies.
Certification	The facility owner or operator should ensure that the OSRO/HSRO identified in the response plan provides adequate documentation that the requirements for this exercise have been met.
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	Records to be kept at the facility.
Evaluation	Self-evaluation
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.11 Coast Guard (Cont'd)

Coast Guard Marine Transportation-Related (MTR) Facilities	
Government-Initiated Unannounced Exercises	
Applicability	Vessel and MTR facility response plan holders within the area.
Frequency	Triennially, if successfully completed. A facility deemed by the CG/EPA not to have successfully completed the exercise may be required to participate in another government initiated unannounced exercise at the discretion of the exercising agency. (Plan holders who have successfully completed a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise.)
Initiating Authority	U.S. Coast Guard
Participating Elements	Vessel and MTR facility response plan holders.
Scope	Unannounced exercises are limited to a maximum of four exercises per area per year. Exercises are limited to approximately 4 hours in duration. Exercises must involved response to an average AMD scenario. PHMSA and MMS would cover unannounced exercises for pipelines and offshore facilities not part of a complex in their exercise program.
Objectives	Conduct proper notifications to response to unannounced scenario of an average most probable discharge. Demonstrate response is: • Timely – As a general rule, the regulatory planning standard is containment equipment (e.g., booms) on scene within one hour of notification and recovery equipment (skimmers and temporary storage) on scene within two hours. Therefore in a government-initiated unannounced exercise, plan holder should be able to initiate simulated clean up within approximately two hours of exercise commencement. • Conducted with adequate amount of equipment for scenario; • Properly conducted. Whenever feasible, equipment deployment should also include testing ACP containment, protection and diversion strategies.
Certification	U.S. Coast Guard
Verification	U.S. Coast Guard
Records	
Retention	3 years
Location	For facilities, at the facility. For vessels, in accordance with 33 CFR 155.1060(e)(2)
Evaluation	Evaluation to be conducted by initiating agency.
Credit	Credit may be granted by the initiating authority for an actual spill response when the PREP objectives are met, the response is evaluated by the initiating authority and a proper record is generated. Plan holders participating in this exercise may take credit for notification & equipment deployment exercises, if criteria for those exercises are met, the response is evaluated by the plan holder and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)

Onshore Transportation Related Pipelines	
Owner or Operator Internal Notification Exercises	
Applicability	Pipeline owner or operator
Frequency	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly)
Party Initiating Exercise	As indicated in the response plan
Participants	Facility response personnel and the facility's qualified individual
Scope	Exercise notification process between key facility personnel and the qualified individual to demonstrate the accessibility of the qualified individual
Objectives	Contact by telephone, radio, message-pager, or facsimile and confirmation established as indicated in response plan
Format	As indicated in response plan
Certification	Self-certification as indicated in response plan. Each plan should have a written description of the company's certification process.
Verification	Verification conducted by Pipeline and Hazardous Materials Safety Administration (PHMSA) during regular inspections* or PHMSA tabletop exercises. *Verification will not be done by inspections in the near term.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)[Cont'd]

Onshore Transportation Related Pipelines	
Internal Tabletop Exercises	
Applicability	Pipeline owner or operator
Frequency	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly)
Party Initiating Exercise	As indicated in the response plan
Participants	Designated spill emergency response team members.
Scope	Demonstration of the response team's ability to organize, communicate, and make strategic decisions regarding population and environmental protection during a spill event.
Objectives	Designated emergency response team members should demonstrate: • Knowledge of facility response plan; • Ability to organize team members to effectively interface with a unified command; • Communication capability; and • Coordinate for response capability as outlined in response plan.
Format	Internal tabletop exercise as outlined in response plan.
Certification	Self-certification as indicated in response plan or as defined in the "Guiding Principles" section of this document, whichever is more stringent. Each plan should have a written description of the company's certification process.
Verification	Verification conducted by PHMSA during regular inspections* or PHMSA tabletop exercises. *Verification will not be done by inspections in the near term.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holders should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)[Cont'd]

Onshore Transportation Related Pipelines	
Owner/Operator Equipment Deployment Exercises	
Applicability	Pipeline owner or operator
Frequency	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly). *The number of equipment deployment exercises should be such that equipment and personnel assigned to each response zone are exercised at least once per year. If the same personnel and equipment respond to multiple zones, they need only exercise once per year. If different personnel and equipment respond to various response zones, each must participate in an annual equipment deployment exercise.
Party Initiating Exercise	As indicated in the response plan
Participants	Designated spill emergency response team members.
Scope	Demonstrate ability to deploy spill response equipment* identified in the FRP. *May consist entirely of operator owned equipment, or a combination of OSRO and operator equipment.
Objectives	Designated emergency response personnel should demonstrate: • Ability to organize, and; • Ability to deploy and operate representative types of key response equipment as described in response plan.
Format	Announced deployment exercise indicated in response plan.
Certification	Self-certification as indicated in response plan. Each plan should have a written description of the company's certification process.
Verification	Verification conducted by PHMSA during regular inspections* or PHMSA tabletop exercises. *Verification will not be done by inspections in the near term.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holders should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Sec. III-4.12 DOT (PHMSA)[Cont'd]

Onshore Transportation Related Pipelines	
Unannounced Exercises	
Applicability	Pipeline owner or operator
Frequency	Maximum of 20 unannounced PHMSA exercises conducted annually for the pipeline industry as a whole. A single owner or operator will not be required to participate in a PHMSA- initiated unannounced exercise, if they have already participated in one within the previous 36 months.
Party Initiating Exercise	PHMSA
Participants	Designated spill emergency response team members. Operations staff. On-Scene Coordinator (optional). State and local government (optional).
Scope	Demonstrate ability to respond to a worst-case discharge spill event.
Objectives	Designated emergency response team members should demonstrate adequate knowledge of their facility response plan and the ability to organize, communicate, coordinate, and respond in accordance with that plan.
Format	Unannounced tabletop exercise to discuss strategic issues.
Certification	Certification can be effectuated by PHMSA personnel conducting the exercise. PHMSA will provide written certification of the exercise date, participants, and response zone exercised.
Verification	Verification can be made by PHMSA personnel conducting the exercise.
Records	
Retention	3 years
Location	Owner or operator shall retain records as indicated in response plan. PHMSA to retain verification records.
Credit	Plan holders should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Section IV – Table of Contents

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP – COMPANY INCIDENT REPORT FORM

Company, Agency and environmental notifications must be made quickly. **Do NOT wait for all incident information before calling the National Response Center at 800-424-8802.** Use this form to record as much incident information as possible. **Communicate within 30 to 60 minutes of discovery time**. Use the Emergency Notifications Log to document all communication, any additional information and distribution.

I. INCIDENT TYPE

A. Check all that apply: ☐ **Release** ☐ **Security** ☐ **Fire** ☐ **Other (Specify)** _____

B. REPORTING PARTY		**C. SUSPECTED RESPONSIBLE PARTY**	
Name/Title:		Name/Title:	
Company:		Company:	
Address:		Address:	
City, State Zip:		City, State Zip:	
Call Back #:		Call Back #:	

D. **Calling for the Responsible Party?** ☐ Yes ☐ No

II. INCIDENT LOCATION INFORMATION

Incident Location: ☐ Terminal ☐ Pump Station ☐ Vessel ☐ Pipeline ☐ Truck ☐ Rail

Owner Name:		Operator Name:	
Address:	3010 Briarpark Dr; PWC 07-7330-34	Address:	
City, State, Zip:	Houston, TX 77042	City, State, Zip:	
County/Parish:		Hwy or River Mile Marker:	
Section-Township-Range:		Latitude	Longitude
Dist./Dir. to Nearest City:		Facility Storage Capacity:	(bbls)
Container Type (☐ AST/ ☐ UST)		Container Capacity	(bbls)
Site Supervisor/Contact:		Call Back #:	

III. INCIDENT DESCRIPTION & IMPACTS

Date/Time Discovered:		Discovered by:	
Material Released:		Quantity Released:	(bbls/lbs)
Duration of the Release:		Weather Conditions:	
Quantity to Surface Water:		Temperature: °F	Humidity:
Off Company Property? ☐ Yes ☐ No		Wind Speed:	Direction:
Evacuations: ☐ Yes ☐ No	# Evacuated:	Name of Surface Water	
Fire: ☐ Yes ☐ No	# Hospitalized:	Distance to Water:	(ft/mi)
Explosion: ☐ Yes ☐ No	# of Injuries:	# of Fatalities	Media coverage expected? ☐Yes ☐ No

If Operator error, has Drug and Alcohol program been initiated? ☐Yes ☐ No **DOT jurisdiction event?** ☐Yes ☐ No

If DOT event, list those completing Drug and Alcohol testing? _____

Incident description (Including Source and or Cause of the Incident) _____

Impacted area description _____

Damage description and estimate ($, days down, etc.) _____

Actions taken to correct, control or mitigate (Change in Security Level, FSP and/or ERP Implemented, etc.) _____

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
IV. EMERGENCY NOTIFICATIONS - LOG							
Duty Officer/		800-231-2551					Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

V. ADDITIONAL INFORMATION

** Alternate NRC contact information: Fax: 202-267-2165, TDD: 202-267-4477, or e-mail: lst-nrcinfo@comdt.uscg.mil

VI. PREPARED BY AND DISTRIBUTION

Prepared by: _____ **Date:** _____ **IMPACT Entry Complete:** ☐ Yes ☐ No

* Notify the appropriate Company DOT Coordinator to complete the *PHMSA FORM F 7000-1*, as applicable.

Spill Response Equipment Inspection

If the facility lists response equipment in this plan, then the equipment shall be inspected on an annual basis. Equipment found to be defective would be repaired or replaced. Documentation of equipment inspection/maintenance records is available at the facility. An example of the response equipment inspection log has been included below:

FACILITY-OWNED EQUIPMENT INSPECTION LOG				
Equipment Location:			**Response Time**	
Inspected By:	**Print**		**Sign**	
Inspection Date:				
Recovery Capacity (EDRC):	Ex: 7,645 bpd x 20% daily recovery rate = 1,529 bpd EDRC (based on a 20% efficiency)			
Equipment Type	**Description - Model, Style, Size, Capacity, Shelf Life**	**Qty**	**Operational Status**	**Last Deployment Date**
EXAMPLE: Boom	*50' Acme 6x6 booms*	*100'*	*Good*	*7/01/11*

Retention: 5 years
Inspection Frequency: DOT/PHMSA: Annual

Aboveground Atmospheric Storage Tank
Monthly Routine In-Service Inspection

GPL-199

Rev 4 2011-05-13

Ref: 49CFR195.432 or 40 CFR112.1.8.1(f)(FRP), 112.7(e)(SPCC) and API-653
Also Use this Form for Annual Inspection of Small Storage Tanks Sized 10,000 gallons or less

Tank No: _____ **Location:** _____

Service: ☐ Break-Out ☐ Storage

Corrective action is required for any adverse condition noted (visible leaks or any notation on columns 4-9)
NOTE: Access onto a floating roof is not required by this form

(1) Employee Initials	(2) Date	(3) Visible Leaks (Yes/No)	(4) Shell Distortion	(5) Pressure/ Vaccum Relief Valves	(6) Corrosion (Handrails, Sketchplates, Attachments, Stairs, etc.)	(7) Tank Foundation Tank Pipe Supports Tank Dikes	(8) Coating Insulation Condition	(9) Nozzles, Tank Valves, Roof Drains & Tank Piping

Comments: Address all unsatisfactiory conditions above and corrective actions (SAP WO Number)

Date	Comments

NOTE: Any deficiencies noted during the inspection shall be reported to immediate company supervision and the TIG.
ANY LEAKS DISCOVERED DURING INSPECTION NEED TO BE REPORTED IMMEDIATELY.

Official Document Location: Livelink 34509973
Form: ADM090 MAX 12Y
Completed Form Retention: **HSE405 3Y** (required by EPA 40CFR 112.7(e) (SPCC Plan)
HSE480 5Y (required by facility emergency response plan 40 CFR 112.1.8.1(f) or if facility operates under a Title V Air Permit)

Doc. No.: GPL-205
Rev.: 2

Transportation - Pipelines and Terminals

PI Form - GPL-205 - Annual Tank Inspection Report

1. TERMINAL/FACILITY: _____

2. TANK #: _____

3. INSPECTOR: _____

4. SERVICE: _____

TANK TYPE: ____ External ____ Internal ____ Cone Roof ____ Spheroid ____ Sphere ____ Other

DATE: _____

5. CAPACITY: _____

(CHECK APPROPRIATE ANSWER OR MARK THROUGH THE QUESTION IF IT DOES NOT APPLY.)

TANK APPURTENANCES (ATMOSPHERIC STORAGE)

	YES	NO
6. Are the relief valve vent screens clean?	☐	☐
7. Do the combination pressure/vacuum pallets move freely to an open or closed position?	☐	☐
8. Are the liquid thermal relief valves on tank piping properly mounted to prevent piping overpressure?	☐	☐
9. Is a flame arrestor on the tank (see Std. 26.01-18)?	☐	☐
A. Do state regulations or local ordinance require it?	☐	☐
B. Can it be removed by applying a design hazard review or a Management of Change (MOC)?	☐	☐
10. Is tank gauge in satisfactory condition?	☐	☐
11. Is water drain valve in satisfactory condi ion?	☐	☐
12. Is roof drain apparently in sa isfactory condition? (i.e., no staining at the base exit of he roof drain piping)	☐	☐

FILL IN ITEMS 14 THRU 27 FOR FIXED OR EXTERNAL FLOATING ROOFS

	YES	NO
13. Is the external roof resting on the surface of the stored liquid?	☐	☐
14. Is gauge hatch in satisfactory condition?	☐	☐
15. Is roof paint in satisfactory condition?	☐	☐
16. Is check valve mounted in roof sump, is it free of debris, and does the internal "clapper" operate freely?	☐	☐
17. Is roof leak-free? Any patches or epoxy-type repairs noted?	☐	☐
18. Are pontoon compartments free of hydrocarbon liquids?	☐	☐
19. Does floating roof deck area drain accumulated water well?	☐	☐
20. Is roof travel apparently free at all shell height posi ions?	☐	☐
21. Are roof drain sump(s) clear of debris?	☐	☐
22. Does roof have large quantities of accumulated dirt on deck area?	☐	☐
23. Is primary/secondary seal in satisfactory condition?	☐	☐
If not, how much is bad (in linear footage)?	ft	
24. Is seal fabric compa ible for intended product service?	☐	☐
25. Are "grounding" shunts installed and spaced accordingly?	☐	☐
26. Are "pinholes" spotted on floating decks area? Accumulated liquid?	☐	☐

27. Additional comments: _____

FILL IN ITEM 28 FOR INTERNAL FLOATING ROOFS

28. Through manholes or roof hatches on the fixed roof, visually inspect the internal floa ing roof and primary seal or the secondary seal (if one is in service) for he following:

	YES	NO
(A) Is the internal floating roof not res ing on he surface of the liquid inside the storage tank?	☐	☐
(B) Is there any liquid accumulated on top of the roof?	☐	☐
(C) Is the seal detached?	☐	☐
(D) Are there holes or tears in the seal fabric?	☐	☐
(E) Are there any defects in the floating roof?	☐	☐
(F) IFR to shell bonding issues (cables or shunts, etc)?	☐	☐

*If the answer to any of the above questions is yes, note corrective actions and date taken. _____

NOTE: Documentation is required to ensure that repairs are made within 45 days of identifying a defect. If a defect is found that cannot be repaired in 45 days, no ify the area environmental coordinator.

FILL IN ITEMS 29 THRU 31 FOR LIFTER ROOF TANKS ONLY

A "Lifter Roof" is a fixed roof that moves and collects vapors.

	YES	NO
29. Is the relief valve opening mechanism in sa isfactory condition?	☐	☐
30. Are the fixed roof stops in satisfactory condition?	☐	☐
31. Is roof travel apparen ly free at all positions?	☐	☐
32. For liquid seal, is the Launder apparently leak free?	☐	☐
33. Is liquid seal (i e., diesel fuel) retaining specific gravity over time?	☐	☐

34 Additional comments: _____

SHELL

	YES	NO
35. Is the shell free of leaks?	☐	☐
36. Any flat or visible dents on tank shell?	☐	☐
37. Full appearance of girth welds/rivet joints on the vertical/horizontal weld/rivet seams?	☐	☐
38. Is external "sketchplate or chime" experiencing corrosion?	☐	☐
39. Is the wind girder satisfactorily guarded from corrosion or water accumulation?	☐	☐
40. Is the general condition of paint satisfactory?	☐	☐

41. Additional comments: _____

TANK BOTTOM/FOUNDATION AREA

	YES	NO
42. Is the edge tank bottom perimeter free of visible leaks?	☐	☐
43. Is tank berm properly sloped to divert storm water?	☐	☐
44. Are there any physical deformities caused by severe edge settlement?	☐	☐
45. Does he tank have a concrete ringwall?	☐	☐
If YES, please answer the following subparts:		
A. Are any sections of ringwall missing?	☐	☐
B. Are cracks wider han 1/8" in diameter visible around the tank perimeter?	☐	☐
C. Is there evidence of water migra ion into ringwall cracks?	☐	☐
46. If tank is on earthen foundation, are here any locations where tank is unsupported from soil?	☐	☐
47. If tank has leak detec ion system, checked & no leaks found?*	☐	☐

48. Additional comments: _____

* Be sure to seal tank double containment area after checking leak detec ion ports

FIRE PROTECTION - If Applicable to Storage Tank

	YES	NO
49. Are foam line(s) and connections braced satisfactorily?	☐	☐
50. Do foam chambers appear clean and unobstructed?	☐	☐
51. Does tank dike area drain sa isfactorily?	☐	☐
52. Is the foam bladder vessel filled to 95% capacity?	☐	☐
53. Are adequate portable fire extinguishers located at the base of the tank stairway or inside the tank farm?	☐	☐
54. Have he internal glass membrane plates remained unbroken in he side-mounted enclosed-shell foam chambers?	☐	☐
55. Is dike capacity maintained to original design capacity?	☐	☐
56. Are adequate "No Smoking" and "Hot Work Permit" signs posted at tank dike entranceway?	☐	☐

57. Additional comments: _____

Distribution: Orig - Facility
Ref. Copy - Region Office (R) Regional Equipment Inspector

Retain inspection report for 2-year period if required by DOT 49CFR 195.404; or EPA 40 CFR 60.115b (NSPS)

Retain inspection report for 3-year period if required by EPA 40CFR 112.7(e) (SPCC Plan)

Retain inspection report for 5 years if required by facility emergency response plan 40 CFR 112.1.8.1(f) or if facility operates under a Title V Air Permit

TRANSPORTATION – PIPELINES & TERMINALS
EPR&S PREP - COMPANY TRAINING ROSTER/LOG

TRAINING DATE(S): _____ (YYYY-MM-DD) **START TIME:** _____ **END TIME:** _____

LOCATION: _____

COMPANY CONTACT: _____ **PHONE:** _____

Roster/Log Instructions: Check all training that was successfully completed by participants in attendance. The Course description is associated with the Learning Management System (LMS) Course Express Number.

TRAINING COURSE TITLE/ LEARNING MANAGEMENT SYSTEM COURSE EXPRESS NUMBER:

- ☐ Incident Command System / TPTER000012
- ☐ OPA '90 Plan Review / TPTER000023
- ☐ Unannounced Tabletop Exercise / TPTER000021 (1/Y)
- ☐ Tabletop Exercise / TPTER000015
- ☐ Unannounced Equipment Deployment Exercise / TPTER000019
- ☐ Equipment Deployment Exercise / TPTER000013
- ☐ Unannounced Agency Drill / TPTER000018
- ☐ Spill Response Participation in an Actual OPA 90 Event / TPTER000022
- ☐ Security – Site Personnel / TPTER000030
- ☐ Security - Annual Exercise / TPTER000025
- ☐ Security - Marine FSO / TPTER000031
- ☐ Security - Marine Quarterly Drill / PTER000026
- ☐ Spill Prevention Briefing and SPCC Review / TPTHSE000323
- ☐ Other: _____

All classes listed above may be applied towards HAZWOPER Refresher Training.

- ☐ Hazwoper, 4-hr Refresher / TPTERHAZWOPER4
- ☐ Hazwoper, 8-hr Refresher (WA ONLY) / TPTERHAZWOPER8
- ☐ Certification-24 Hour HAZWOPER Technician Level / TPTER000003
- ☐ HAZWOPER QI-IC / TPTHSE000212
- ☐ HAZWOPER Supervisor Certification / TPTER000024
- ☐ Other: _____

☐ **Company Contact:** Send a copy of the completed Training Roster to an EPR&S Coordinator via Company Global Scan or Fax: 918-662-6807. Retain the original copy in the facility files.

► *For EPR&S and LMS use only:* ☐ *Review/Submit to LMS Training Administrator* *Initials:* _____ *Date:* _____

☐ *LMS Entry Completed* *Initials:* *Date:*

LIST OF ATTENDEES TRAINED / COMPLETED SUCCESSFULLY
(* = Did not complete)

LAST NAME, FIRST NAME (PRINT)	EMPLOYEE ID NO. *OR* COMPANY NAME	JOB TITLE & LOCATION	SIGNATURE
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
LAST NAME, FIRST NAME (PRINT)	EMPLOYEE ID NO. *OR* COMPANY NAME	JOB TITLE & LOCATION	SIGNATURE

TRANSPORTATION – PIPELINES & TERMINALS
EPR&S PREP - COMPANY TRAINING ROSTER/LOG

TRAINING DATE(S): _____ (YYYY-MM-DD) **START TIME:** _____ **END TIME:** _____

LOCATION: _____

_____

COMPANY CONTACT: _____ **PHONE:** _____

15.			
16.			
17.			
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42.			
43.			
44.			

QUALIFIED INDIVIDUAL - NOTIFICATION EXERCISE

Facility Name: _____ **Date:** _____

☐ **Exercise** ☐ **Actual Response** **Quarter:** ☐ **1st** ☐ **2nd** ☐ **3rd** ☐ **4th**

Conducted After Normal Working Hours ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No

(One of the quarterly QI Notification Exercises must be conducted after normal working hours.)

Exercise Initiated by ☐ **Terminal** ☐ **Pipeline** **Person Initiating Contact:** _____
(Name/Position)

Person Notified: _____
(Name/Position)

Is this person identified in your response plan as qualified individual; or designee? ☐ Yes ☐ No

Time Initiated: _____ **Number(s) Called** _____

Initiation Communication used: ☐ Telephone ☐ Radio ☐ Pager ☐ Other: _____

Call Complete: ☐ Yes ☐ No **Message Left:** _____

Time in which QI or designee responded: _____ **Number Called:** _____

Response Communication used: ☐ Telephone ☐ Radio ☐ Pager ☐ Other: _____

Other Notification: _____
(Name/Position)

Type of Communication used: ☐ Telephone ☐ Radio ☐ Pager ☐ Other: _____

Time Called: _____ **Number(s) Called** _____

Notification Complete: ☐ Yes ☐ No **Message Left:** _____

Response Time: _____ **Response Number Called:** _____

Emergency Scenario: _____

Changes to be implemented: _____

Time Table for Implementation: _____

Corrective Follow-up assignment _____

Facility Supervisor Signature: _____ **Date:** _____

SPILL MANAGEMENT TEAM (SMT) - TABLE TOP EXERCISE

Plan Name: _____ **Date:** _____

☐ **Announced Exercise** ☐ **Unannounced Exercise** ☐ **Actual Response**

Location: _____

Start time: _____ ☐ AM ☐ PM **Stop time:** _____ ☐ AM ☐ PM

Response Plan Scenario Used:
- ☐ Small Spill / Average Most Probable Discharge
- ☐ Medium Spill / Maximum Most Probable Discharge
- ☐ "Worst-Case" Discharge (WCD)

Product: _____ **Amount:** _____ bbls

1. **Did the Spill Management Team (SMT) utilize the ERP during the exercise?** ☐ Yes ☐ No
2. **Were internal and external notifications completed per the ERP?** ☐ Yes ☐ No
3. **Were communication systems adequate?** ☐ Yes ☐ No
4. **Were the Company Oil Spill Removal Organizations (OSRO) notified?** ☐ Yes ☐ No
5. **Was there good coordination with On-Scene Coordinator, State and applicable agencies?** ☐ Yes ☐ No
6. **Were sensitive site and resource information in the ERP accessed as needed?** ☐ Yes ☐ No
7. **Select which of the 15 PREP core components were employed during this particular exercise:**
   - ☐ Notifications
   - ☐ Staff mobilization
   - ☐ Operate within Response Management System
   - ☐ Discharge control
   - ☐ Assessment of discharge
   - ☐ Containment of discharge
   - ☐ Recovery of spilled material
   - ☐ Protection of sensitive areas
   - ☐ Disposal of recovered material & contaminated debris
   - ☐ Communications
   - ☐ Transportation
   - ☐ Personnel support
   - ☐ Equipment maintenance & support
   - ☐ Procurement
   - ☐ Documentation
8. **Evaluation:** Refer to the attached Exercise Critique for this information.
9. **Changes to be Implemented and person responsible for follow-up of corrective action:**

   _____

   _____

   _____
10. **Time Table for Implementation:**

    _____

    _____

    _____
11. **Self Certifying Signature:** _____

    Print Name / Position: _____

EQUIPMENT DEPLOYMENT EXERCISE (PREP-EDX)

PLAN NAME: _____ **DATE:** _____

EXERCISE TYPE: ☐ **Announced** ☐ **Unannounced** **or** ☐ **Actual Response**

DEPLOYMENT LOCATION: _____

TIME STARTED: _____ ☐ AM ☐ PM **TIME OSRO CALLED:** _____ ☐ AM ☐ PM ☐ N/A

TIME ON-SCENE: _____ ☐ AM ☐ PM **TIME BOOM DEPLOYED:** _____ ☐ AM ☐ PM ☐ N/A

TIME OSRO/RECOVERY EQUIPMENT ARRIVES ON-SCENE FOR DEPLOYMENT: _____ ☐ AM ☐ PM ☐ N/A

TIME COMPLETED EXERCISE: _____ ☐ AM ☐ PM

EQUIPMENT DEPLOYED:

☐ Company-Owned ☐ Co-op Equipment
☐ OSRO/Contractor owned ☐ Both Company & Co-op Equipment
☐ Both Company, OSRO/Contractor ☐ Company, OSRO/Contractor & Co-op

Name of participating OSRO, Co-op and/or Contractor: _____

DESCRIBE THE GOALS OF THE EQUIPMENT DEPLOYMENT AND LIST ANY AREA CONTINGENCY PLAN (ACP) STRATEGIES TESTED. (Refer to the ICS 201-1 form for sketch of equipment deployment location(s) and booming strategies.)

EXERCISE EVALUATION:

1. DEPLOYMENT OF FACILITY-OWNED EQUIPMENT:

a. List type & amount of all equipment deployed (e.g., boom & skimmers) and number of support personnel employed.
Refer to the attached ICS Forms: 211-E (for a list of equipment deployed), 211-P (for personnel employed) or the 201-4 (Resource Summary).

b. All facility/pipeline personnel that are responsible for response operations are involved in a comprehensive training program? ☐ Yes ☐ No
If so, describe: _____

c. All pollution response equipment involved in a comprehensive maintenance program? ☐ Yes ☐ No
If so, describe the program: _____

d. Date of last equipment inspection: _____

e. Was the amount of equipment deployed at least the amount necessary to respond to the pipeline's/ facility's average most probable spill? ☐ Yes ☐ No
If not, describe why: _____

f. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? ☐ Yes ☐ No
If not, describe why: _____

g. Was the equipment deployed in its intended operating environment? ☐ Yes ☐ No
If not, explain why: _____

h. Was all deployed equipment operational? ☐ Yes ☐ No
If not, explain why: _____

2. DEPLOYMENT OF OSRO AND/OR COOP-OWNED EQUIPMENT:

a. List type & amount of all equipment deployed (e.g., boom & skimmers) and number of support personnel employed.
Refer to the attached ICS Forms: 211-E (for a list of equipment deployed), 211-P (for personnel employed) or 201-4 (Resource Summary).

b. All response organization personnel that are responsible response operations involved in a comprehensive training program? ☐ Yes ☐ No
If so, describe the program: _____

c. All pollution response equipment involved in a comprehensive maintenance program? ☐ Yes ☐ No
If so, describe the program: _____

d. Date of last equipment inspection: _____

e. Was a representative sample (at least 1,000 ft. of each boom type and one of each skimmer type) deployed? ☐ Yes ☐ No
If not, describe why: _____

f. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? ☐ Yes ☐ No
If not, describe why: _____

g. Was the equipment deployed in its intended operating environment? ☐ Yes ☐ No
If not, describe why: _____

h. Was all deployed equipment operational? ☐ Yes ☐ No
If not, explain why: _____

3. Select which of the 15 core components of the response plan were employed during this exercise:

- ☐ Notifications
- ☐ Staff mobilization
- ☐ Operate within Response Management System
- ☐ Discharge control
- ☐ Assessment of discharge
- ☐ Containment of discharge
- ☐ Recovery of spilled material
- ☐ Protection of sensitive areas
- ☐ Disposal of recovered material & contaminated debris
- ☐ Communications
- ☐ Transportation
- ☐ Personnel support
- ☐ Equipment maintenance & support
- ☐ Procurement
- ☐ Documentation

4. EDX CRITIQUE

(Description of lessons learned, procedures and schedule for implementation, and person(s) responsible for follow-up of corrective actions.

a. What went well?

_____

b. Areas for improvement?

_____

c. Corrective actions	d. Implementation schedule	e. Person responsible for follow up of corrective actions

5. SELF-CERTIFYING SIGNATURE: _____ DATE: _____

Print Name/Position: _____

Interim Storage Tracking

Interim Storage Location(s)	Location(s) Received From	Time/Date Received	Volume (Gals/Yds)	Type of Waste:
Totals				

Waste Recovery Tracking Form

Recovery Location(s)	Time Recovered		Volume (Gals/Yds)	Type of Waste:	Projected Interim Storage Demand:
	From:	To:			
Totals					

Waste Disposal Tracking Form

Incident Name: _____ Type of Waste: _____ Waste Stream#: _____

Date	Bill of Lading/ Manifest Number	Originating Site	Transporter	Disposal Facility Destination	Quantity:

Sec. IV-2 Industry Forms

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)				
15 PREP COMPONENTS EVALUATION WORKSHEET				
Incident/Drill Name:		**Prepared by:**	**at:**	
Period: to		**Company Name:**		
ORGANIZATION DESIGN				
1) Notifications				
Components	**ICS/UCS Position Responsible**	**Completed (Y/N)**	**Date/Time Completed**	**Comments**
1a. Test the notifications procedures identified in the Area Contingency Plan and the associated Responsible Party Response Plan.				
2) Staff mobilization				
Components	**ICS/UCS Position Responsible**	**Completed (Y/N)**	**Date/Time Completed**	**Comments**
2a. Demonstrate the ability to assemble the spill response organization identified in the Area Contingency Plan and associated Responsible Party Response Plan.				
3) Ability to operate within the response management system described in the plan				
Components	**ICS/UCS Position Responsible**	**Completed (Y/N)**	**Date/Time Completed**	**Comments**
3.1 Unified Command: Demonstrate the ability of the spill response organization to work within a unified command.				
3.1.1 Federal Representation: Demonstrate the ability to consolidate the concerns and interests of the other members of the unified command into a unified strategic plan with tactical operations.				
3.1.2 State Representation: Demonstrate the ability to function within the unified command structure.				
3.1.3 Local Representation: Demonstrate the ability to within the unified command structure.				
Page 1 of 8				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

3) Ability to operate within the response management system described in the plan (Cont'd)

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
3.1.4 Responsible Party Representation: Demonstrated to function within the unified command structure organization to control and stop the discharge at the source.				
3.2. **Response Management System:** Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.				
3.2.1 Operations: Demonstrate the ability to coordinate or direct operations related to the implementation of action plans contained in the respective response and contingency plans developed by the unified command.				
3.2.2 Planning: Demonstrate the ability to consolidate the various concerns of the members of the unified command into joint planning recommendations and specific long-range strategic plans. Demonstrate the ability to develop short-range tactical plans for the operations division.				
3.2.3 Logistics: Demonstrate the ability to provide the necessary support of both the short-term and long-term action plans.				
3.2.4 Finance: Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations.				
3.2.5 Public Affairs: Demonstrate the ability to form a joint information center and provide the necessary interface between the unified command and the media.				
3.2.6 Safety Affairs: Demonstrate the ability to monitor all field operations and ensure compliance with safety standards.				
3.2.7 Legal Affairs: Demonstrate the ability to provide the unified command with suitable legal advice and assistance.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

4) Discharge control

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
4. Demonstrate the ability of the spill response organization to control and stop the discharge at the source.				
4.1 Salvage: Demonstrate the ability to assemble and deploy salvage resources identified in the response plan.				
4.2 Firefighting: Demonstrate the ability to assemble and deploy the firefighting resources identified in the response plan.				
4.3 Lightering: Demonstrate the ability to assemble and deploy the lightering resources identified in the response plan.				
4.4 Other salvage equipment and devices: (electrical and manual controls and barriers to control the source) Demonstrate the ability to assemble and deploy the other salvage devices identified in the response plan.				

5) Assessment of discharge

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
5. Demonstrate the ability of the spill response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations plan for use.				

6) Containment of discharge

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
6. Demonstrate the ability of the spill response organization to contain the discharge at the source or In various locations for recovery operations.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

7) Recovery of spilled material

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
7. Demonstrate the ability of the spill response organization to recover, mitigate, and remove the discharged product. Includes mitigation and removal activities, e.g. dispersant use, ISB use, and bioremediation use.				
7.1 On-Water Recovery: Demonstrate the ability to assemble and deploy the on-water response resources identified In the response plans.				
7.2 Shore-Based Recovery: Demonstrate the ability to assemble and deploy the shoreside response resources identified in the response plans.				

8) Protection of sensitive areas

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
8. Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the Area Contingency Plan and the respective industry response plan.				
8.1 Protective Booming: Demonstrate the ability to assemble and deploy sufficient resources to implement the protection strategies contained in the Area Contingency Plan and the respective industry response plan.				
8.2 Water Intake Protection: Demonstrate the ability to quickly identify water intakes and implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.				
8.3 Wildlife Recovery and Rehabilitation: Demonstrate the ability to quickly identify these resources at risk and implement the proper protection procedures from the Area Contingency Plan to develop a plan for use.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

8) Protection of sensitive areas (Cont'd)

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
8.4 Population Protection (Protect Public Health and Safety): Demonstrate the ability to quickly identify health hazards associated with the discharged product and the population at risk from these hazards, and to implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.				

9) Disposal of recovered material and contaminated debris

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
9. Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.				

10) Communications

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
10. Demonstrate the ability to establish an effective communications system for the spill response organization.				
10.1 Internal Communications: Demonstrate the ability to establish an intra-organization communications system. This encompasses communications at the command post and between the command post and deployed resources.				
10.2 External Communications: Demonstrate the ability to establish communications both within the response organization and other entities (e.g., RRT, claimants, media, regional or HQ agency offices, non-governmental organizations, etc.).				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

11) Transportation

Components	ICS/UCS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
11. Demonstrate the ability to provide effective multi-mode transportation both for execution of the discharge and support functions.				
11.1 Land Transportation: Demonstrate the ability to provide effective land transportation for all elements of the response.				
11.2 Waterborne Transportation: Demonstrate the ability to provide effective waterborne transportation for all elements of the response.				
11.3 Airborne Transportation: Demonstrate the ability to provide the necessary support of all personnel associated with the response.				

12) Personnel support

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
12. Demonstrate the ability to provide the necessary support of all personnel associated with the response.				
12.1 Management: Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel into or out of the response organization with established procedures.				
12.2 Berthing: Demonstrate the ability to provide overnight accommodations on a continuing basis for a sustained response.				
12.3 Messing: Demonstrate the ability to provide suitable feeding arrangements for personnel involved with the management of the response.				
12.4 Operational and Administrative Spaces: Demonstrate the ability to provide suitable operational and administrative spaces for personnel involved with the management of the response.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

12) Personnel support (Cont'd)

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
12.5 Emergency Procedures: Demonstrate the ability to provide emergency services for personnel involved in the incident.				

13) Equipment maintenance and support

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
13. Demonstrate the ability to maintain and support all equipment associated with the response.				
13.1 Response Equipment: Demonstrate the ability to provide effective maintenance and support for all response equipment. Provide effective waterborne transportation for all elements of the response.				
13.2 Response Equipment: Demonstrate the ability to provide effective maintenance and support for all equipment that supports the response. This requirement includes communications equipment, transportation equipment, administrative equipment, etc.				

14) Procurement

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
14. Demonstrate the ability to establish an effective procurement system.				
14.1 Personnel: Demonstrate the ability to procure sufficient personnel to mount and sustain an organized response. This requirement includes insuring that all personnel have qualifications and training required for their position within the response organization.				
14.2 Response Equipment: Demonstrate the ability to procure sufficient response equipment to mount and sustain an organized response.				
14.3 Support Equipment: Demonstrate the ability to procure sufficient support equipment to support and sustain an organized response.				

NATIONAL PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP)

15 PREP COMPONENTS EVALUATION WORKSHEET (Cont'd)

15) Documentation

Components	ICS Position Responsible	Completed (Y/N)	Date/Time Completed	Comments
15. Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.				

Page 8 of 8

ICS 201-1 Incident Briefing Map/Sketch	
Incident:	**Prepared By:** **at**
Period:	**Version Name:**

ICS 201-2 – Summary of Current Actions	
Incident:	**Prepared By:** **at:**
Period: **to**	**Version Name:**

Date/Time	Action/Note

ICS 201-2 Summary of Current Actions			© 1997-2012 TRG/dbSoft, Inc.

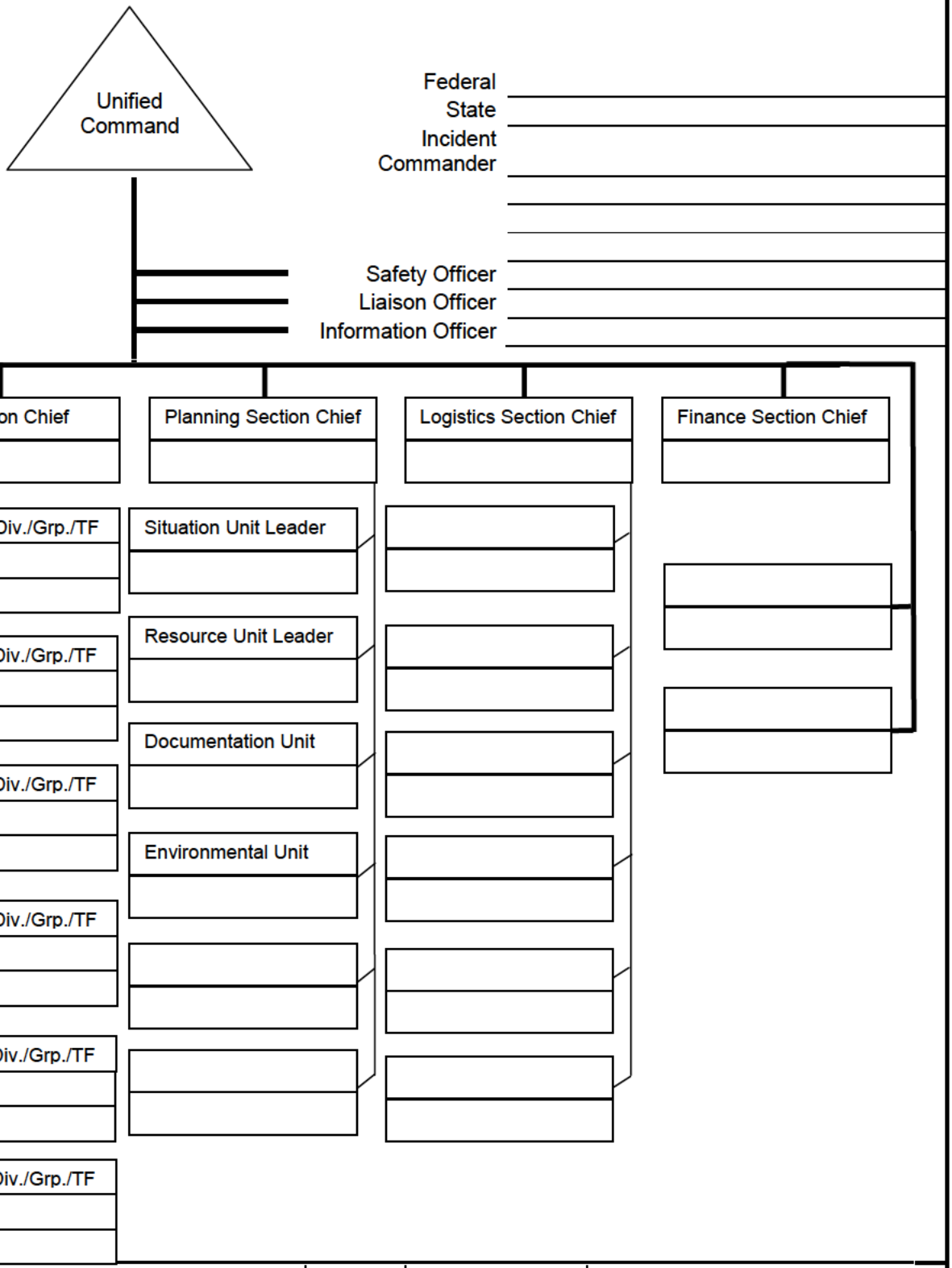
Incident:	**Prepared By:** **at:**
Period: **to**	**Version Name:**

Date/Time	Action/Note

ICS 201-2 Summary of Current Actions			**© 1997-2012 TRG/dbSoft, Inc.**

ICS 201-3 Current Organization

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**



ICS 201-3 – Current Organization			**© 1997-2012 TRG/dbSoft, Inc.**

ICS 201-4 – Resource Summary

Incident: **Period:**

ICS 201-4 Resource Summary

ICS 201-5 Site Safety and Control Analysis

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

1. Is Site Control set up? ☐ Yes ☐ No	2. Is there an on-scene command post? ☐ Yes ☐ No If so, where?
3. Have all personnel been accounted for? ☐ Yes ☐ No ☐ Don't Know	Injuries: Fatalities: Unaccounted: Trapped:
4. Are observers involved, or rescue attempts planned? Observers: ☐ Yes ☐ No Rescuers: ☐	5. Are decon areas setup? ☐ Yes ☐ No If so, where?

1. Electrical line(s) down or overhead? ☐ Yes ☐ No	2. Unidentified liquid or solid products visible? ☐ Yes ☐ No
3. Wind direction across incident: ☐ Towards your position Wind Speed ☐ Away from	4. Is a safe approach possible? ☐ Yes ☐ No
5. Odors or smells? ☐ Yes ☐ No	6. Vapors visible? ☐ Yes ☐ No
7. Holes, ditches, fast water, cliffs, etc. nearby? ☐ Yes ☐ No	8. Fire, sparks, sources of ignition nearby? ☐ Yes ☐ No
9. Is local traffic a potential problem? ☐ Yes ☐ No	10. Product placards, color codes visible? ☐ Yes ☐ No
11. Other Hazards? ☐ Yes ☐ No	12. As you approach the scene from the upwind side, do you note a change in the status of any of the above? ☐ Yes ☐ No

1. Entry Objectives:

2. Warning sign(s), barriers, color codes in place? ☐ Yes ☐ No

3. Hazardous material being monitored? ☐ Yes ☐ No
   - 3a. Sampling Equipment:
   - 3b. Sampling location(s):
   - 3c. Sampling frequency:
   - 3d. Personal exposure monitoring:

4. Protective gear / level:
   - 4a. Gloves:
   - 4b. Respirators:
   - 4c. Clothing:
   - 4d. Boots:
   - 4e. Chemical cartridge change frequency:

5. Decon
   - 5a. Instructions:
   - 5b. Decon equipment and materials:

6. Emergency escape route established? ☐ Yes ☐ No
   Route?

7. Field responders briefed on hazards? ☐ Yes ☐ No

8. Remarks:

ICS 201-5 Site Safety and Control Analysis

Weather Report

Incident:	Prepared By: at
	Version Name:

Present Conditions

Wind Speed:		Wave Height:	
Wind Direction From The:		Wave Direction:	
Air Temperature:		Swell Height:	
Barometric Pressure:		Swell Interval:	
Humidity:		Current Speed:	
Visibility:		Current Direction Toward:	
Ceiling:		Water Temperature:	
Next High Tide (Time):		Next Low Tide (Time):	
Next High Tide (Height):		Next Low Tide (Height):	
Sunrise:		Sunset:	

Notes:

24 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

48 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

ICS 202 - General Response Objectives			
Incident:	**Prepared By:**	**at:**	
Period:	**Version Name:**		
Overall and Tactical Objectives			
		Assigned to:	Status
1. Ensure the Safety of Citizens and Response Personnel			
☐ 1a. Identify hazard(s) of spilled material			
☐ 1b. Establish site control (hot zone, warm zone, cold zone, & security)			
☐ 1c. Consider evacuations if needed			
☐ 1d. Establish vessel and/or aircraft restrictions			
☐ 1e. Monitor air in impacted areas			
☐ 1f. Develop site safety plan for personnel & ensure safety briefings are conducted			
2. Control the Source of the Spill			
☐ 2a. Complete emergency shutdown			
☐ 2b. Conduct firefighting			
☐ 2c. Initiate temporary repairs			
☐ 2d. Transfer and/or lighter product			
☐ 2e. Conduct salvage operations, as necessary			
3. Manage a Coordinated Response Effort			
☐ 3a. Complete or confirm notifications			
☐ 3b. Establish a unified command organization and facilities (command post, etc.)			
☐ 3c. Ensure local and tribal officials are included in response organizations			
☐ 3d. Initiate spill response Incident Action Plans (IAP)			
☐ 3e. Ensure mobilization & tracking of resources & account for personnel & equip			
☐ 3f. Complete documentation			
4. Maximize Protection of Environmentally-Sensitive Areas			
☐ 4a. Implement pre-designated response strategies			
☐ 4b. Identify resources at risk in spill vicinity			
☐ 4c. Track oil movement and develop spill trajectories			
☐ 4d. Conduct visual assessments (e.g., overflights)			
☐ 4e. Development/implement appropriate protection tactics			

Incident:	Prepared By:	at:
Period:	Version Name:	

Overall and Tactical Objectives

	Assigned to:	Status
5. Contain and Recover Spilled Material		
☐ 5a. Deploy containment boom at the spill site & conduct open-water skimming		
☐ 5b. Deploy containment boom at appropriate collection areas		
☐ 5c. Evaluate time-sensitive response technologies (e.g., dispersants, in-situ burning)		
☐ 5d. Develop disposal plan		
6. Recover and Rehabilitate Injured Wildlife		
☐ 6a. Establish oiled wildlife reporting hotline		
☐ 6b. Conduct injured wildlife search and rescue operations		
☐ 6c. Setup primary care unit for injured wildlife		
☐ 6d. Operate wildlife rehabilitation center		
☐ 6e. Initiate citizen volunteer effort for oiled bird rehabilitation		
7. Remove Oil from Impacted Areas		
☐ 7a. Conduct appropriate shoreline cleanup efforts		
☐ 7b. Clean oiled structures (piers, docks, etc.)		
☐ 7c. Clean oiled vessels		
8. Minimize Economic Impacts		
☐ 8a. Consider tourism, vessel movements, & local economic impacts		
☐ 8b. Protect public and private assets, as resources permit		
☐ 8c. Establish damage claims process		
9. Keep Stakeholders and Public Informed of Response Activities		
☐ 9a. Provide forum to obtain stakeholder input and concerns		
☐ 9b. Provide stakeholders with details of response actions		
☐ 9c. Identify stakeholder concerns and issues, and address as practical		
☐ 9d. Provide timely safety announcements		
☐ 9e. Establish a Joint Information Center (JIC)		
☐ 9f. Conduct regular news briefings		
☐ 9g. Manage news media access to spill response activities		
☐ 9h. Conduct public meetings, as appropriate		
ICS 202 General Response Objectives	**© 1997-2012 TRG/dbSoft, Inc.**	

ICS 203 - Organization Assignment

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

Command Staff

Title	Name	Mobile	Pager	Other	Radio
Federal (FOSC)		( ) -	( ) -	( ) -	
State (SOSC)		( ) -	( ) -	( ) -	
RP(s)		( ) -	( ) -	( ) -	
Incident Commander		( ) -	( ) -	( ) -	
Deputy Incident Commander		( ) -	( ) -	( ) -	
Safety Officer		( ) -	( ) -	( ) -	
Information Officer		( ) -	( ) -	( ) -	
Liaison Officer		( ) -	( ) -	( ) -	
Intelligence Officer		( ) -	( ) -	( ) -	

Operations Section

Title	Name	Mobile	Pager	Other	Radio
Operations Section Chief		( ) -	( ) -	( ) -	
Deputy Operations Section Chief		( ) -	( ) -	( ) -	
Staging Area Manager		( ) -	( ) -	( ) -	
Recovery & Prot. Branch Director		( ) -	( ) -	( ) -	
Emergency Resp. Branch Director		( ) -	( ) -	( ) -	
Air Ops Branch Director		( ) -	( ) -	( ) -	
Wildlife Branch Director		( ) -	( ) -	( ) -	
Branch Director		( ) -	( ) -	( ) -	
Division/Group Supervisor		( ) -	( ) -	( ) -	
Disposal Group Supervisor		( ) -	( ) -	( ) -	

Planning Section

Title	Name	Phone	Fax	Other	Radio
Planning Section Chief		( ) -	( ) -	( ) -	
Deputy Planning Sec ion Chief		( ) -	( ) -	( ) -	
Situation Unit Leader		( ) -	( ) -	( ) -	
Resource Unit Leader		( ) -	( ) -	( ) -	
Documentation Unit Leader		( ) -	( ) -	( ) -	
Technical Specialist		( ) -	( ) -	( ) -	
Demobilization Unit Leader		( ) -	( ) -	( ) -	
Check In Recorder		( ) -	( ) -	( ) -	

ICS 203 Organization Assignment

ICS 203 - Organization Assignment (Continued)

Incident:	Prepared By: at
Period:	Version Name:

Logistics section

Title	Name	Phone	Fax	Other	Radio
Logis ics Section Chief		( ) -	( ) -	( ) -	
Deputy Logistics Section Chief		( ) -	( ) -	( ) -	
Service Branch Director		( ) -	( ) -	( ) -	
Medical Unit Leader		( ) -	( ) -	( ) -	
Food Unit Leader		( ) -	( ) -	( ) -	
Communication Unit Leader		( ) -	( ) -	( ) -	
Support Branch Director		( ) -	( ) -	( ) -	
Supply Unit Leader		( ) -	( ) -	( ) -	
Facilities Unit Leader		( ) -	( ) -	( ) -	
Ground Support Unit Leader		( ) -	( ) -	( ) -	
Vessel Support Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Finance Section

Title	Name	Phone	Fax	Other	Radio
Finance Section Chief		( ) -	( ) -	( ) -	
Deputy Finance Section Chief		( ) -	( ) -	( ) -	
Time Unit Leader		( ) -	( ) -	( ) -	
Procurement Unit Leader		( ) -	( ) -	( ) -	
Compensa ion/Cla ims Unit Leader		( ) -	( ) -	( ) -	
Cost Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Source Control Section

Title	Name	Phone	Fax	Other	Radio
Salvage/Source Control Group		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

ICS 203 Organizational Assignment	

ICS 211p – Check-In List (Personnel)

Incident:	Prepared By: at:

Check-In Location - - ☐ Command Post ☐ Staging Area ☐ Other --> Location Name:

Personnel Check-In Information

ICS 211P Check-In List (Personnel)			

ICS 211e – Check-In List (Equipment)					
Incident:			**Prepared By:**		**at:**
Period:			**Version Name:**		
Check-In Location:	☐ Command Post	☐ Staging Area	☐ Other	-->	**Location Name:**

Equipment Check-In Information					
Equipment Description & Identifier					

ICS 211e Check-In List (Equipment)			© 1997-2012 TRG/dbSoft, Inc.

Annex – Table of Contents

Annex 1 – Table of Contents

Annex 1 – Table of Contents

Annex 1 – Table of Contents

Annex 1 – Table of Contents

1.0 Information Summary

1.0.1 Owner / Operator Information

The Owner and Operator of this pipeline is:

OWNER /OPERATOR ADDRESS	Phillips 66 Company 3010 Briarpark Drive Houston, TX 77042
TELEPHONE	832-765-1693
FOR EMERGENCIES	800-231-2551

PIPELINE MAINTENANCE FACILITY ADDRESS	See each specific area in this Annex

AGENT FOR SERVICE OF PURPOSE	Pipeline Division Manger (refer to Emergency Notification Contact List) Mailing Address: 3900 Kilroy Airport Way Long Beach, CA 90806 Fax Number: 562-290-1501

1.0.2 Information Summary

Maintenance Group Name	Northern Lines Coast Area		
Address	3900 Kilroy Airport Way, Suite 210 Long Beach, CA 90806		
Counties	Santa Barbara, San Luis Obispo, Kern, Kings, and Fresno		
QI / AQI – Santa Margarita	Mark Mitchell	Office: Cell:	805-438-6201 805-391-3713
	Daniel French	Office: Cell:	805-438-6210 805-391-3811
QI / AQI – Santa Maria	Butch Lemos	Office: Cell:	805-925-5795 805-331-6965
	Jeremy Wilson	Office: Cell:	805-349-7628 805-331-6967
Worst Case Discharge	(b) (7)(F), (b) (3)		

Maintenance Group Name	Northern Lines Valley Area		
Address	3900 Kilroy Airport Way, Suite 210 Long Beach, CA 90806		
Counties	Alameda, Contra Costa, Fresno, Kern, Kings, Merced, San Joaquin and Stanislaus		
QI / AQI – Tracy/Coalinga Junction	Kenneth Willey	Office: Cell:	209-836-1873 209-321-4229
	Jerry Keeney	Office: Cell:	805-438-6210 805-391-3811
QI / AQI – Taft	Jon Cornell	Office: Cell:	661-765-6092 661-699-5376
	Kenneth Willey	Office: Cell:	209-836-1873 209-321-4229
Worst Case Discharge	(b) (7)(F), (b) (3)		

Maintenance Group Name	Southern Lines Area		
Address	2650 Lomita Blvd Torrance, CA 90505		
County	Los Angeles		
QI / AQI – LA Basin, Torrance Tank Farm	Dennis Doherty	Office: Cell:	310-326-8777 310-420-5311
	Harold Dingee	Office: Cell:	310-602-7737 310-466-4831
Worst Case Discharge	(b) (7)(F), (b) (3)		

A list of line sections for each pipeline contained in the Response Zone have been included in subsequent parts of this Annex, divided by area.

1.0.3 Certification of Substantial Harm – Northern Lines Coast Area

MAINTENANCE GROUP NAME: **Northern Lines Coast Area**

MAINTENANCE GROUP ADDRESS: **1580 E. Battles Road**

Santa Maria, CA 93454

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES x NO

2. Is the pipeline greater than 10 miles in length?

   YES x NO

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?

   YES NO x

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES x NO

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES NO x

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

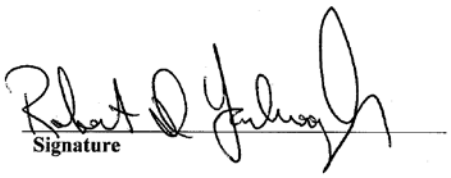
   YES x NO

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES x NO

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.



Rob Yarbrough, Director, Emergency Preparedness, Response and Security 05/2013

Printed Name/Title Date

1.0.4 Certification of Substantial Harm – Northern Lines Valley Area

MAINTENANCE GROUP NAME: **Northern Lines Valley Area**

MAINTENANCE GROUP ADDRESS: **3900 Kilroy Airport Way, Suite 210**

Long Beach, CA 90806

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES x NO

2. Is the pipeline greater than 10 miles in length?

   YES x NO

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?

   YES NO x

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES x NO

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES NO x

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

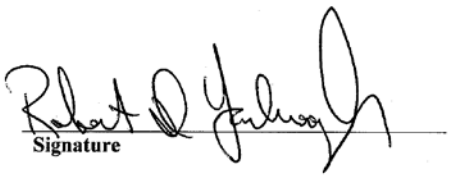
   YES x NO

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES x NO

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.



Rob Yarbrough, Director, Emergency Preparedness, Response and Security — 05/2013

Printed Name/Title — Date

1.0.5 Certification of Substantial Harm – Southern Lines Area

MAINTENANCE GROUP NAME: **Southern Lines Area**

MAINTENANCE GROUP ADDRESS: **3900 Kilroy Airport Way, Suite 210**

Long Beach, CA 90806

1. Is the pipeline greater than 6 and 5/8 inches in outside nominal diameter?

   YES x NO

2. Is the pipeline greater than 10 miles in length?

   YES x NO

3. Has the line section experienced a release greater than 1,000 barrels within the previous five years?

   YES NO x

4. Has the line section experienced at least two reportable releases, as defined in Part 195.50, within the previous five years?

   YES x NO

5. Does the line contain any electric resistance-welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under Part 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe as defined in Rule 40 CFR 194?

   YES NO x

6. Is the line section located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes?

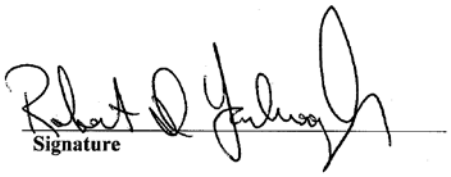
   YES x NO

7. Is the line section located within a one-mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

   YES x NO

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.



Rob Yarbrough, Director, Emergency Preparedness, Response and Security — 05/2013

Printed Name/Title — Date

1.1 Purpose of Plan

This Annex is designed to show the Company's compliance with the regulations set forth by the Department of Transportation in 49 CFR 194/195.

This Annex is also designed to provide field personnel with the information necessary to respond to incidents in a safe and efficient manner. For purposes of this plan, incidents are defined as events that happen within the California Response Zone's pipeline system, that create unacceptable impacts on people, property, or the environment and require emergency response operations.

Emergency response operations involve actions taken at, or in close proximity to, the site of an incident that are designed to mitigate the situation and get initial control over the incident, ensure safety of all concerned, develop plans of action, and facilitate communications

1.2 Scope of Plan

This plan applies to emergency response operations carried out by the field personnel within the California Response Zone and the Emergency Response Team. This plan applies to any type or size of incident that may occur within the California response zone. The plan contains prioritized procedures for personnel to follow in the event of a release or other emergency situation within the pipeline response zone.

1.3 Objectives

The objectives of this plan are to:	
✓	Comply with 49 CFR 194 and 195 regulations
✓	Comply with the Occupational Safety and Health Act requirements for an employee emergency plan and fire prevention plan as described in 29 CFR 1910.38 and the emergency planning and response requirements according to 29 CFCR 1910.119(n) and 29 CFR 1910.120
✓	Comply with CA Code of Regulations, Title 14, Div. 1, Sub-div 4, Chap. 3
✓	Follow the format described in Appendix A of 49 CFR part 194
✓	Define the roles and responsibilities for Company personnel.
✓	Detail Emergency Response Team notification and activation procedures.
✓	Provide Company personnel with rapid access to the tools needed to carry out emergency response operations.

1.4 Management Certification

MANAGEMENT CERTIFICATION

This plan is approved for implementation as herein described. Manpower, equipment and materials will be provided as required in accordance with this Plan. The Company is dedicated to protection of the environment and commits to implement the necessary measures, as specified in the Plan, as necessary in a spill response emergency.

In addition to any OSRO and non-company resources listed in this Plan, the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times.

This plan has been prepared in accordance to and is consistent to the National Contingency Plan and the applicable Area Contingency Plan(s) for the facilities covered by this plan.

I certify, to the best of my knowledge and belief, under penalty of perjury under the laws of the State of California, that the information contained in this contingency plan is true and correct and that the plan is both feasible and executable.

CERTIFICATION SIGNATURE:

Rob Yarbrough	Director, Emergency Preparedness, Response & Security
PRINTED NAME	TITLE

DATE

1.5 Qualified Individual Delegation of Authority

Phillips 66 Company
600 North Dairy Ashford
Houston, TX 77079-1175
Phone: (281) 293-1000

May 1, 2012

I hereby delegate the authority to act as Qualified Individual (QI), as stated in the Company Emergency Response Plans, to the following positions:

- Division Pipeline Managers,
- Pipeline Area/Facility/Terminal Supervisors and designated Operators,
- Terminal Supervisors/Superintendents and designated Operators,
- HSE Manager,
- Emergency Preparedness, Response & Security Director and Coordinators,
- Health & Safety Director and Coordinators, and
- Environmental Director and Coordinators.

Listed below is a summary of the responsibilities and authority of the QI:

- Activate internal alarms and hazard communication systems,
- Activate personnel and equipment maintained by the operator,
- Identify character, exact source, amount, and extent of the release,
- Notify and provide information to appropriate Federal, State and Local authorities,
- Assess interaction of spilled substance with water and/or other substances stored at facility and notify on-scene response personnel,
- Assess possible hazards to human health and the environment,
- Assess and implement prompt removal actions,
- Coordinate rescue and response actions,
- Direct cleanup activities activating and contracting with required oil spill removal organizations,
- Act as a liaison with the On-Scene Coordinator, and
- Obligate any funds required to carry out all required and directed oil spill response activities.

Deborah G. Adams
President, Transportation
600 North Dairy Ashford, TA-2034
Houston, TX 77079-1175

It is the Qualified Individual's responsibility to first make the appropriate notifications, then to initiate response operations. This individual has absolute authority to obligate any funds necessary to carry out all required and/or directed response activities. This individual will also act as liaison with city, county, state and federal agencies and serve as the On-Scene Incident Commander. The Response Zone QI and Alternate are identified in Annex 2.

The following checklist (the checklist is not all inclusive) serves as a guide to the On-Scene Incident Commander/Qualified Individual.

The minimum duties required of the QI / PIC include:	
✓	Notify all response personnel, as needed
✓	Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification
✓	Notify and provide necessary information to appropriate Federal, State, and local authorities with the designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Commission
✓	Assess the possible hazards to human health and the environment due as a result of the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any hazardous surface waters runoffs from water or chemical agents used to control fire and heat-induced explosion)
✓	Assess and implement prompt removal actions to contain and then remove the substance released
✓	Coordinate rescue and response action as previously arranged with all response personnel
✓	Use authority to immediately access company funding to initiate response, mitigation and clean-up activities
✓	Direct clean-up activities until properly relieved of this responsibility

1.6 Northern Lines - Coast Area

1.6.1 Response Zone Description

Coast Area

The Coast Area operations contain line sections which meet the PHMSA criteria for identifying pipeline facilities which could reasonably be expected to cause "significant and substantial harm" (49 CFR 194.103). The Coast Area Response Zone contains line sections that:

- Have experienced a release greater than 1,000 barrels within the previous five years [194.103(c)(1)];
- Have experienced two or more reportable releases (49 CFR 195.50) within the previous five year period [194.103(c)(2)];
- Are located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes [194.103(c)(4)]; and/or
- Are located within a one-mile radius of environmentally sensitive areas, and could reasonably be expected to reach these areas [194.103(c)(5)].

Coast Area Scope

The Coast Area on-shore pipeline system is operated by Company from the Santa Maria District and the San Luis Obispo District offices. The Coast Area system is situated in San Luis Obispo and Santa Barbara Counties, and includes the following pipelines:

- Santa Maria Trunk pipelines (Line 300)
- 12" Lompoc to Orcutt (crude oil pipeline)
- 8" Orcutt to Summit (crude oil pipeline)
- 10"/12" Santa Maria to Summit (crude oil pipeline)
- 10" Summit to Santa Maria Refinery (crude oil pipeline)
- 12" Summit to Avila Terminal (crude oil pipeline) (out of service)
- 12" Sisquoc to Santa Maria Station (crude oil pipeline)
- Orcutt Gathering pipeline (Line 353)
- 4"/6" CalCoast/Newlove/Pinal to Orcutt (crude oil pipelines)
- Bell pipeline (Line 352) (Abandoned)
- 10"/12" Bell / Hopkins to Santa Maria Station (crude oil pipelines) (Abandoned)
- Products pipeline (Line 355) (out of service)
- 8" Miossi Line to Avila Terminal (crude oil pipeline)
- Coast-Valley Trunk pipelines (Line 400)
- 8"/12" Santa Maria Refinery to San Luis Obispo Crossover (gas oil and petroleum distillate
- 8" Summit to Santa Maria Refinery (crude oil pipeline)
- 8" Summit to Avila Terminal (crude oil pipeline)
- 8"/12" Avila Terminal to Santa Margarita (gas oil and petroleum distillate)
- 8" Santa Margarita to Shandon (gas oil and petroleum distillate)
- Associated Coast Area pumping stations, metering facilities and breakout tanks

- Avila Pump Station
- Orcutt Pump Station
- Santa Maria Pump Station
- Summit Pump Station
- Bell Pump Station (out of service)
- Sisquoc Meter Facility (at the All American Pipeline Sisquoc Pump Station)
- Cuesta Pump Station
- Santa Margarita Pump Station
- Creston Pump Station
- Shandon Pump Station

The Coast Area on-shore pipeline system consists of facilities between the coastal areas in Santa Barbara and San Luis Obispo Counties up to Shandon Pump Station. The on-shore pipeline system continues from Shandon Station through the Central Valley of California to the San Francisco Bay Area.

The Coast Area of pipeline operations is shown in this Section in relation to the entire system. Section numbers and block valves identify pipeline sections in this Plan. Block valve locations are identified in the pipeline system drawings included in this annex.

The Company has supplied a copy of transparent overlays to all local/county responding agencies as required by California State Fire Marshal regulations. This mapping system is used by all utilities and local/county emergency agencies for location purposes.

Reference to Other Manuals and Plans

The following manuals and plans serve as guidelines for their applicability to oil spill contingency planning for the Coast Area pipeline operations. This plan is written in accordance with these guidelines.

- National Oil and Hazardous Substance Pollution Contingency Plan (40 CFR 300)
- San Luis Obispo/Santa Barbara/Ventura Area Contingency Plan
- U.S. EPA Region IX Area Mainland Regional Contingency Plan
- Santa Barbara Area Wide Emergency Plan (P-4)

Line	Size	Controlled by	Contact (1)
Santa Maria Area			
Santa Maria – Summit	12"	Controller (6)	Controller
Orcutt – Summit	8"	Controller (6)	Controller
Bell - Santa Maria	10/12"	Santa Maria Refinery (3)	Controller
LOGP – Orcutt	12"	TOC LOGP/ Ponca City	TOC LOGP/ Ponca City
Cal-Coast/Newlove/Pinal	4"/6"	Gauger / LACT Unit	Foreman
Sisquoc - Santa Maria	12"	Controller (6)	Controller
Santa Margarita Area			
Summit-Santa Maria Refinery Oil	10"	Controller (6)	Controller
Santa Maria Refinery-Summit Gasoil	8"	Santa Maria Refinery (3)	Controller
Santa Maria Refinery Miossi Products	8"	Santa Maria Refinery (3)	Controller
Miossi – SLO Products	12"	Santa Maria Refinery	Controller
SLO – Junction #1	8/10"	Controller (6)/SMR	Controller
SLO – Junction #2	8"	Controller (6)/SMR	Controller
Summit - Avila	12"	Controller (6)	Controller
Summit - Avila	8"	Controller (6)	Controller
Avila – Shandon #1	8"	Controller (6)	Controller
Avila – Shandon #2	8"	Controller (6)	Controller
Miossi – Avila	8"	Controller (6)	Controller

1.6.2 Pipeline Information

The Northern Pipelines system is responsible for gathering crude oil from the oil fields in Santa Barbara, San Luis Obispo, Kern, Kings, and Fresno Counties and transporting these crudes to the Santa Maria Refinery (SMR), San Francisco Area Refineries (SFR), and Ultramar-Diamond Shamrock's Avon Plan for processing into petroleum products. Also semi-refined products from the Santa Maria Refinery are delivered to SFR through the pipeline system. The system consists of over 800 miles of 4" to 16" diameter pipe. Semi-refined and refined products moved in the system include those listed in this Plan. Refined products are transported from the Rodeo Refinery to Richmond Terminal and natural gas is transported from Union Island gas field to Rodeo Refinery and UDS's Avon Refinery.

(b) (7)(F), (b) (3) The system is set up with two working areas. The Coast Area is comprised of the Santa Maria and Santa Margarita Areas. The Valley Area is comprised of the Taft, Coalinga and Tracy Areas. The pipeline system operates 24 hours per day except for periodic maintenance and emergencies, such as seismic or other failure.

The Coast Area is comprised of about 290 miles of active 4" to 12" diameter pipeline and 9 active pump stations. One station (Santa Margarita) is manned. Sisquoc, Bell, Santa Maria Orcutt, Summit, Cuesta, Creston, Shandon, and Antelope stations are unattended and remotely operated. The Valley Area is comprised of about 500 miles of active 4" to 16" diameter pipelines, and 9 pump stations. There is one manned station (Junction) and eight unattended, remotely operated stations in the Valley Area. The associated SFR is also manned; although it is not part of the pipeline system.

The Northern Pipelines operation is headquartered in Long Beach, California. The Pipeline District Director’s office is located at the Bakersfield, CA office. The Pipeline District Director is responsible for both the Coast and Valley Areas.

The flow of oil in the pipeline system begins in the oil fields near Santa Maria and Taft, flowing north in both systems from the various leases. Oil is also received from the PXP Operating Company LOGP and the All American Pipeline via Sisquoc. In the Santa Maria System, delivery is made to the Santa Maria Refinery from Santa Maria and Orcutt Pump Stations by way of Summit Station. In the Taft District, oil flows north from the fields in Kern County through Sunset, Midway, Shale, McKittrick, Middlewater and Junction Pump Stations.

At Junction begins primarily a mainline operation north on the 12" Junction line. Stations from Sunset on through the system to SMR are hot oil pump stations, and heating equipment is used or is available at each pump station.

At SMR, the heavy crude from the Santa Maria Area is processed into semi-refined products of light and heavy gas oil and petroleum distillate (P.D.). These commodities are pipelined in the No. 2 Line system back over to Junction Pump Station through Cuesta, Santa Margarita and Shandon Pump Stations. At Junction Station, the gas oil products are pumped north to Coalinga Station on the 12" Junction Line to Coalinga, and then north from Coalinga on the 16" Oleum line to Patterson Pump Station and to SFR. Also, at Junction, the major portion of the P.D. stream is blended into the remainder of the heavy oil, which is received from the valley area. The blending operation results in a crude oil stream of about 20 degrees to 22 degrees API gravity.

This blended crude oil pumps quite readily, allowing the 12" Junction and 16" Oleum Pipeline System north to SFR to be "ambient temperature" (unheated) systems.

The Santa Maria Area and Santa Margarita Area operations within the Coast Area are discussed below.

1.6.3 Santa Maria Area Operations

The Santa Maria Area is located in Santa Barbara and San Luis Obispo Counties in the central coast area of California, and has about 100 miles of 4" to 12" diameter pipeline. The Area is a gathering and mainline operation, with four unattended, remotely operated pump stations and one manned station. Crude is gathered from the Point Pedernales offshore (Platform Irene), Point Arguello offshore (via All American Pipeline and Sisquoc), Lompoc, Orcutt Hill and Santa Maria Valley oil fields. The majority of this crude is delivered to SMR via the pipeline system.

The flow of crude oil is generally from south to north in the Santa Maria District area. Point Pedernales crude oil flows to the onshore dehydration facility (LOGP) at Lompoc, and is blended with a small amount of Lompoc field crude. Lompoc pumps this crude to Orcutt station where Orcutt crude is blended into the stream. Orcutt pumps it to SMR through Summit Station.

Santa Maria Area has a truck unloading rack at Santa Maria Pump Station for receiving crude by truck from the various oil field areas not served by pipeline. Crude oil from Price Canyon field is trucked into Santa Maria Pump Station and commingled with crude from Santa Maria Valley field, also known as Cat Canyon. Santa Maria Station moves the crude oil to SMR via Summit Pump Station. Trucks are also received from the Bakersfield Area.

The Santa Maria Area has two pipelines from Suey Junction to Summit Station. There is one 8" pipeline from Orcutt Station and one 10"/12" pipeline from Santa Maria Station, both lines flow to Summit where the stream is combined and pumped to SMR by Summit.

Santa Maria operates a 6” natural gas line to SM Refinery.

1.6.4 Santa Margarita Area Operations

The Santa Margarita Area is located in San Luis Obispo County and northwestern Kern County. The Santa Margarita Area has about 190 miles of 4" to 12" diameter pipelines. The Area contains four unmanned, remotely operated pump stations with one individual covering the maintenance of these stations eight hours a day, five days a week. Logistics Control Center remotely controls these stations.

The Santa Margarita Area is responsible for storing and boosting semi-refined product.

The Santa Margarita Area operates and maintains two 6” diameter natural gas pipelines. These lines supply fuel gas for Santa Margarita Station and Shandon Station.

The flow of the semi-refined product in the Santa Margarita Area begins at Santa Maria Refinery and is boosted along the pipeline to Junction Station.

The product line begins at Santa Maria Refinery, where various semi-refined products are pumped. Logistics Control Center directs the product movement. The product is pumped eastward on the 8”/12” products line to the San Luis Obispo Crossover. At the crossover, two 8” lines (No. 1 and No. 2) can be used separately or parallel for product movement to Santa Margarita Station. At Cuesta Station, Logistics Control Center has remote control. Cuesta Station can be used to boost the product or bypass the station on to Santa Margarita Station. At Santa Margarita, the product can either be boosted on to Junction Station or the product stream directed into the products storage tanks, to be pumped at a later date. Shandon Station is another booster station that can be used to boost the product between Santa Margarita and Junction Stations. Shandon Station is remotely controlled by Logistic Control Center.

Although the No. 1 Line is a bi-directional line between Santa Margarita and Junction Station, it is primarily designated for gas oil east. The No. 2 Line can be used for both products but is primarily used for PD service.

The Santa Margarita Area is also responsible for the maintenance of the Summit to Avila 8” line, which is idle at this time.

1.6.5 Pipeline Description – Santa Margarita Area

The following pages list information related to the pipeline sections in the Santa Margarita Area. This information is used to develop oil spill scenarios for response planning, as required by DOT regulations (49 CFR Part 194). Information related to the pump stations is listed in this Plan. The information shown in the following tables includes:

- Pipeline name, size and maximum flow rate
- Pipeline section number (shown on the pipeline system drawings that follow)
- Block valves associated with the pipeline section
- Volume of product contained in the line section (barrels)
- Maximum amount of product that could potentially drain from the line section (barrels)
- Maximum amount of product that could potentially be lost through a rupture in the pipeline, assumed to be the volume resulting from the maximum pipeline flow rate for a five minute period (barrels)
- Largest foreseeable discharge (LFD) for the line section calculated as described in this Plan
- Sensitive aquatic areas in the vicinity of the pipeline section that could be impacted by a product spill

Discharge Detection and Mitigation

Leak detection is performed to provide a means of ensuring the safety of employees and the public, and protection of private property and the environment through the activation of an emergency response program. It is also performed to provide the Company with a means of preventing product loss and to meet regulatory requirements of federal, state and county agencies and permit conditions.

The Coast Area pipeline system utilizes the following leak prevention and detection systems:

- Right-of-way ambient monitoring
- Supervisory Control and Data Acquisition (SCADA) system
- Pressure and flow monitoring system
- Routine inspection of facilities by field personnel
- Participation in the Underground Service Alert (U.S.A.) pipeline locator service
- Procedures for minimizing post-shutdown residual drain-out from pipes

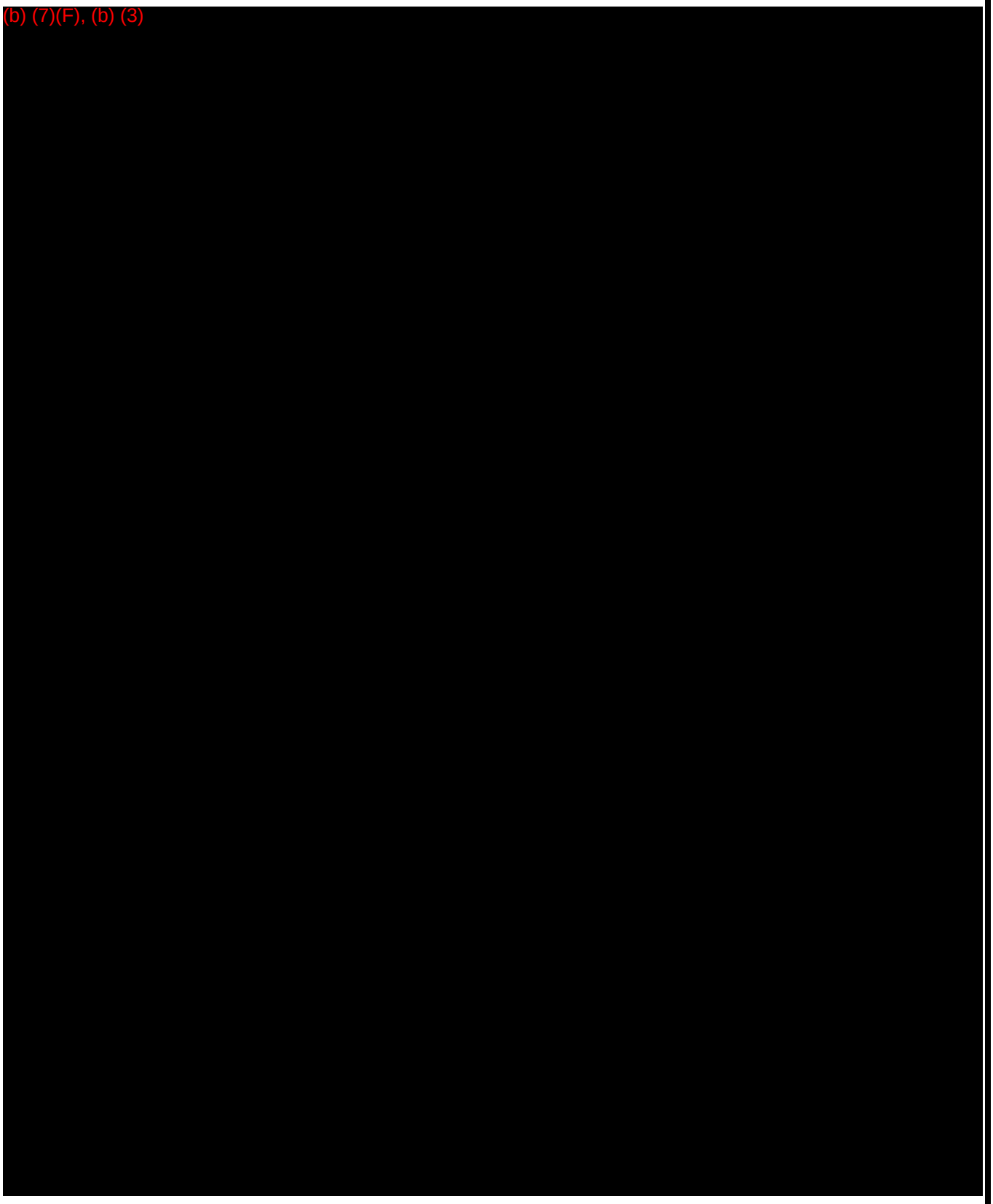
Right-of-Way Ambient Monitoring

Right-of-Way ambient monitoring is performed at least once every two weeks to meet California Pipeline Safety Act (CPSA 51012.3) regulations. Company procedure is to conduct an aerial survey of the pipeline twice a week.

The aerial surveyor is alert for signs of leakage, construction or excavation activities, or any other situation that could affect the safe operation of the pipeline system. In the event that any unusual or threatening conditions are observed, the aerial surveyor will immediately notify the Pipeline Area Supervisor using the Company radio frequency.

Supervisory Control and Data Acquisition System

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

1.6.6 Pipeline System Description

Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
SANTA MARIA TRUNK LINE (Line 300)						
12" Lompoc to Orcutt – Crude Oil (40,000 bpd max.)						
1	(b) (7)(F), (b) (3)	2,100	1,050	140	1,190	(b) (7)(F), (b) (3)
2		110	20	140	160	
3		1,490	700	140	840	
4		1,420	1,400	140	1,540	
5		2,400	1,700	140	1,840	
8" Orcutt to Summit – Crude Oil (36,000 bpd						
6	(b) (7)(F), (b) (3)	820	800	120	920	(b) (7)(F), (b) (3)
7		620	80	120	200	
8		1,080	460	120	580	
9		460	160	120	280	
10		2,460	2,20	120	2,320	
10", 12" SMS to Summit – Crude oil (48,000 b						
11	(b) (7)(F), (b) (3)	1,030	130	170	300	(b) (3), (b) (7)(F)
12		2,070	1,040	170	1,210	
13		890	360	170	530	
14		2,400	2,400	170	2,570	
15		2,440	1,850	170	2,020	
10" Summit to SMR – Crude oil (52,000 bpd m						
17	(b) (7)(F), (b) (3)	3,530	2,200	120	2,320	(b) (7)(F), (b) (3)
18		220	200	120	320	
19		2,720	1,250	120	1,370	
20		1,250	520	120	640	
21		4,120	1,040	120	1,160	
ORCUTT GATHERING LINE (Line 353)						
6", 8" Lompoc to Orcutt – Crude Oil (5,000 bid max./1,000 bbl lease tank)						
23	(b) (7)(F), (b) (3)	1,760	1,380	N/A	2,390	
24		440	350	N/A	1,350	
25		220	180	N/A	1,180	

Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
SISQUOC LINE (Line 300)						
12" Sisquoc to SMS – Crude Oil (84,000 bpd max.)						
42	(b) (7)(F), (b) (3)	1,560	1,560	140	1,700	(b) (7)(F), (b) (3)
43		3,260	2,890	140	3,030	
44		2,600	2,600	140	2,740	
MIOSSI LINE (Line 355)						
8" SMR Products Line Junction to Avila Terminal – Products (24,000 bpd max.)						
46	(b) (7)(F), (b) (3)	1,450	1,040	80	580	(b) (7)(F), (b) (3)
COAST-VALLEY TRUNK LINE (Line 400)						
8", 12" SMR to San Luis Obispo Tank Farm – Products (36,000 bpd)						
47	(b) (7)(F), (b) (3)	520	420	120	540	(b) (7)(F), (b) (3)
48		70	60	120	180	
49		1,180	600	120	720	
50		20	20	120	140	
51		1,180	600	120	720	
52		1,480	700	120	820	
53		20	20	120	140	
54		520	420	120	540	
55		4,210	2,100	120	2,220	
56		410	330	120	450	
8"Summit to SMR – Crude Oil (20,000 bpd max.)						
57	(b) (7)(F), (b) (3)	1,400	470	70	540	(b) (7)(F), (b) (3)
8" Summit to Avila – Crude Oil, Gasoil (20,000 bpd max.)						
58	(b) (7)(F), (b) (3)	1,570	2,200	70	2,270	(b) (7)(F), (b) (3)
59		100	200	70	370	
60		620	560	70	630	
61		590	460	70	530	
62		560	230	70	300	
63		1,840	460	70	530	

COAST-VALLEY TRUNK LINE (Line 400) - *Continued*						
Sec. No.	**Block Valves**	**Line Volume**	**Max. Drainage**	**Max. Pumping Loss**	**LFD**	**Sensitive Areas**
8" Avila Terminal to Santa Margarita – No. 1 and No. 2 Oil (24,000 and 28,800 bpd max)						
64	(b) (7)(F), (b) (3)	850	620	100	720	(b) (7)(F), (b) (3)
65		1,510	820	100	920	
66		460	750	100	850	
67		560	390	100	490	
68		330	260	100	360	
69		750	720	100	820	
70		2,430	1,050	100	1,150	
8" Santa Margarita to Shandon – No. 1 and No.2 Oil (24,000 and 28,800 bpd max.)						
71	(b) (7)(F), (b) (3)	230	160	100	260	(b) (7)(F), (b) (3)
72		3,600	1,330	100	1,430	
73		3,600	1,160	100	1,260	
74		130	30	100	130	
75		1,250	720	100	820	
8" Shandon to Antelope – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
1	(b) (7)(F), (b) (3)	1,480	490	100	590	
2		2,390	1,250	100	1,350	
8" Antelope to Junction – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
3	(b) (7)(F), (b) (3)	4,100	3,500	100	3,600	

1.6.7 Pipeline System Drawings

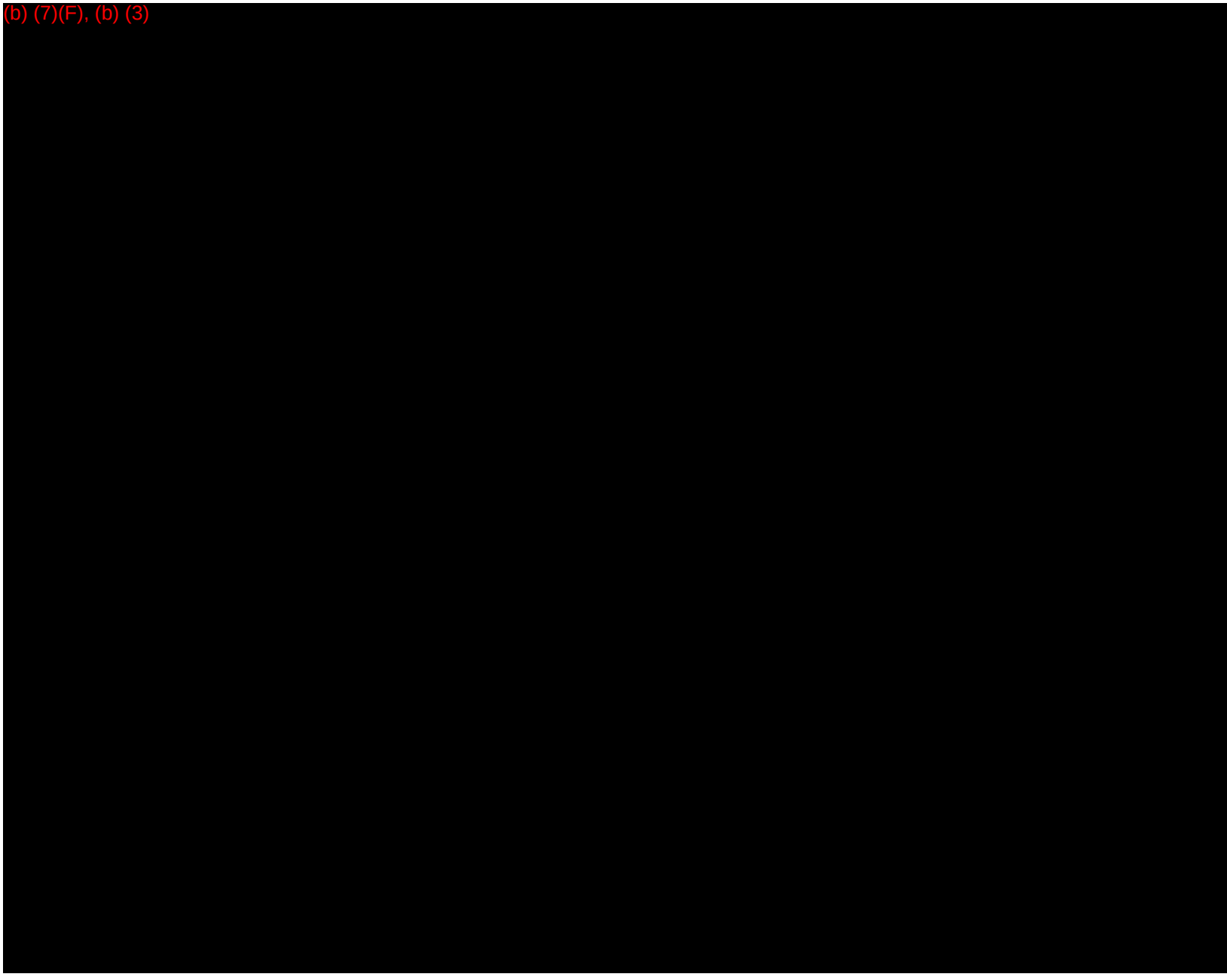
The Northern Lines Coast Area Pipeline system is illustrated in the following figures below.

Each figure contains the following information:

- Name of the Northern Lines Coast Area Pipeline
- Pipeline size, length, and line capacity
- Pipeline section number (circled), corresponding to the section numbers presented in the preceding tables
- Pipeline block valve and lateral valve locations
- Pipeline pump station locations
- Major roads and graphic scale

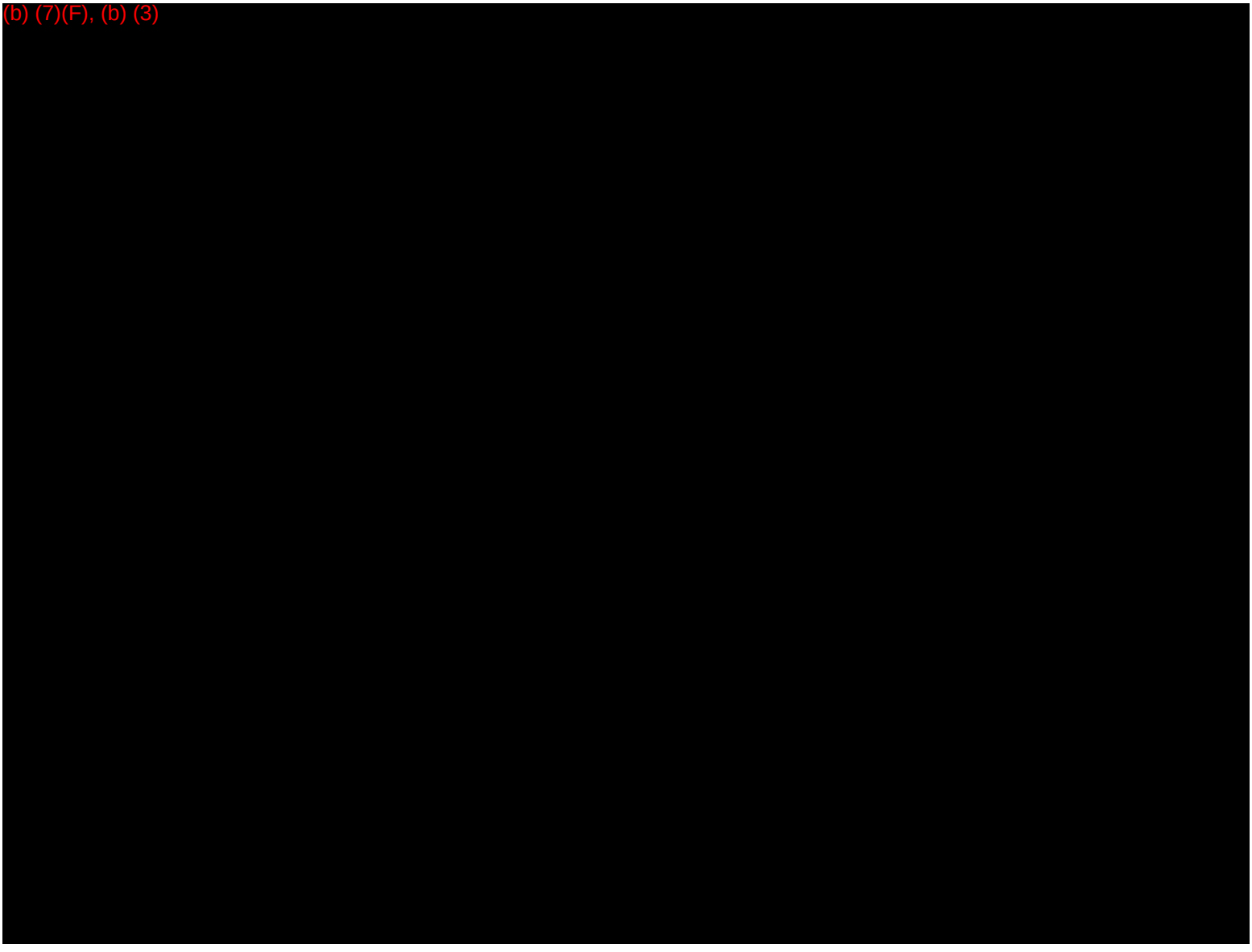
Corresponding Company “D2A” drawing numbers for the pipeline, which show greater detail and are available at the Company offices in each Area, Long Beach, CA and Houston, TX.

(b) (7)(F), (b) (3)


(b) (7)(F), (b) (3)

Coast Area – Sections 6 Through 15

(b) (7)(F), (b) (3)



Coast Area – Section 16

Coast Area – Sections 17 Through 21

(b) (7)(F), (b) (3)

Coast Area – Sections 22 Through 25

Coast Area – Sections 34 Through 41

(b) (7)(F), (b) (3)

Coast Area – Sections 42 Through 44

(b) (7)(F), (b) (3)

Coast Area – Section 46

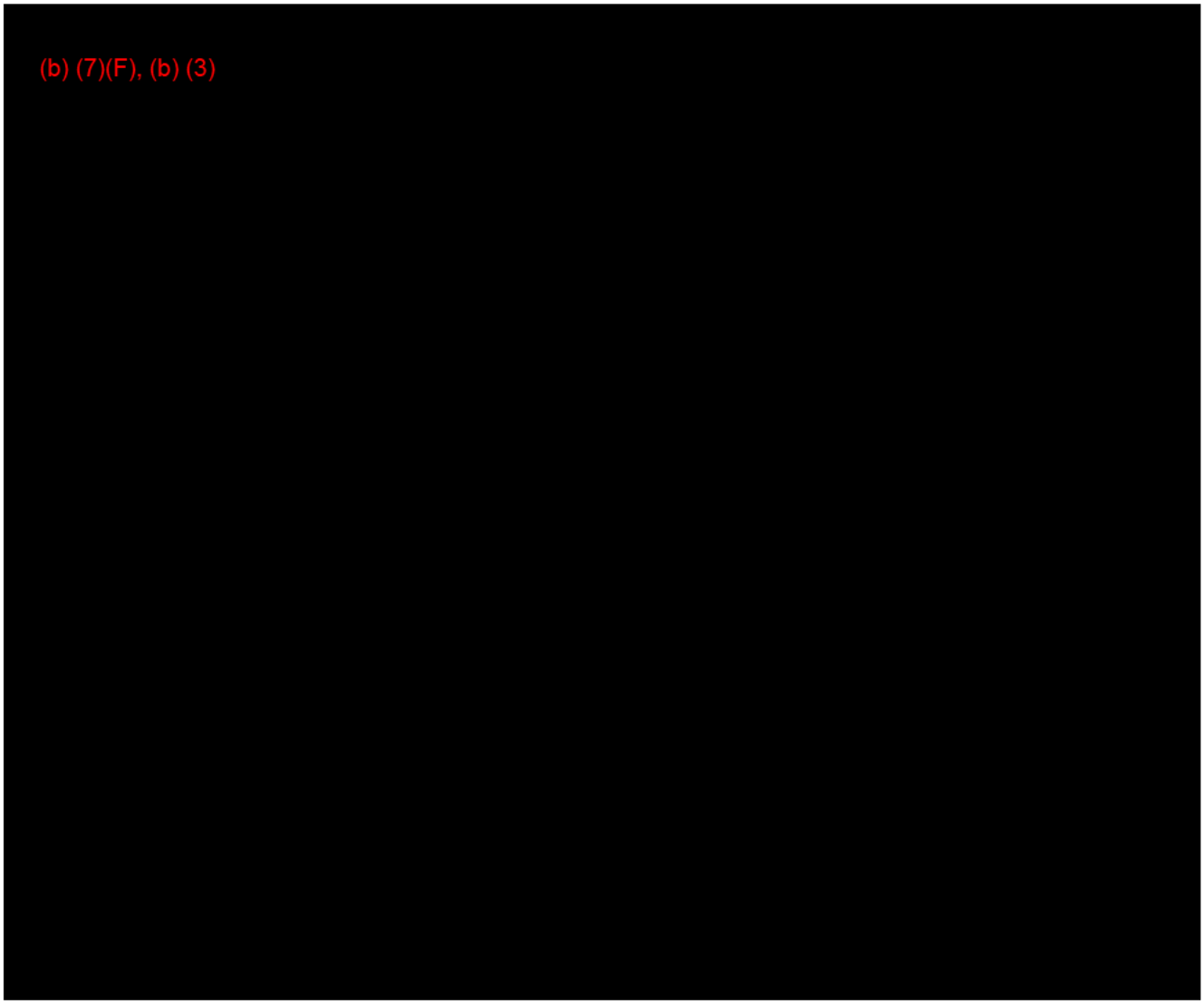
(b) (7)(F), (b) (3)

Coast Area – Sections 47 Through 56

Coast Area – Sections 57 Through 63

(b) (7)(F), (b) (3)

Coast Area – Sections 64 Through 70



Coast Area – Sections 71 Through 75

(b) (7)(F), (b) (3)

Coast Area – Shandon to Antelope

(b) (7)(F), (b) (3)

Antelope to Junction

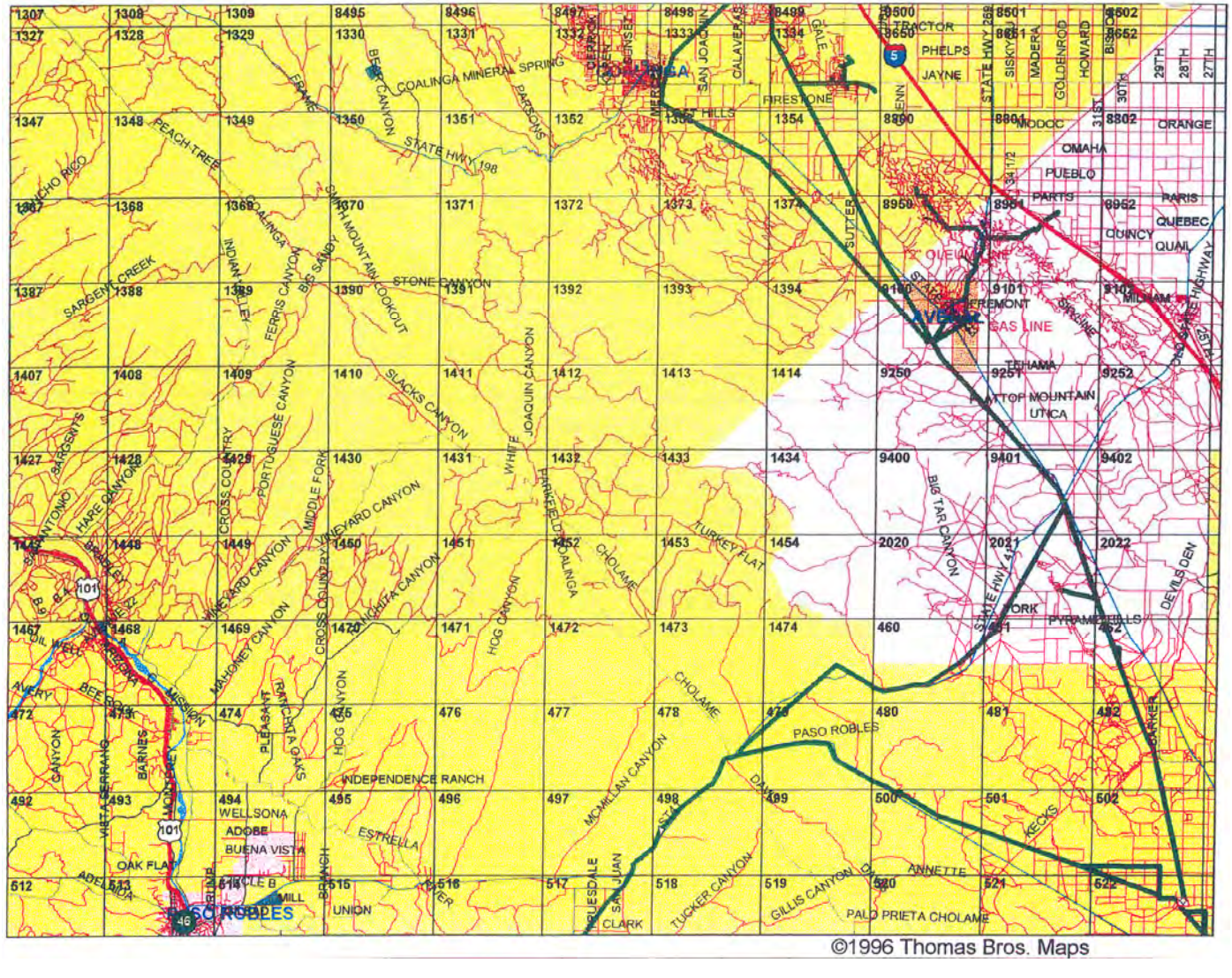
(b) (7)(F), (b) (3)

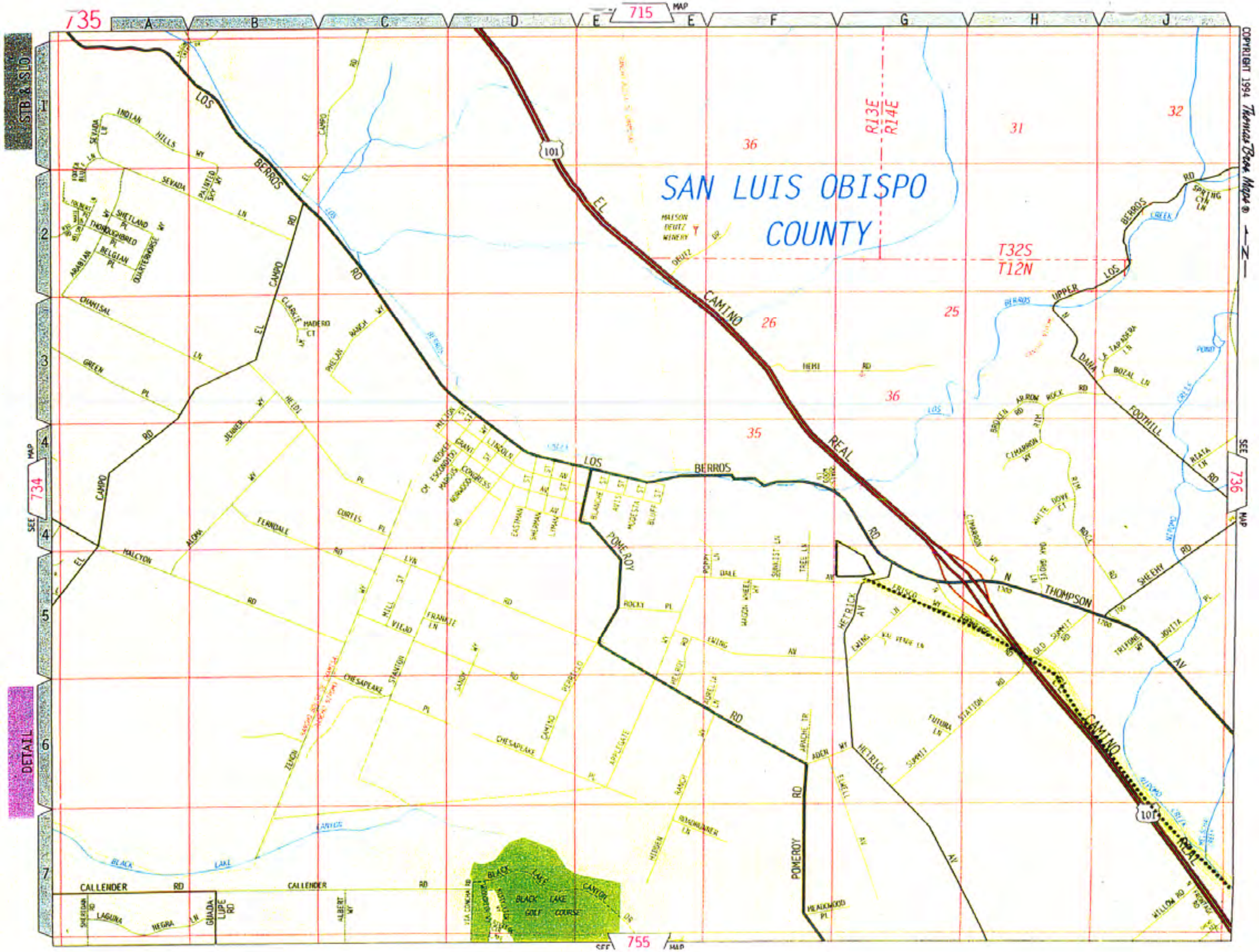
1.6.8 Thomas Guide Maps

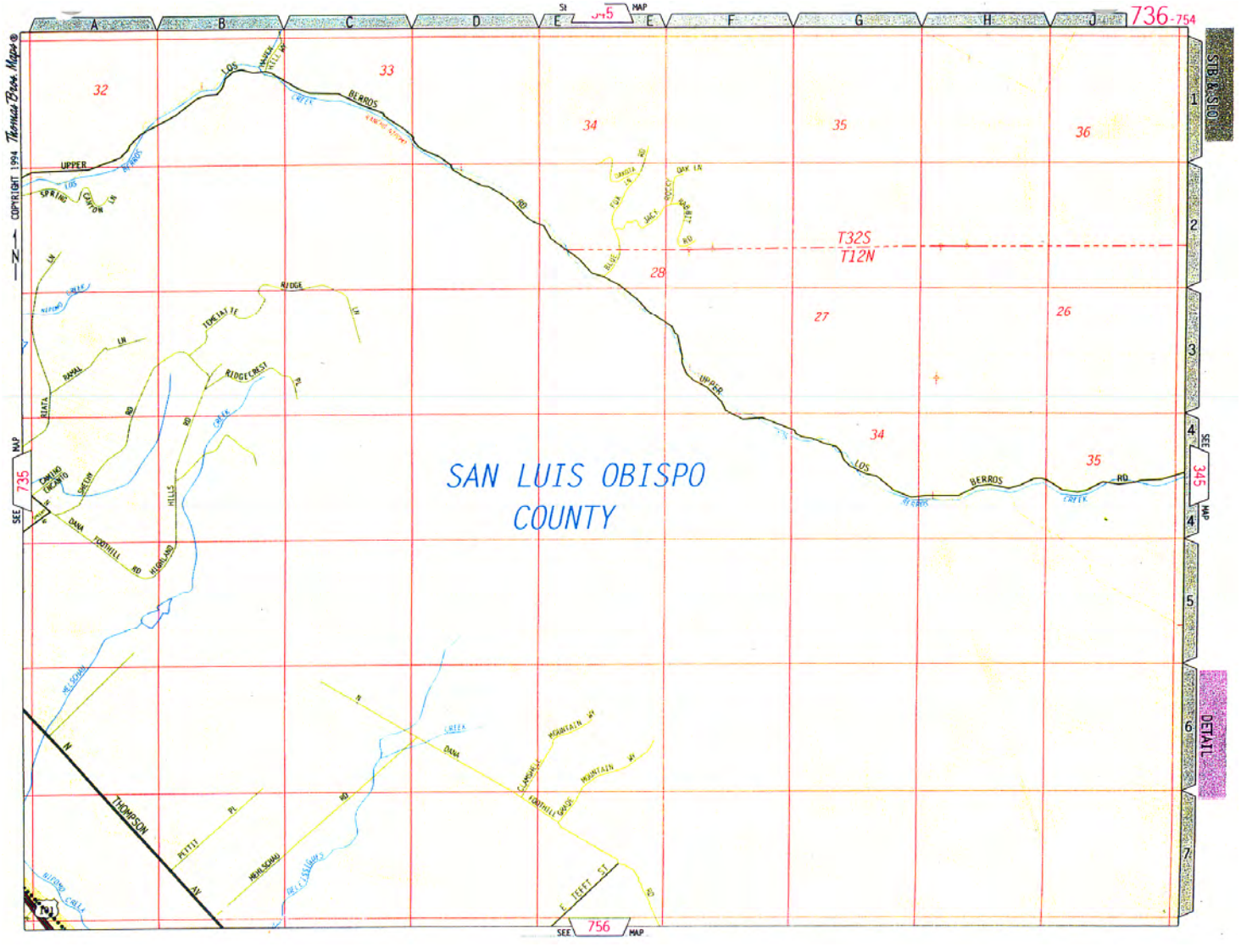
Thomas Guide Maps, with the pipeline alignment superimposed, are presented on the following pages. The maps are in the order of increasing Thomas Bros. map number.

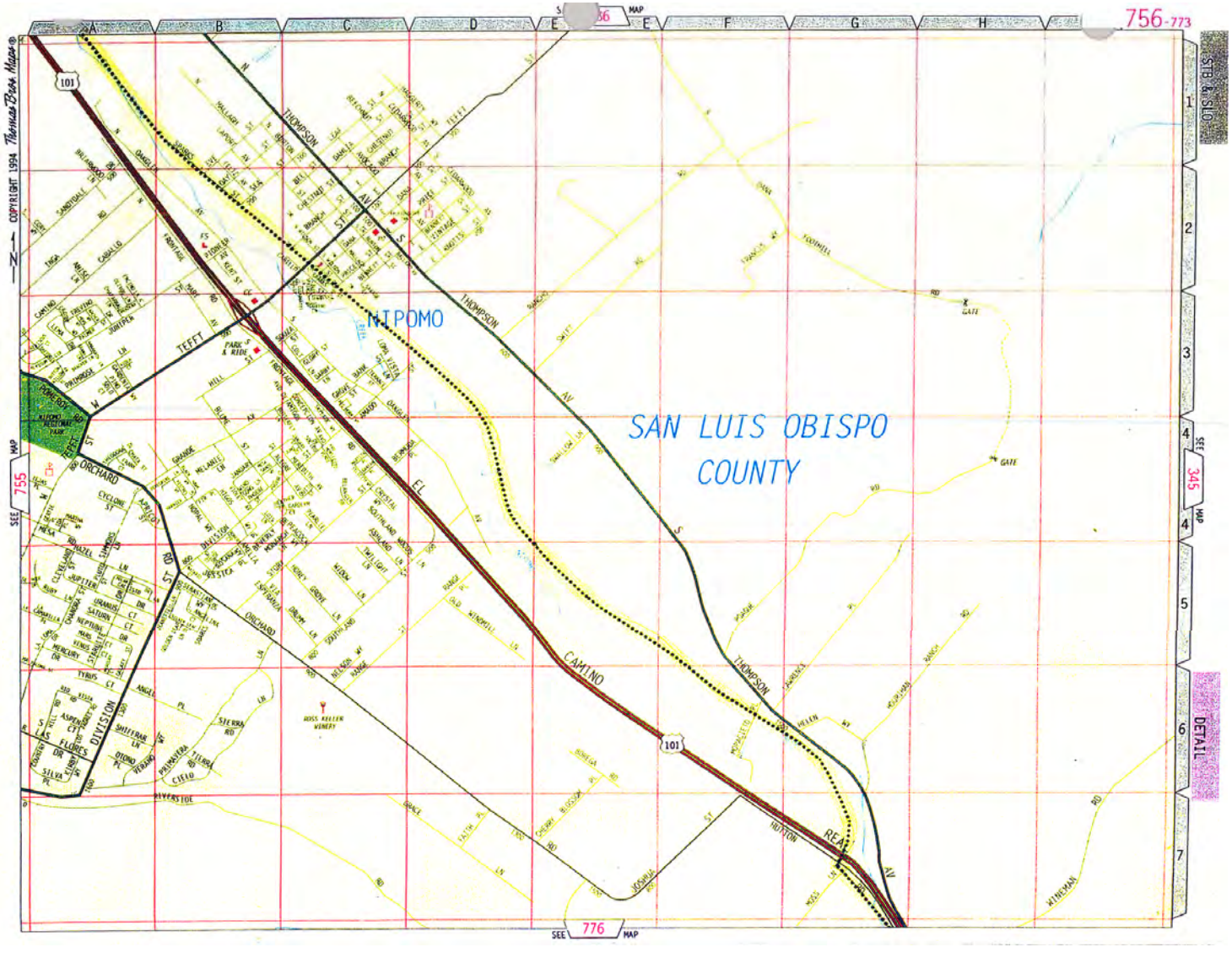
These maps are helpful for locating the pipeline route, especially in populated areas, and for identifying the exact location of an incident when notifying Company and agency response personnel. Access routes to the pipeline and many land features can be rapidly identified from these maps.

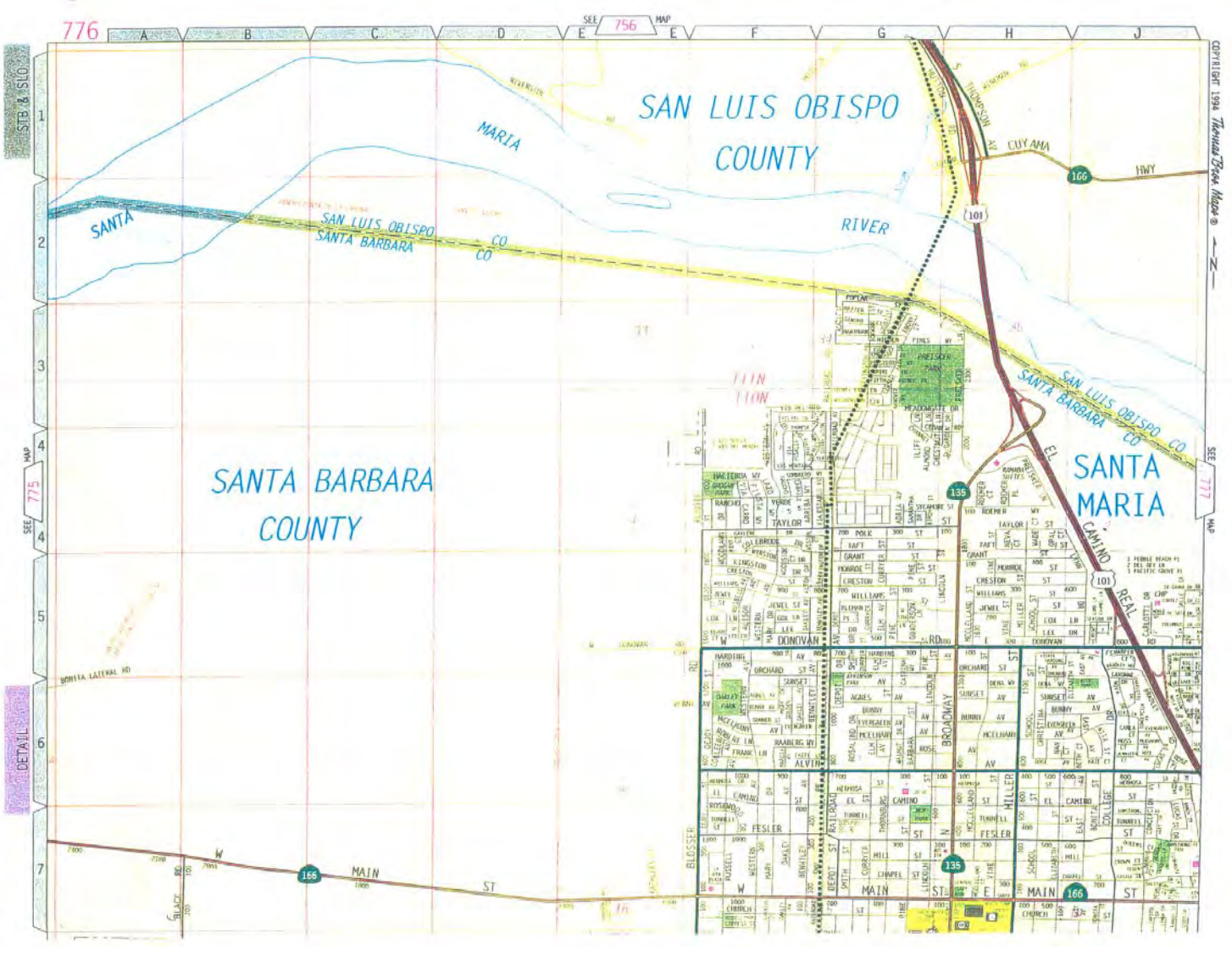
The maps are taken from the Thomas Guide for Santa Barbara and San Luis Obispo / Ventura Counties, 1996 edition. Reproduced by permission.


COALINGA MINERAL SPRING
STATE HWY 198
PEACH TREE
SARGENTS
SARGENT CREEK
INDIAN LEY
FERRIS CANYON
BIG SANDY
SMITH MOUNTAIN LOOKOUT
STONE CANYON
SLACKS CANYON
JOAQUIN CANYON
WHITE
PORTUGUESE CANYON
MIDDLE FORK
VINEYARD CANYON
HARE CANYON
CROSS COUNTRY
FARMERSVILLE
COALINGA
CHOLAME
TURKEY FLAT
BIG TAR CANYON
HIGHFA CANYON
HOG CANYON
MAHONEY CANYON
CROSS COUNTRY
RANCHITA OAKS
INDEPENDENCE RANCH
MCMILLAN CANYON
PASO ROBLES
WELLSONA
ADOBE
BUENA VISTA
OAK FLAT
ESTRELLA
SAN JUAN
CLARK
TUCKER CANYON
GILLIS CANYON
PALO PRIETA CHOLAME
ANNETTE
UNION
MILL
CIRCLE B
TRACTOR
PHELPS
JAYNE
FIRESTONE
MODOC
OMAHA
PUEBLO
PARIS
QUEBEC
QUINCY
QUAIL
FREMONT
GAS LINE
TEHAMA
UTICA
YORK
PYRAMID HILLS
ORANGE
©1996 Thomas Bros. Maps


735
715
755
734
736
SAN LUIS OBISPO COUNTY
STB & SLO
DETAIL
COPYRIGHT 1994 Thomas Bros. Maps
R13E
R14E
T32S
T12N
EL CAMINO REAL
LOS BERROS RD
CALLENDER RD
POMEROY RD
HETRICK AV
THOMPSON
BLACK LAKE GOLF COURSE
CHESAPEAKE
HALCYON
EL CAMPO RD
FERNDALE
BERROS


SAN LUIS OBISPO
COUNTY
T32S
T12N
736-754
SEE MAP 735
SEE MAP 345
SEE MAP 756
STB & SLO
DETAIL
LOS BERROS CREEK
UPPER LOS BERROS CREEK
LOS BERROS RD
THOMPSON AV
DANA HILLS
DANA FOOTHILL RD
RIDGECREST PL
RIDGE LN
TOMTAIL LN
OAK LN
E TEFFT ST
Thomas Bros. Maps®
COPYRIGHT 1994


NIPOMO
SAN LUIS OBISPO COUNTY
THOMPSON
TEFFT
ORCHARD
DIVISION
CAMINO
REAL
101
SEE 755 MAP
SEE 776 MAP
SEE 345 MAP
DETAIL
STB & SLO
COPYRIGHT 1994 Thomas Bros. Maps®


776
SEE 756 MAP
A
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STB. & SLO
DETAIL
SEE 775 MAP
SEE 777 MAP
SAN LUIS OBISPO COUNTY
SANTA BARBARA COUNTY
SANTA MARIA
MARIA
SANTA
RIVER
SAN LUIS OBISPO CO
SANTA BARBARA CO
SAN LUIS OBISPO CO
SANTA BARBARA CO
CUYAMA HWY
THOMPSON AV
EL CAMINO REAL
BROADWAY
MAIN ST
DONOVAN RD
BONITA LATERAL RD
BLOSSER RD
FESLER
MILLER
ORCHARD
SUNSET
TAYLOR
GRANT
MONROE
CRESTON
WILLIAMS
JEWEL
PLOWMAN
ALVIN
ROSEMD
CHAPEL
CHURCH
DEPOT
101
135
166
168
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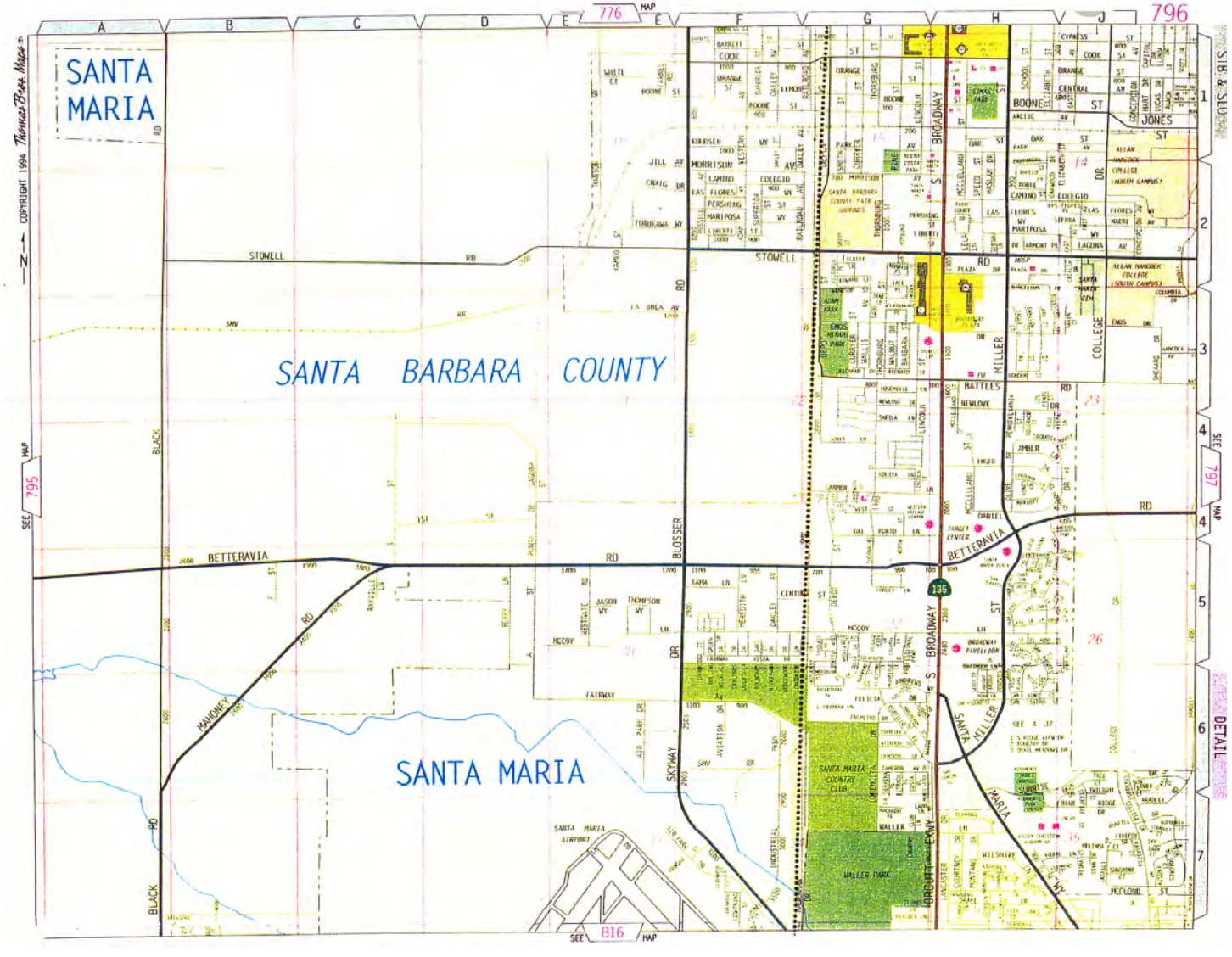
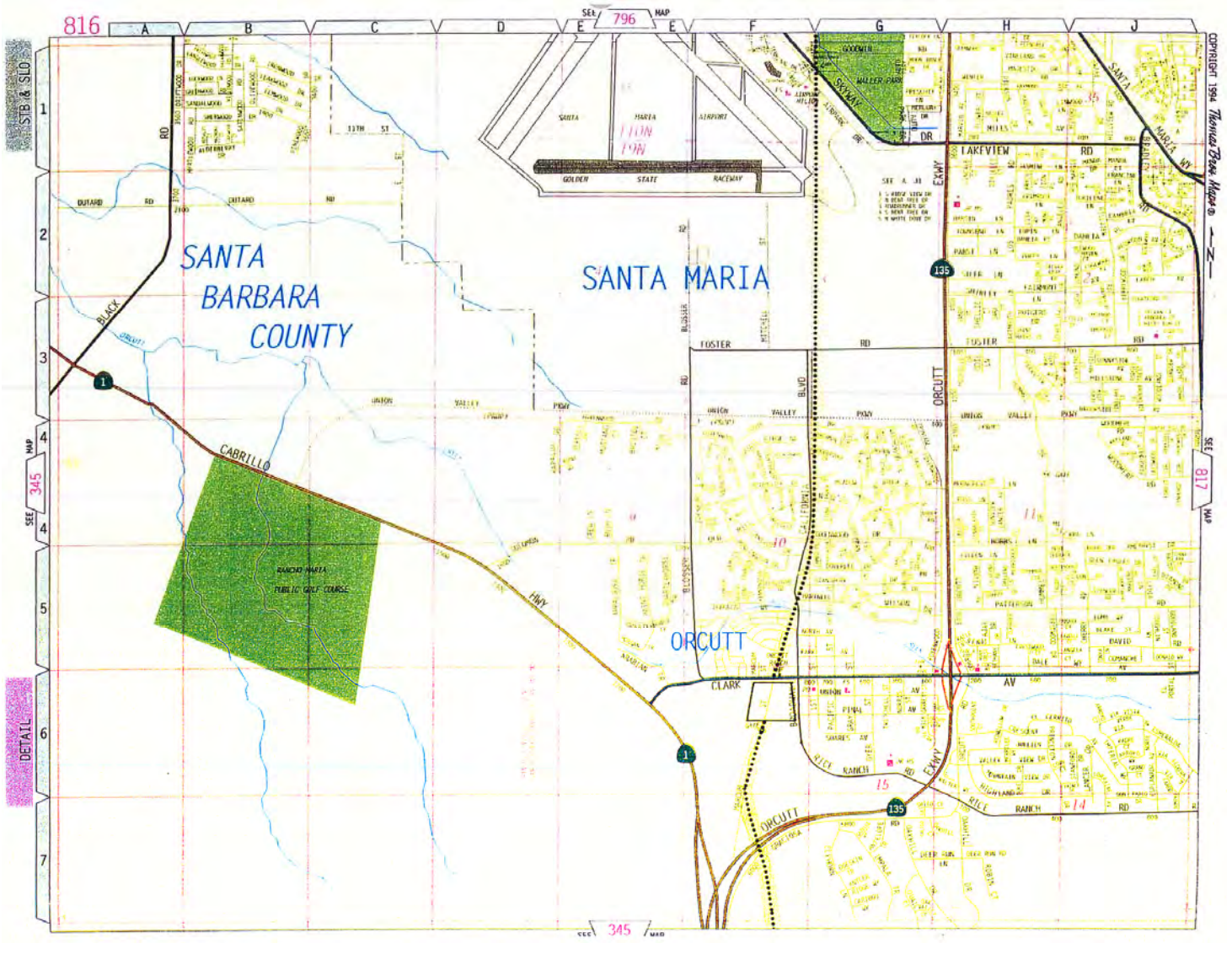

SANTA MARIA
SANTA BARBARA COUNTY
SANTA MARIA
STOWELL RD
BETTERAVIA RD
BLOSSER RD
BROADWAY
MILLER
COLLEGE
BLACK RD
MAHONEY AVE
SKYWAY DR
SANTA MARIA AIRPORT
SANTA MARIA COUNTRY CLUB
WALLER PARK
SEE 795 MAP
SEE 797 MAP
SEE 816 MAP
SEE DETAIL
776 MAP
796 MAP
135


816
SEE 796 MAP
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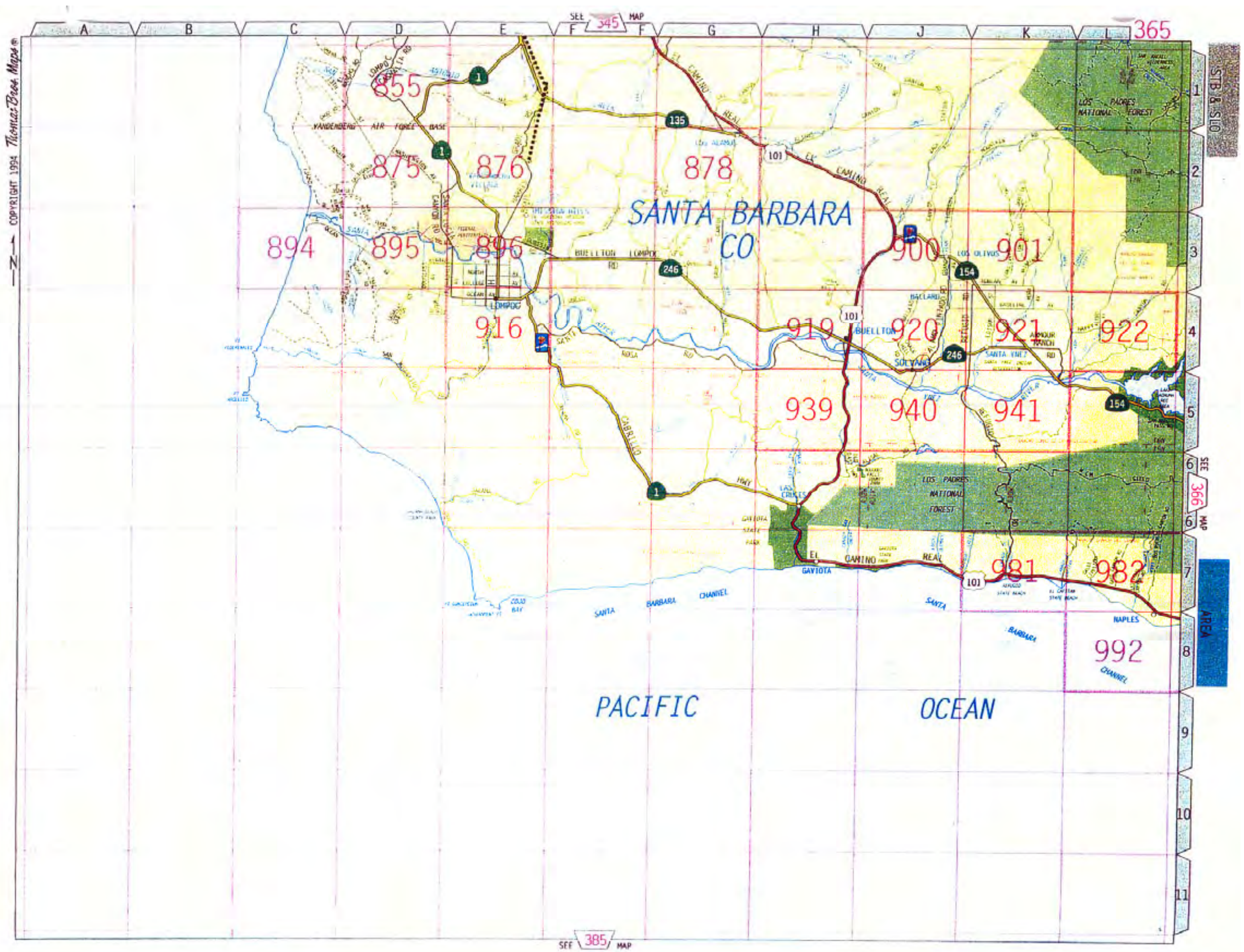
STB & SLO
DETAIL
SEE 345 MAP
SEE 817 MAP
SANTA BARBARA COUNTY
SANTA MARIA
ORCUTT
GOLDEN STATE RACEWAY
SANTA MARIA AIRPORT
SKYWAY
WALLER PARK
LAKEVIEW RD
FOSTER RD
ORCUTT BLVD
BLACK RD
BLOSSER RD
CABRILLO HWY
CLARK AV
RICE RANCH RD
SANTA MARIA PUBLIC GOLF COURSE
DUTARD RD
135
1
101
COPYRIGHT 1994 Thomas Bros. Maps®


SANTA BARBARA CO
PACIFIC
OCEAN
LOS PADRES NATIONAL FOREST
LOMPOC
BUELLTON
SOLVANG
LOS OLIVOS
SANTA YNEZ
GAVIOTA
VANDENBERG AIR FORCE BASE
SANTA BARBARA CHANNEL
NAPLES
855
875
876
878
894
895
896
900
901
916
919
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992
SEE 345 MAP
365
SEE 366 MAP
SEE 385 MAP
STB & SLO
AREA
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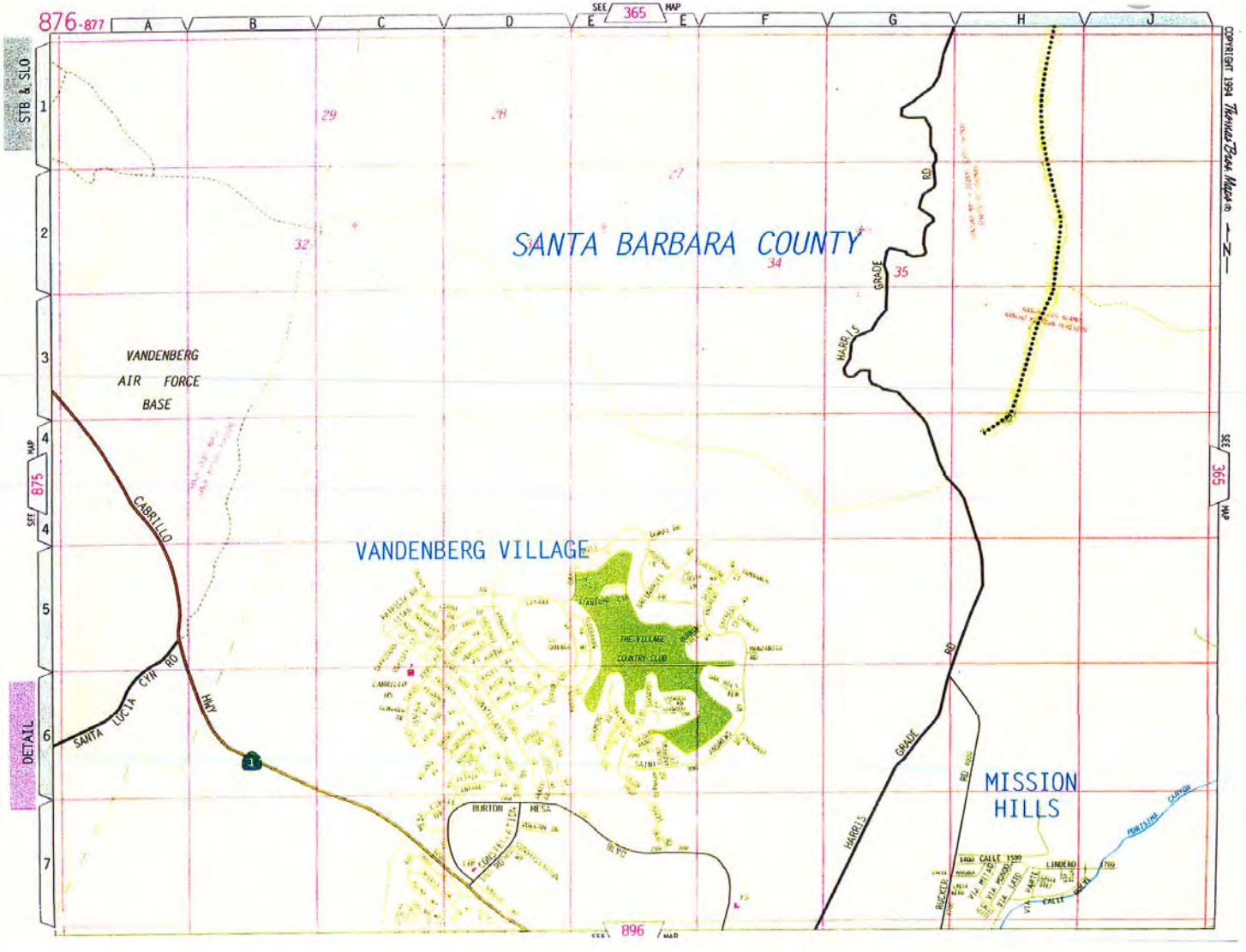
876-877
SEE MAP 365
A
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J
STB & SLO
DETAIL
SEE MAP 875
SEE MAP 365
SEE MAP 896
SANTA BARBARA COUNTY
VANDENBERG AIR FORCE BASE
VANDENBERG VILLAGE
MISSION HILLS
CABRILLO
SANTA LUCIA CYN RD
HWY 1
HARRIS GRADE RD
BURTON MESA BLVD
THE VILLAGE COUNTRY CLUB
CALLE 1500
LINDERO
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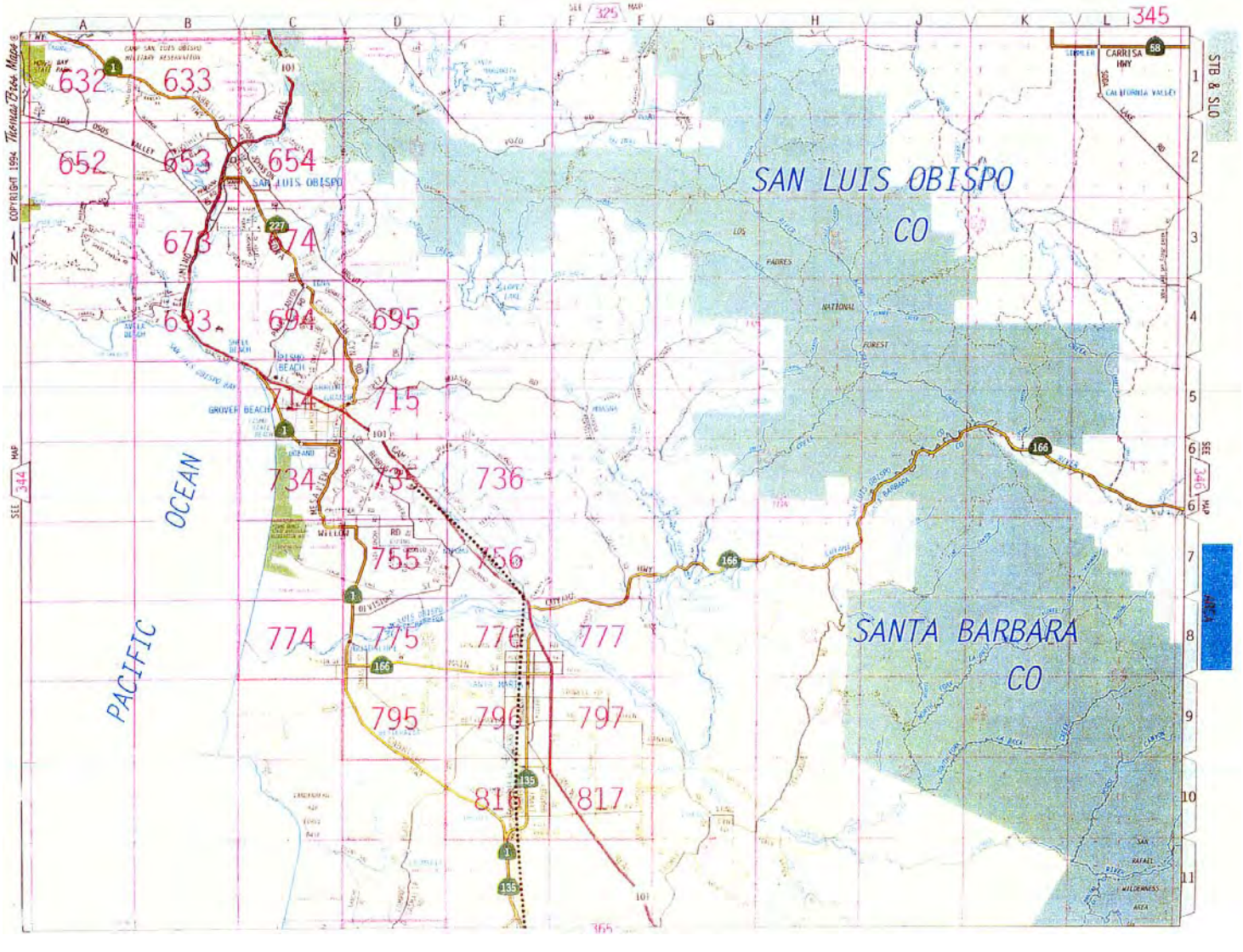


1.6.9 Tank Table

Location	Equipment	Tank or Vessel	Product	Capacity (bbls)	Diameter	Height or Length	Year Built	Type
Shandon	Tk-Large (>29' dia)	35206	Crude Oil	(b) (7)(F), (b) (3)			1980	EFR
Orcutt	Tk-Large (>29' dia)	231401	Crude Oil				1961	EFR
S. Maria	Tk-Large (>29' dia)	T-1	Fire Water				1995	Cone Roof
S. Maria	Tk-Large (>29' dia)	801906	Crude Oil				1997	EFR
S. Margarita	Tk-Large (>29' dia)	3	Water				1986	Cone Roof
S. Margarita	Tk-Large (>29' dia)	55416	Water				1937	Cone Roof
S. Margarita	Tk-Large (>29' dia)	55408	GO/ PD				1959	Floating Roof
S. Margarita	Tk-Large (>29' dia)	55422	Gas Oil				1997	Floating Roof
S. Margarita	Tk-Large (>29' dia)	110404	Gas Oil				1971	EFR
S. Margarita	Tk-Large (>29' dia)	175420	Gas Oil				1985	EFR

1.7 Worst Case Discharge – Coast Area

The Company has developed processes and procedures to minimize damage to the environment that may result due to a discharge from this facility. Containment is most effective when conducted near the source of the spill, where the product has not spread over a large area and to allow effective recovery and/or cleanup. Effective implementation of containment and recovery is generally dependent upon the size of the spill, available logistical resources, implementation time, and environmental conditions or nature of the terrain of the spill area.

It is the Company's goal to be as proactive as possible to ensure that any such incident does not occur. However, in the unlikely event that a spill should occur, The Company has ensured that the manpower and equipment necessary to mitigate and cleanup any spill will be made immediately available. In addition to Company resources and manpower, Company has contracts with Oil Spill Response Organizations (OSROs). These contracted OSROs will ensure our ability to minimize the amount of harm to the environment. They will also ensure our ability to sustain continued operations through 7 days or longer if necessary.

The worst-case discharge volume calculations are based on the guidance provided by the Department of Transportation, Interim Final Rule, 40 CFR Part 194. A worst-case discharge is defined as the largest foreseeable discharge in adverse weather conditions that a pipeline could discharge in a response area. The worst-case discharge is based on the comparison of several factors.

First is the result of the calculation of the flow rate times the maximum time to detect the spill, plus the rate of flow times the time to shut down the pipeline, plus the drainage volume after shutdown of the pipeline.

(Line flow x SCADA response)
+
(gravity flow x manual response)
+
(volume between manual block valves)

SCADA = Supervisory Control and Data Acquisition System

Manual Response = Total time to physically turnoff manual valves nearest spill location

Second, the worst-case discharge could be a foreseeable discharge for a line section based on the maximum historic discharge.

Third, if the line section within the response area contains break out tanks, the worst-case discharge may be the quantity of the largest tanks or tank battery within a single containment dike, adjusting for the capacity of the containment system.

Data compiled for each section of the pipeline system is contained this Plan. Pipeline sections are delineated in two ways: (1) by the pipeline intervals between block valves for the main oil transportation lines; and (2) by the pipeline intervals between the field origin and the block valves or main line lateral tie-in valves for oil gathering lines.

1.7.1 Spill Volume Calculations

The calculation of the largest foreseeable discharge (LFD) assumes that the pipeline is completely ruptured, and that oil is allowed to escape in an unimpeded fashion. In view of the fact that the main transportation pipelines are buried, and that even the most severe ruptures result in irregular breaks in the pipeline wall that limit the rate of flow out of the pipe, the LFD calculation tends to overstate the estimated spill volumes for planning purposes.

A pipeline rupture characteristically results in a large initial release of oil while the pipeline is under pressure, and until the pumps are shut down. Following a large initial release, after pumps are shut down and block valves are closed, flow out of the ruptured line is typically reduced to a low rate.

Information is presented in this Plan, which is used to determine the LFD for each section of the pipeline. The following data is used in the calculation of LFD:

- Pipeline section number.
- Valve numbers identifying the location of the pipeline section.
- Volume of oil contained in the pipeline section, in barrels.
- Maximum volume of oil that could drain out of the pipeline section, in barrels (computed from pipeline elevation drawings, or estimated from topography in a manner that would tend to overstate the actual volume). In a few cases, the maximum drainage exceeds the line volume due to potential spillover from adjacent lines.

The stated maximum drainage volume does not consider the length of time that would be needed to actually discharge the stated volume through a pipeline rupture. In some cases, it would take many hours to discharge the maximum drainage volume.

To arrive at worst-case LFD volumes for long sections of the pipeline, the drainage volume for purposes of calculating the LFD for the pipeline section was assumed to equal the maximum drainage volume. More realistic but less conservative limits could be computed assuming that the most oil flowing out of a rupture could be estimated under the conditions of laminar flow under a constant 200 psi hydrostatic head for a ten mile length of pipeline, for a period of one hour. Even these assumptions are believed to overstate the actual drainage volumes. The hydrostatic head would decrease with time and flow rate would drop dramatically; the closed system would impede flow out of the line due to upstream suction as the line evacuates; and the results reflect the operator's observations of pipeline spill behavior in actual incidents.

Maximum pumping loss, in barrels. Main trunk lines are equipped with Supervisory Control and Data Acquisition (SCADA) monitoring systems, and Pipeline Measurement (PLM) systems. This results in early detection of a rupture, and shut down of the pipeline within five minutes of a major accident.

The Largest Foreseeable Discharge (LFD), in barrels, is the sum of the maximum pumping loss, plus the maximum drainage volume (limited for purposes of the LFD calculation as described above).

(b) (7)(F), (b) (3)

[redacted]

Maximum Historic Discharge

Release history information is located in Annex 1.7.3.

Breakout Tank Worst-Case Discharge

The WCD for tanks is calculated on the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

(b) (7)(F), (b) (3) [redacted]

Under *49CFR§194.105*(b)(4) Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures. The percentage (credits) is a maximum of 75%. Under this section, and with the following criteria, the Company is entitled to receive a 70% credit on their WCD volumes.

Prevention measure	Standard	Credit (%)
Secondary containment > 100%	NFPA 30	**50%**
Built/repaired to API standards	API STD 620/650/653	**10%**
Overfill protection standards	API 2350	**5%**
Testing/Cathodic Protection	API STD 650/651/653	**5%**
Tertiary containment/drainage/treatment	NFPA 30	**5%**
Maximum Allowable Credits		75%
Company claimed credits		**70%**

(b) (7)(F), (b) (3) [redacted]

The prevention credits for the above tank are based upon the Company meeting or exceeding certain industry standards. The tank is built, inspected, and repaired to *API Standard 650/653*. Overfill protection is in place for all breakout tanks and meets *API RP 2350*. **Cathodic protection** and testing is in place to prevent the **corrosion** of pipelines and breakout tanks and meets *API Standard 651*.

The following table is an overview of the WCD Calculations in barrels for this area.

(b) (7)(F), (b) (3) [redacted]

Planning Volume Calculations

Worst Case Discharge Planning Volume Calculations
(b) (7)(F), (b) (3)

Calculation		Group 1 Oil[1]
Areas Impacted: Inland – River/Canal		
Worst Case Discharge: WCD=100% of in-ground pit volume		(b) (7)(F), (b) (3)
Small Case Discharge (Lesser of 1% of WCD or 50 bbl) (bbl)		
Medium Case Discharge (Lesser of 10% of WCD or 857 bbl) (bbl)		
On-Water Recovery Volume (OWRV=Percent oil on-water x WCD) (bbl)		
On-Shore Recovery Volume (OSRV=Percent oil on-shore x WCD) (bbl)		
Emulsification Factor (EF)		
On-Water Clean-Up Planning Volume (OWPV=OWRV x EF) (bbl/day)		
Shoreline Clean-Up Planning Volume (SPV=OSRV x EF) (bbl/day)		
On-Water Recovery Capacity: (OWRC=OWPV x Resource Mobilization Factor) (bbl/day)	Tier 1	
	Tier 2	
	Tier 3	
On-Water Recovery Response Caps (OWRRC) (bbl/day)	Tier 1	1,875
	Tier 2	3,750
	Tier 3	7,500
Amount needed to be identified, but not contracted for (OWRC – OWRRC) (bbl/day)	Tier 1	< 1,829
	Tier 2	< 1,188
	Tier 3	< 4

1 – Group 1 Oil = Non-Persistent Oils
bbl/day – Barrels per day
bbl – barrels

1.7.2 Hazard Identification and Analysis

Hazard Evaluation

The commodities transported and stored by the pipeline system are crude oil, gas oil and semi-refined petroleum products. The properties of these hazardous materials are given in Safety Data Sheets (SDS), located on the Company's intranet site.

The quantity of oil stored and transported in the pipeline system is documented by pipeline section and for breakout tanks. In summary, the Coast Area pipeline system transports from less than 5,000 up to 52,000 barrels of oil per day through 300 miles of pipelines, with a maximum oil storage capacity of (b) (7)(F), (b) (3) [redacted]

Human contact with crude oil can result in health hazards such as eye and skin irritation, symptoms of nervous system depression, and aggravation of pre-existing respiratory disorders. Components of crude oil, such as benzene, are known carcinogens. Crude oil and petroleum products that are released to the environment can be fatal to many animal species that come into contact with the material. Oil can be an acute hazard to shallow aquatic habitats.

Crude oil and petroleum products are also highly flammable, and present a potential radiant heat hazard if a spill is ignited. A 1,000-barrel oil spill could pool on the ground over a one acre area and could be ignited, resulting in a radiant heat hazard 400 feet from the edge of the fire. At the radiant heat hazard distance, burning liquids could cause second-degree burns to exposed persons within about 30 seconds and third-degree burns for continued exposure.

Vulnerability Analysis

Environmentally sensitive areas that could be potentially affected by a pipeline spill are the aquatic habitats in close proximity to the pipeline route. The location of these habitats is identified in the detailed description of the pipeline sections provided in this Plan. The types of habitats vulnerable to a pipeline spill are discussed below.

Sensitive aquatic habitats include small, intermittently flowing creeks and rivers containing riparian habitats and marshland. Also, a section of the pipeline system is located along Pismo Beach, making San Luis Obispo Bay potentially vulnerable to a pipeline spill. Unless a spill is very large and can flow some distance from the spill location (i.e. on the order of the worst case discharge volume), there is little chance that an oil spill will impact sensitive aquatic environments. Creek and stream crossings would be considered vulnerable to any size spill, although there is seldom any surface water in many of the drainages.

The pipeline traverses a large amount of pasture and agricultural fields, which would not be susceptible to significant environmental damage from a spill. The pipeline is also located in some moderately populated urban and rural areas, where the public may be vulnerable to a spill incident.

Evacuation plans have been established for protection of the public in the event of an urban spill. Containment and cleanup plans have been developed for a variety of environments, with special emphasis on techniques to be used or avoided in sensitive areas. Also, planning and coordination of spill response activities with agency officials will improve the effectiveness of the actions taken to limit the consequences of an oil spill.

1.7.3 Spill History

Spill History

Historical spills are described in this Section. The causes of the spills were addressed in the risk and hazard analysis. Since many of the pipelines are old, they were not designed to be piggable. Thus, it has been difficult to assess the condition of the lines on a regular basis. In response to the spills, the Company has instituted a program to make all of their pipelines piggable and then to run a smart pig through the lines to assess their condition and replace any corroded sections. The Company will then continue to pig the lines on a regular basis.

The 12-inch Avila to Summit line that released approximately 400 bbls of crude on August 3, 1992 has been modified to accommodate an internal inspection corrosion tool. Based on results of the inspection, corroded sections of the pipeline were replaced.

The risk and hazard analysis concluded that the above-described program, together with the Company's hydrostatic testing program, adequately mitigates the historical pipeline corrosion problem.

Although transportation of petroleum liquids by buried pipeline is generally considered to be a relatively safe method of shipment, spills do occur periodically.

1992 – 400 bbl release due to external corrosion

In Avila, there was a release of approximately 400 bbl; approximately 250 bbl into marine waters. Replaced failed pipeline section with coated pipe, and conducted electronic ("smart") pigging of the pipeline to verify integrity prior to startup.

1985 – 250 bbl release due to weld failure

In Shell Beach, a weld failed on a pipeline originally put into service in 1943. There was a release of approximately 200 – 250 bbl into marine waters. Replaced defective pipe, and pressure-tested prior to startup.

9/4/97 – Gas oil release during pipeline abandonment procedure

On September 4, 1997 a spill occurred during a pipeline abandonment procedure at Highway 58 & Salinas River. Approximately 31 barrels of gas oil spilled onto the ground during a line drain/purge with nitrogen. Product was recovered and impacted soil was removed.

9/6/97 – Crude oil release from Line 300

On September 6, 1997 Line 300 developed a leak at Betteravia and Rosemary Road. Approximately 20 barrels of crude oil escaped and was eventually recovered. A section of pipeline was replaced and the contaminated soil was removed and area restored to original condition.

9/23/99 – Oily water release due to hydrostatic testing

On September 23, 1999 a leak on the Bell Line occurred during hydrostatic pressure testing. Approximately 20 barrels of oily water escaped and was recovered. No further cleanup required. Pipeline repaired.

9/27/99 – Oily water release due to hydrostatic testing

On September 27, 1999 a leak again occurred on the Bell Line during hydrostatic pressure testing. Approximately 5 barrels of oily water escaped and was recovered. Repairs to pipeline were made.

12/28/00 – Crude oil release from Newlove segment of Line #353

On December 28, 2000 a leak was discovered on the Newlove segment of Line #353. Approximately 20 barrels of crude oil was recovered and repairs were made. External corrosion appeared to be the cause of the leak.

4/10/01 – Crude oil release from Los Flores Gathering Line

On April 10, 2001 a leak developed on the Los Flores gathering line. Approximately 20 barrels of crude oil was recovered and repairs were made. External corrosion was the cause of the leak.

2/20/02 – 10 gal crude oil discovery at Bell Station

On February 20, 2002 a leak was discovered at the shut-in Bell Station facility. This facility had been inoperative and crude oil was found near electrical conduits. Approximately 10 gallons was recovered and contaminated soil was removed. The leak source was not determined.

3/6/02 – Crude oil discovery at Bell Station

On March 6, 2002 during demolition and removal of underground piping at the Bell Station, additional crude oil was discovered and identified as the original source of the February release. External corrosion of the underground lines caused the leak and all lines were purged of product and removed.

4/4/02 – Crude oil release at Santa Maria Pump Station

On April 4, 2002 a leak was discovered at the Santa Maria Pump Station. Approximately 25 gallons of crude oil was recovered and an unidentified line was determined to be the source. The line was determined to be a cut but not capped, abandoned and the property of Unocal.

8/11/11 – Small Crude Oil Release from Line #353

On Thursday, August 11, a crew performing a pipeline depth survey observed a crude oil stain in proximity to line 353 (Orcutt Gathering System). The pipeline was immediately shut down and notifications were completed. The crude oil was contained and personnel excavated, repaired and removed contaminated soil. Crisis Management was informed due to the potential for media attention. An investigation to the cause of the leak has been initiated.

4/9/12 – Crude Oil Leak from Line #300

On Thursday, 4/19 At 18:37 CDT, the Pipeline Control Center received a call from the City of Santa Maria of a crude oil leak near the intersection of Grant and Railroad Ave. The fire department was on-scene and they had damned off the flow of oil. Some of the oil entered a storm drain and was isolated by city personnel. The pipeline was immediately shut down and blocked in. Field crews were dispatched and completed clean up of the surface road. Storm drain clean up and site excavation is underway. The estimated release volume is 3-5 bbls.

9/12/12 – 3 Gallon Crude Oil Release at Santa Maria Station

Santa Maria Station (Line 300) - manifold tubing fitting failure On Wednesday, 9/12, a Santa Maria station employee was working near a receive meter manifold when you noticed a stainless steel tubing connection fitting had failed and a small stream of crude oil was spraying.. The employee immediately shut the valve, stopping the release. Windy conditions caused the crude stream to spray a fine mist on the employee, his vehicle and manifold piping. The employee was wearing appropriate PPE and was not injured. The release was estimated at less than 3 gallons and was cleaned up. No agency reporting was required. An investigation on the cause of the fitting failure is underway.

1.7.4 Offsite Consequence Analysis

Trajectory Analysis

An offsite consequence analysis is required by OSPR regulations to address a "Reasonable Worst Case Oil Spill". A trajectory analysis was prepared for the Clean Seas Regional Resource Manual (http://www.cleanseas.com/equipment.htm) based on a 3,000-barrel spill in Port San Luis Bay. This is slightly larger than the required Reasonable Worst Case Oil Spill of 2,320 barrels. The Port San Luis Bay location is a reasonable surrogate for the areas where spills would most likely enter marine waters, namely Shell Beach and the mouths of the Santa Maria and Sisquoc Rivers. The trajectory map and description are reproduced on the following pages.

The trajectory analysis resulted in a calculated spill trajectory envelope that represents the outer perimeter of shoreside areas that could receive oil in the event of a spill. The envelope is based on extremes of climate, tide, current and wind and assumes pessimistic dispersion and other adverse weather conditions. It represents a composite of potential impact from all conditions rather than the impact of a single spill.

The trajectory analysis indicates potential shoreline impacts as far north as Pt. Piedras Blancas and as far south as Pt. Arguello. The Clean Seas Regional Resource Manual provides a strategy for sensitive area protection, including sensitive area maps. These maps, which are reproduced elsewhere in this Plan, indicate areas of special significance and areas that should be given special priority in the event of a spill.

The Central Coast Area Contingency Plan (2012) provides potential protection strategies for sensitive shoreline areas. However, the Incident Commander will determine the best approach for protection of sensitive areas based on prevailing conditions. The actual approach used in the event of a spill may or may not be the same as indicated in the Central Coast Area Contingency Plan.

Site:	Port San Luis Avila	**Latitude:**	(b) (7)
Hazard:	Facility	**Longitude:**	(b) (7)(F),
Volume:	3,000 bbls		
Duration:	3 days		

Trajectory Analysis:

An envelope of spill trajectories was calculated for facilities located along the shoreline of Port San Luis, which is located approximately 45 nautical miles north of Point Conception. The trajectory analysis considered oil transport by the wind and tidal currents, and spreading of the oil spill by physical processes such as gravity, surface tension, and tidal dispersion. Immediately after release of the oil, spreading of the spill would occur primarily from physical spreading processes. Within the first 12 hours, the spill would be expected to occupy a patch approximately 1 nautical mile in diameter. By 3 days, the spill patch would be approximately 4 nautical miles in diameter.

Transport of the spill away from the source would be due primarily to longshore coastal currents and wind-induced surface drift. The direction and strength of this transport varies seasonally and with the direction, strength, and persistence of local winds. Northward transport, which would be expected during the Davidson Current period (November-February) and/or during periods of southerly winds, could move the spill as far as Morro Bay after 1 day and within 4 nautical miles of Point Piedras Blancas after 3 days. Southward transport, which would occur during the California Current period (July-November) and/or during periods of northerly winds, could move the spill as far as Point Sal after 1 day. By 3 days, the spill would be expected to have moved past Point Arguello. Because of the current patterns south of Point Arguello and Point Conception, the spill would be expected to continue moving southward away from the coastline.

These spill trajectory envelopes represent the outer perimeter of shoreside areas that could receive oil in the event of any spill. The envelopes are based on regional extreme of climate, tide, current and wind, and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of any one spill. A full discussion of the details used for preparing these spill envelopes is provided in this Plan.

(b) (7)(F), (b) (3)

1.7.5 Spill Prevention

The Company conducts discharge prevention training sessions which are in addition of any other training employees may receive. Training for the prevention of oil spills focuses primarily on reducing the risk of an oil spill during operations. At least once a year personnel attend spill prevention training. Operational reviews are conducted and discussions on cause and circumstances are reiterated.

Maintenance and Inspection Records

Maintenance and inspection records of pipeline equipment will be made available to the OSPR Administrator upon request.

Required Prevention Measures

Federal requirements for pipeline construction and maintenance are described by PHMSA in 49 CFR 195, Subpart F. The California Pipeline Safety Act (CPSA) prescribes state regulations. These measures include those described in this annex.

The pipeline is protected from surges with full flow relief at each group pump station. The full flow relief consists of a pressure relief valve that relieves to a breakout tank. The relief system was examined in the risk and hazard analysis and found to be adequate.

Other required prevention measures include:

- cathodic protection for all lines
- coating for all lines
- hydrostatic testing of lines every 5 years (10 years initially for new line) or approved internal inspection tools (“smart pigs”) in lieu of hydrostatic testing
- valve inspections twice per year
- aerial inspections of pipeline routes

Valve Closure

Key valves in the pipeline system can be operated manually at the valve site or remotely from the Control Center. It takes approximately 60 seconds for a valve to be closed remotely.

1.7.6 Secondary Containment

Secondary containment systems exist for all of the breakout tanks associated with pumping stations in the Coast Area of operations. All breakout tanks in the Coast Area are surrounded by secondary containment dikes, which are designed to contain 110 percent of the capacity of the breakout tank at its high level alarm filling height.

The following figures list information related to the breakout tanks identified in the Coast Area pipeline system. This information is used to develop oil spill scenarios for response planning, as required by DOT regulations (49 CFR Part 194). The information shown in the following tables include:

- Station name
- Breakout tank number

All of the pump stations have Spill Prevention Control and Countermeasures (SPCC) plans that address drainage and tank berms. All berm drain valves are locked closed except during the draining of storm water. All storm water is inspected and logged before draining. The pump stations are exempt from NPDES regulations because they are transportation related facilities, Standard Industrial Code (SIC) 4612. For a description of facility drainage and secondary containment, please see facility SPCC Plan.

The Coast Area stations with breakout tanks and secondary containment systems are illustrated in the following figures.

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

1.7.7 Response Analysis

Introduction

The potential consequences of a worst-case discharge depend on the location of the incident and the mitigation measures implemented to contain and clean up the oil. Sensitive environmental resources include the public, wildlife, vegetation and aquatic environments, including domestic water supply and navigable waters.

Sensitive plant and animal resources are listed in this Plan. Along the pipeline right-of-way, few sensitive or endangered species would be impacted by a terrestrial oil spill. Some portions of the pipeline system are located in rural and moderately populated urban areas, where a spill could pose a danger to humans. In areas where a spill could reach aquatic habitats, there is a higher possibility of impacting sensitive plant and animal species.

Evacuation plans are described in this Plan for alerting the public and keeping people away from the area of a spill. Crude oil and semi-refined products pose a danger of ignition that would be the primary concern for responders in a populated area.

The California Department of Fish and Wildlife will be notified in the event of a reportable spill, and would provide input to the qualified individual on special precautions to be taken during spill containment and cleanup activities to preserve sensitive and endangered species along the pipeline route.

The Company is aware of the California Oiled Wildlife Care Network (OWCN) that has been established. The Oiled Wildlife Care Network (OWCN) is a statewide collective of trained wildlife care providers, regulatory agencies, academic institutions and wildlife organizations working to rescue and rehabilitate oiled wildlife in California. With this statement, the Company commits to using the OWCN to satisfy their oiled wildlife requirements. The Company is aware that the Responsible Party has the financial responsibility for oil wildlife care.

In the event of an oil spill, including a worst-case discharge, PHMSA and OSPR require that adequate and timely response resources are available to limit the potential environmental consequences. Sensitive aquatic areas that may be impacted by an oil spill are listed in the analysis of the largest foreseeable discharge (LFD) planning volumes in this Plan. These areas include small drainages, creeks, rivers, a slough and the coastal area along San Luis Obispo Bay.

In addition, a worst-case spill scenario for the Sisquoc Pipeline has been included to satisfy County of Santa Barbara requirements.

PHMSA Response Analysis

Terrestrial Spill Scenario

In the case of a terrestrial spill, cleanup contractors identified in Annex 2 of the Plan would be mobilized, along with adequate Company personnel and equipment. These response resources are fully capable of containment and cleanup of the (b) (7) (5) (b) barrel worst-case discharge along the pipeline system. For a worst-case discharge on land, PHMSA does not indicate any timing requirements for the arrival of containment and cleanup resources at the scene. The response resources required for a worst-case terrestrial spill include earth moving equipment, vacuum trucks, temporary oil storage containers, hazardous waste disposal contractors, and an adequate number of workers. The following describes the resources that the Company can bring to bear to respond to a (b) (7)(F), (b) spill.

Company personnel would most likely be the first responders to the release. The Company maintains spill response equipment at pump stations. This equipment is listed in this Plan and includes equipment such as sorbent pads, plastic sheeting, hand tools, portable pumps, generators, trucks, radios, response clothing and boots and gas detectors. Much of the equipment is contained in response trailers that can be brought to the site. The Company can also call in the GIMAT team, consisting of trained management personnel.

It is anticipated that much of the oil would be contained onsite by the dike system, however, this analysis assumes the entire (b) (7)(F), (b) escape. For a spill of this scope, the Company would immediately call in contractor support to assist in the containment and cleanup effort. The Company has primary full service response companies under contract. Contact and contract information is included in Annex 2 of this plan.

Manning – The Company has a contract in place with an OSRO that has been classified by the U.S. Coast Guard and approved by the State of California to meet the requirements for spill response. The OSRO can and will provide HAZWOPER trained personnel appropriate and necessary for a response. A copy of the contract and contact information for the OSRO is included in Annex 2 of this plan.

Recovery Equipment – Recovery equipment would be required to recover the oil and contaminated soil and debris. Pooled oil would most likely be sucked up by vacuum trucks or pumped into tank trucks. The Company has portable pumps and generators stored at their tank farms that can be used for pumping oil. In addition, portable tanks can be brought in to store recovered oil if required. The contracted OSRO will provide additional required equipment necessary for the response.

Storage/Disposition of Recovered Oil – The Company has several options for the storage and disposal of the recovered oil. First, the oil can be taken to the nearest pump station that has storage capacity. In addition, the recovered oil could be taken to the Avila Station, which has over 15 storage tanks, or to the Santa Maria Refinery. It is envisioned that the recovered oil would eventually be taken to one of the Company's refineries for reprocessing. Contaminated material could be taken to one of the pump stations for temporary storage and possible cleanup, or to an approved landfill.

Inland Water Spill Scenario

The pump stations are located such that it would be difficult for a worst case spill to reach an inland waterway. However, it is possible for a pipeline release to reach an inland waterway. In this case, the Company would respond with both their personnel and their full service spill contractors. The OSROs maintain extensive inventories of boom, sorbent pads, and skimming equipment that would be used to contain, collect, and recover the spilled material. For spills into the Sisquoc or Santa Maria Rivers, the strategy is to attempt to boom the river mouth at the coastline to divert and contain the spill. If a spill occurs into rapidly moving water, the oil would disperse over a large area as it is carried downstream in a high-energy environment.

Navigable Water Still Scenario

A worst case spill at the coastline could impact navigable water along a 5.5 mile stretch of San Luis Obispo Bay near Pismo Beach and Avila. Two pipelines in this area are located within about 1,000 feet or less of the shoreline. The OSPR reasonable worst case spill was calculated to be (b) (7)(F), (b) (3) . Since the PHMSA worst case discharge is from a breakout tank well away from navigable waters, the OSPR worst case spill has been used to determine offshore and shoreline response resource requirements.

Response resource requirements and timing are provided in the OSPR regulations (14 CCR 817.02) but are unavailable in the applicable DOT regulations for on-shore pipelines (49 CFR 194.115). However, the approach discussed in the U.S. Coast Guard regulations (33 CFR 154) for planning response resources for a worst case discharge can be used as a guideline to plan an effective oil spill response under these circumstances. Under the USCG approach, the following planning volumes would be used for heavy crudes and fuels (persistent, Group 4 oils) in a near-shore environment:

(b) (7)(F), (b) (3)

In order to calculate a Response Planning Volume for on water recovery, the Reasonable Worst Case Spill (OSPR), or the worst case discharge capable of impacting navigable waters (PHMSA) is multiplied by a persistence factor and then by an emulsification factor, both of which are oil group dependent. Where uncertainty in the oil group is present, the worst case planning volume is the one with the highest multiplicative product of persistence and emulsification factors. The highest on water product is 1.0 for Group 3 - Medium Crude, and the highest shoreline product is 1.0 for Group 3 or Group 4 - Heavy Crude. Factors are shown in the following table.

Oil Group	Description	On Water Persistence Factor	On Shore Persistence Factor	Emulsification Factor
1	Non-persistent (e.g., gasoline)	0.2	0.1	1.0
2	Light Crude	0.5	0.3	1.8
3	Medium Crude	0.5	0.5	2.0
4	Heavy Crude	0.5	0.7	1.4

These factors are applicable for both OSPR and USCG regulations. Although most of the crude oils transported in the subject pipelines are Group 4, there is potential for some Group 3 oil to be transported. Thus, Group 3 has been assumed for purposes of calculating worst case planning volumes.

The OSPR worst case spill would translate to an on water planning volume of 2,320 barrels. Increasing on water recovery capacity must be mobilized within specified time periods, according to the USCG regulations, as follows:

Within 12 hours, daily on-water recovery capacity must be at least 15 percent of the response planning volume, or 348 barrels per day (Tier 1 USCG planning requirement).

Within 36 hours, daily on-water recovery capacity must be at least 25 percent of the response planning volume, or 580 barrels per day (Tier 2 USCG planning requirement).

Within 60 hours, daily on-water recovery capacity must be at least 40 percent of the response planning volume, or 928 barrels per day (Tier 3 USCG planning requirement).

(b) (7)(F), (b) (3) [redacted]

1.7.8 OSPR Response Planning Volume

(b) (7)(F), (b) (3)

[redacted]

The Company is a member of the Clean Seas oil spill cooperative, and will call upon Clean Seas to be the primary on-water spill contractor in the event of an oil spill into navigable water. Clean Seas has one of its oil spill response vessels (OSRV) and equipment staged in response trailers (Van Numbers 3 and 10) located at Avila Beach, which is only a few miles away from the potentially affected shoreline area. Clean Seas response resources are listed in this Plan.

The "de-rated" response capacity (using the USCG criteria for taking only twenty percent of the manufacturer's rated equipment capacity) of a Clean Seas response vessel is 10,282 barrels per day for tier one, two or three planning requirements, with 12,665 barrels of on-board storage capacity. Thus, the worst case on-water planning volume of 2,320 barrels and the required daily recovery rates would be well within the capabilities of the Clean Seas oil spill response resources.

Twenty percent of Clean Seas response capacity can operate in shallow water (less than six feet), although this would be difficult in the area of interest since most of the area is in a high energy coastline zone, and six foot depths are generally within the surf zone. A large number of vessels of opportunity are available for response activities such as boom towing, logistics and wildlife rescue.

Shoreline response resources may be differentiated into protection and cleanup resources, consistent with the terminology used in OSPR regulations. Protection resources are those, such as on-water diversion boom and equipment for sediment diking that may be used to prevent oil from reaching and contaminating sensitive areas. Cleanup resources are those that would be used to remove oil from areas after they have become contaminated. Protection resources are considered in the next section. Cleanup resources are considered in the following section.

Shoreline Protection

The basis for the identification of shoreline protection and cleanup resources is the Clean Seas Regional Resource Manual (CSRRM) "spill envelope" shown in this Section. The "spill envelope" represents the maximum extent 3,000 barrels of oil would be expected to reach along the shoreline in three days if no response occurs. If the Company must respond to a spill, it will most likely be somewhere within the boundaries of the "spill envelope", though not everywhere. The CSRRM recognizes this and states: "no single spill could possibly impact the coastline over the entire spill envelope.... A single spill could not simultaneously move along all of the trajectories used to develop the spill envelope." [page 202-1] Consequently, while the "spill envelope" is used to determine the extent of the area at risk, the resources required would never need to encompass the entire area at once. The "spill envelope" is useful primarily to assist in defining the mix of resources that would be most suitable to respond to a spill, not the quantity.

This Section identifies, by CSRRM/ACP map location, the recommended primary and secondary protection strategies and the resources to implement those strategies for each sensitive area within the spill envelope identified in the CSRRM. Shoreline protection is more likely to be required close to the source of a spill than farther away. Thus, the areas closest to Avila are shaded. However, since the area covered by the table is far larger than any single spill would affect, only a subset of locations identified in this Section would need protection. Therefore, except for the four areas nearest Avila, only 50% of the additional resources are considered necessary to respond to a worst case spill involving the facility.

Shoreline Protection Resource Summary

Sensitive Area Protection Resources								
Location	**RRM/ ACP MAP X REF**	**Primary Strategy**	**Secondary Strategy**	**Boom Length**	**Boats (note)**	**Workers**	**Heavy Equip.**	**Operator**
Oak Knoll Creek	CS 03-05	Sed. Dike	None			5	1	1
San Simeon Point	CS-04-01	Sed. Dike	None			5	1	1
Pico Creek	CS-04-02	Sed. Dike	None			5	1	1
San Simeon Creek	CS-04-03	Sed. Dike	None			5	1	1
Villa Creek	CS 05-03	Sed. Dike	None			5	1	1
Cayucos Creek	CS 06-01	Sed. Dike	None			5	1	1
Morro Bay	CS 06-06	Hbr Boom	None	3,500	4	15	1	1
Islay Creek	CS 07-01	Sed. Dike	None			5	1	1
Diablo Canyon Area*	CS 07-03	Hbr Boom	None	200	2	5	1	1
San Luis Obispo Creek*	CS 08-03	Sed. Dike	Hbr Boom	200	2	10	1	1
Pismo Creek*	CS 09-02	Sed. Dike	None			5	1	1
Arroyo Grande Creek*	CS 09-03	Sed. Dike	None			5	1	1
Oso Flaco Creek	CS 10-01	Sed. Dike	None			5	1	1
Santa Maria River	CS 10-04	Sed. Dike	Hbr Boom	2,000	2	15	2	2
Schuman Creek	CS 11 01	Sed. Dike	Hbr Boom	200		5	1	1
San Antonio Creek	CS 11 03	Sed. Dike	Hbr Boom	250		10	1	1
Santa Ynez River	CS 12 01	Sed. Dike	Hbr Boom	2,000	2	15	1	1
* Areas nearest Avila			Totals	8,350	12	125	19	19
Note: Boats based on number and recommended location & method of securing booms on CSRRM maps								

The following identifies the shoreline protection resources most likely to be needed in the event of a spill from the pipeline system. The resources for the four areas located closest to Avila are added to 50% of the resources required for the balance of the area covered by the 24-hour spill envelope. These estimated shoreline protection resource requirements are compared on the Table to the shoreline protection resources available from Clean Seas.

1.7.9 Protection Resources Estimate

Sensitive Area Protection Resource Summary	Boom (ft)	Boats	Workers	Heavy Equip.	Operators
Probable on Water Resources (Shaded Locations)	400	4	25	4	4
Estimated Additional Resources (50% of rest)	3,975	4	50	8	8
Totals	4,375	8	75	12	12
Protection Resources Available From Clean Seas Table # (in CSRRM) Page # (in CSRRM)	9,424 501-1 (500-1)	23 (500-5)	571 502-1 (500-11)	62 502-2 (500-13)	(provided by equipment vendor)

The above table demonstrates that the Company has more than adequate shoreline protection resources available from Clean Seas. In addition, other companies in the Company contractor database are also capable of providing resources for shoreline protection.

Shoreline Cleanup

The types and quantities of shoreline cleanup resources required depend on the type of shoreline, its accessibility, the volume of oil that must be recovered, and other factors, such as tidal cycles, winds, and currents. The distribution of shoreline types that could be affected by a spill from the pipeline system is shown on the following table. This table is a summary of the ESI categories from the Clean Seas Oil Spill Cleanup Manual.

The dominant shoreline types are of ESI types 1 through 4 comprising 67 percent of the total shoreline. While another 9 percent is ESI type 9 and 5 percent is ESI 10, these ESI types are represented only in the Pico Creek and Morro Bay areas and at the Santa Ynez River mouth, locations quite distant from Avila. Eighty two percent of the total shoreline is in ESI types 1 through 6. Therefore, the shoreline cleanup resources available to the Company should be capable of responding primarily to these dominant shoreline types. The resource requirements analysis for shoreline cleanup considers primarily the dominant shoreline types in determining the resource requirements.

Another factor to be considered is the accessibility of the shoreline in areas that might be affected by a spill. The OSPR Guidance Document and the Central Coast Area Contingency Plan contain access information regarding access locations within the area of concern. For this analysis, the accessibility of specific shoreline types, where shoreline type is a factor in cleanup, was estimated. It was assumed that 20 percent of the shoreline affected by a spill would be inaccessible for the purposes of estimating response resources.

Summary of Shoreline ESI Types

ESI Type	Total Miles	Percent
1 - Cliff	18.3	14 %
2 - Platform	21.4	16 %
3 - Fine/Medium Sand	34.8	26 %
4 - Coarse Sand/Gravel	14.8	11 %
5 - Mixed Sand/Gravel	9.3	7 %
6 - Gravel & Riprap	11.0	8 %
7 - Exposed Tidal	3.0	2 %
8 - Sheltered Rocky	2.1	2 %
9 - Sheltered Tidal	12.7	9 %
10 - Salt Marsh	6.5	5 %
Total	133.9	100 %

The following table provides this estimate of inaccessible versus accessible shoreline. This is used as the input for estimating resources required for shoreline cleanup.

Distribution of Shoreline Types

Substrate ->	Beach		Cobble		Marsh	Rock/ Block	
ESI Types ->	3,4,5,7,9		6		10	1,2,8	
Factors:	Access	No Access*	Access	No Access*			Total
Miles of Shoreline**	59.7	14.9	8.8	2.2	6.5	41.8	133.9
% of Shoreline Type	45%	11%	7%	2%	5%	31%	100 %+

Notes:
* Inaccessible shoreline estimated at 20 percent of total shoreline for type(s).
** Miles of shoreline.
+ Totals do not add to 100% due to rounding.

The following table provides an estimate of the resources required to respond to an OSPR (b) (7)(F), (b) (3) [redacted]s. The calculations are based on actual experience in several shoreline oil spills in California and use the percentages from the previous table. The calculations involve estimates of the volumes of material that will be recovered and the types of equipment necessary to recover that material. The Company has contracts with contractors capable of providing all the equipment identified on the following table. See Annex 2 of this Plan for information on contractors and equipment.

1.7.10 Resources Required for Shoreline Protection and Cleanup

TOTAL SHORELINE PLANNING VOLUME (PV)					(b) (7) (F) (b)		
Shift recovery factor and bbl =			33		766 bbl		
INPUTS FOR RESOURCE REQUIREMENTS CALCULATIONS							
	BEACH					Block/Roc	TOTALS
Substrate >	Sand, gravel, mud		Cobble		Onshore	Man Made	
	ESI #3, 4, 5, 7, 9		ESI #6		ESI #10	ESI #1, 2, 8	
	Access	No access	Access	No access			
% of shoreline total	45.0	11.0	7.0	1.6	4.8	31.0	100 %
# shifts per day	2	2	2	2	2	2	
# of recontaminations	3	3	3	3	3	3	
Total bbl on substrate	1,044	255	162	37	111	719	
							109 Persons

RESOURCES:	**ASSUMPTIONS:**	**TOTAL REQUIRED**	
Mobile HQ	1 driver/clerk is assigned. For use by the IC, IC staff and supervisors	1	each
4 Wheel drive	For inaccessible areas	3	each
Dozer	1 operator is assigned. For use where heavy equipment is accessible	1	each
Loader/backhoe	1 operator. Used to lead dump trucks and move material	7	each
Grader/Scraper	1 operator. Heavy equipment to remove oil/substrate	3	each
Vacuum truck	1 operator. To remove oil/emulsions	2	each
Vac. pump w/hoses	1 operator. Needs 1-2 laborers. Used for smaller areas than vacuum truck	2	each
Dump truck	1 operator. Heavy equipment for hauling waste	3	each
Barrels (in lieu of dump)	Used by laborers where sump trucks can't be used	104	each
Liquid waste (bbl = TPV X)	Twice response planning volume	4,640	barrels
Containment boom (ft)	2 operators/1,000^2	1,725	feet
Pressure washer	3 operators. Warm/cold/high/low choice.	3	each
Sorbent pads (bales)	100' is used as guideline. Could be pads, rolls or bales.	240	bales
Oil mops/Rope skimmers	2 operators. Used to clean oil in marshes or tight areas	1	each

RESOURCES:	ASSUMPTIONS:	TOTAL REQUIRED	
Hand tools	Hand equipment for laborers	22	each
Generator/lights	Could need more if the oil is wide	4	each
Flash lights	1 for each supervisor's truck	3	each
Chemical toilets	1 toilet for every 15 people	8	each
Signs/traffic control	ID loading, dumping, smoking, entrance, headquarters, restricted areas	8	each
Warning tape (yds)	Border restricted areas and traffic paths in sensitive areas	5,173	yards
Radios	5 radios per set for communications	10	each
Fuel truck	1 operator. May need both gas & diesel for generators, pumps, trucks, heavy equip	3	each
Protective clothing	Calculated for entire episode. 1/operator, supervisor + 2/laborer + 5 IC staff every	70	sets
Protective plastic sheet	Used for lining dump trucks to prevent leaking, seeping	14	rolls
Laborers	Must be trained for hand removal	44	laborers
Operators/Drivers	This is the sum of the above operator assignments	59	Op/Drivers
Crew supervisors	1 supervisor for 15 labor/operator. Does not include IC team	7	Supervisors

1.7.11 Sisquoc Pipeline Worst Case Spill Analysis

An unlikely but potentially serious spill could occur if the Sisquoc Pipeline is severed at the Sisquoc River pipeline crossing. This scenario is considered the worst case spill scenario, due to the potential environmental impacts when the river is flowing at this location along the pipeline route.

Spills at other locations along the pipeline route would be relatively straightforward to contain and clean up, and would have the potential for less severe environmental consequences, even if a larger spill volume is involved. This is because the pipeline is buried at least 48 inches below ground level in agricultural fields. The terrain is flat along the areas of the pipeline route downstream from the Meter Facility at the Sisquoc Pump Station, where larger spill volumes might result from a pipeline accident.

Sisquoc River Spill

(b) (7)(F), (b) (3)

[redacted]

In general terms, once a pipeline leak is detected by the SCADA system flow meters, the Control Center will shut in block valves to isolate the problem and immediately call County Emergency Services. The Santa Maria Area Supervisor, who normally assumes the role of Incident Command in an emergency, will then be notified without delay to mobilize emergency responders. All American Pipeline would also be notified if a spill involves or threatens their Sisquoc Pump Station facility.

If an employee discovers or is notified of a spill, the employee will notify the Control Center to shut in the pipeline block valves, and then call County Emergency Services. The employee will then notify the Area Supervisor to mobilize emergency responders.

The Incident Commander activates the Integrated Contingency Plan (ICP) Emergency Response Plan to notify responders and to initiate emergency response actions to limit any potential environmental consequences of a crude oil spill along the pipeline route.

The Incident Commander would dispatch area personnel to the apparent location of a spill or leak to assess the severity of the situation, and to perform manual operations such as closing block valves if it is safe to do so. It is estimated that someone would be onsite looking for the problem within 30 minutes after the Controller detects the problem. Once a leak is confirmed and assessed, the employee would notify the Incident Commander of its location, estimated amount spilled, control of the source of the problem, and other pertinent information. The Incident Commander would then proceed to the site, call for Company personnel and contractor support and notify appropriate agencies (the County Emergency Center will be contacted again to provide an update on the situation).

If the spill is in the Sisquoc River, and could potentially be carried downstream toward the coastline, the Incident Commander would immediately notify Clean Seas. Clean Seas personnel and equipment from Carpinteria would be at the Santa Maria River mouth within three to four hours. It is estimated that the Incident Commander would be onsite within 45 minutes after notification. Once onsite, the Incident Commander would continue to assess the situation, begin directing response actions, and call in additional services as necessary. For any significant spill, the Incident Commander would activate the ICP at the earliest possible opportunity and mobilize appropriate resources.

Once the ICP is activated for the postulated worst case spill, the actions taken in response to the spill would depend on river conditions.

If the river was full of water and running strongly, it is likely that nothing would be done to try to contain the oil in the river. In this case, strong currents may carry the oil over twenty miles downstream to the coastline, dispersing it rapidly. If the coastline or ocean is threatened by a spill, Clean Seas would be notified, and spill containment/cleanup equipment (staged at various locations throughout the County) and manpower would be mobilized to the Santa Maria River mouth.

If the river were primarily dry, which it is the majority of the year, the Incident Commander would immediately call in spill response contractors in an attempt to prevent the oil from spreading in the river bottom. A list of spill response contractors is included in Annex 2 of this plan. Containment of the oil at the Sisquoc River pipeline crossing would be the likely response to an oil spill the majority of the time. The California Department of Fish and Wildlife (CDF&W) would be notified of a spill into a flowing or riparian habitat, as discussed in the ICP. With the approval of CDF&W, earth-moving equipment could be used for spill containment in the river bottom, which is currently disturbed by other activities and lacks sensitive riparian plant and animal species. Access routes for heavy equipment to the river bottom can be chosen to avoid damage to less disturbed areas of the river bank.

If the flow of the river is relatively light, the most likely response to the spill would be to contain it in the river and prevent it from spreading downstream. This could be done by closing off the flow by using bulldozers to build sand berms or blocking dams across the direction of flow. Valved pipe or inclined pipe could be used to allow uncontaminated water to bypass the obstacle to flow, if necessary. The oil would then be cleaned up using skimmers and/or sorbent pads. The response effort would also attempt to keep the oil from reaching the water channels within the river. This would be done with sandbags and/or bulldozers. Depending on the area contaminated, the oil would be cleaned up by hand using hand tools and/or tractors. Another technique that would most likely be used in the dry areas of the riverbed would be the digging of pits or sumps to collect the oil. Vacuum trucks would then be used to remove the oil that flows into the pits.

If the flow were moderate in the river, whereby it would not be practical to close off the flow, sorbent booms or barriers would be constructed. These types of booms are constructed of two fences with sorbent material placed in-between to capture the oil. Booms allow water to flow past them, while trapping oil floating on the surface. The placement of sorbent booms or barriers during moderate flow conditions would be chosen by the Incident Commander at a point downstream, where the sorbent barriers could be positioned prior to any oil reaching the downstream site.

Agricultural Land Spill

A pipeline accident along the pipeline route in agricultural areas or at Santa Maria Pump Station would trigger all of the same initial responses as the Sisquoc River Spill scenario discussed above. The likely response to a spill in agricultural areas would be to immediately call in earth-moving equipment and workers to build containment dikes around the spill to prevent spreading. Actions would be taken to block drainage of oil into culverts or ditches, if necessary, and to use vacuum trucks or sorbents to clean up the spill. Oil-soaked vegetation would be cut by hand and bagged for proper disposal, and oil-contaminated soil would be rehabilitated consistent with the techniques described in the Clean Seas Manual.

1.7.12 Onshore Trajectory Analysis

Pipelines in Santa Barbara and San Luis Obispo Counties cross the Santa Maria and Sisquoc Rivers and many small creeks along the coast. Most of these water courses are seasonal and have no gauging stations. The required information to conduct a thorough trajectory analysis for each creek is simply not available.

However, an attempt was made to perform a trajectory analysis in order to help release respondents understand where a release might travel after entering creeks and the fastest times expected for a release to enter marine waters.

The pipeline routes were mapped on USGS Quad Maps. The routes were divided into segments according to drainage basins. The shortest time required for a release within a particular drainage basin to reach marine waters was sought. This shortest time would be from a product release directly into a creek with the shortest distance to marine waters within the drainage basin. Releases elsewhere within the drainage basin would first need to travel overland and then enter the creek.

As per 40 CFR Part 112 Attachment C guidelines, the Chezy-Manning equation was used to calculate stream and thus released product velocities:

v = (1.5/n) * r(2/3) * s(1/2)

where:
n = roughness coefficient
r = hydraulic radius (approximately 0.667 * the channel depth)
s = channel slope

As little specific information is available for the small, often seasonal creeks crossed by the pipelines, certain general assumptions were made. Creeks crossed by the pipeline tend to be winding, minor streams. Therefore, as per 40 CFR Part 112 Attachment C guidelines, a value of n, the roughness coefficient, was chosen as 0.04.

The depths of the creeks vary seasonally and throughout the lengths of the creeks. A channel depth of 2.5 feet was chosen to represent average flood depths for -all of the creeks and a channel depth of 10 feet was chosen for the rivers.

The channel slope was taken from the USGS Quad Maps. In order to maximize the channel slope, the location where the creek with the shortest distance to marine waters within a drainage basin was crossed or adjacent to the pipeline was chosen. The difference between the elevation of this location and that of creek's final destination was noted. For a stream proceeding uninterrupted to marine waters, the final destination would be at sea level. However, many creeks flow into reservoirs where further flow would be inhibited. Therefore, the elevation of the reservoir was taken as the elevation of the final destination. The distance of the creek crossing to the final destination was measured using a ruler. Because the channels often wind heavily, this distance was multiplied by 1.5 to obtain a final channel length. The slope of the channel was obtained by dividing the elevation change by the channel length.

The table showing resources required for shoreline protection and clean up provides the identification of the creeks and rivers, the final destinations of releases, the elevation changes, channel lengths and velocities calculated for this study and the times required for releases to reach their final destinations. 14 CCR Division 1, Subdivision 4, Chapter 3.3 Section 817.02 requires that a trajectory analysis be performed for releases with the potential to reach marine waters within 72 hours. Trajectory analyses were only performed for these releases.

This Plan also discusses trajectory analysis and spill protection and mitigation. This Annex lists the various creeks in the area and presents information on creek protection. This Plan addresses a discharge into the Sisquoc River.

Information on sensitive environments along the various pipeline segments is contained in this Plan. Additional information on the sensitive resources along the San Antonio Creek and Barka Slough are contained in this Plan. Information on sensitive resources along the coast is summarized in this Plan with detailed information contained in the Area Contingency Plan.

Dispersant Use Plan

Spill incidents from onshore pipelines are generally poor candidates for chemical dispersant treatment. The shallow waters near the coastline, where a spill might occur in relatively small volumes, would preclude the use of dispersant chemicals under most circumstances. Although the use of chemical dispersants is gaining wider acceptance, it remains tightly regulated. The Clean Seas Regional Resource Manual: (http://www.cleanseas.com/equipment.htm) contains a detailed discussion of dispersant use including regulatory requirements, information on potential impacts and application techniques. A discussion of dispersant usage is also contained in the Area Contingency Plan (ACP).

Trajectory Analysis

Trajectory Analysis

Segment	Creek Name	Via	Final Destination	Elevation (ft)	Distance (ft)	Distance * 1.5	Velocity	Distance to Marine Waters	Distance * 1.5	Time to Reach Marine Waters (hours)
Line 300										
1	San Antonio Creek	Barka Slough	Ocean (sand dunes)	100	65,000	97500	1.69	65,000	97500	16.04
2	Harris Canyon	San Antonio Creek	Ocean (sand dunes)	120	75,000	112500	1.72	75,000	112500	18.15
8	Sanata Maria River		Ocean	80	60,000	90000	1.57	60,000	90000	0.92
12	Sanata Maria River		Ocean	80	65,000	97500	1.51	65,000	97500	1.00
19	Meadow Creek		Ocean	10	1,000	1500	4.30	1,000	1500	0.10
20	Pismo Creek		Ocean (Pismo Beach)	10	1,000	1500	4.30	1,000	1500	0.10
21	San Luis Obispo Creek			10	1,000	1500	4.30	1,000	1500	0.10
42	Sisquoc River	Sanata Maria River	Ocean	140	120,000	180000	1.47	120,000	180000	1.85
Line 400										
49	Arroyo Grande Creek		Ocean	40	20,000	30000	2.72	20,000	30000	3.06
62	Pismo Creek		Ocean (Pismo Beach)	60	10,000	15000	6.09	10,000	15000	0.68
63	San Luis Obispo Creek		Ocean	20	3,000	4500	3.51	3,000	4500	0.36
64	Pinole Creek		Ocean	30	5,000	7500	3.33	5,000	7500	0.62
Line 355										
46	San Luis Obispo Creek (several times)		Ocean	30	3,000	4500	4.30	3,000	4500	0.29

1.7.13 Spill Response Equipment List & Location

Equipment Location: Santa Margarita Pump Station; 18781 El Camino Real; Atascadero, CA 93422					
Inspection Date:		**Inspector:**			
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Year Purchased**	**Comments****
*Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)					
Emergency Response Trailer #1					
1. Trailer		Each	1		
2. Tires		Each	2		
Personal Protective Equipment					
3. Cartridges, Airborne Particle		Each	3		
4. Cartridges, Organic Vapor		Each	3		
5. Face Shield Frame		Each	5		
6. Face Shields (Clear)		Each	5		
7. First Aid Kit		Each	2		
8. Floatation Devices, Personal		Each	1		
9. Pump, Draeger		Each	1		
10. Pump, MSA Combustible Gas		Each	1		
11. Radio (Kept in Main Office)		Each	1		
12. Radio, Portable		Each	4		
13. Respirators	Medium	Each	3		
14. Respirators	Large	Each	1		
15. SCBA Gear		Each	6		
Spill Containment/Absorbant Materials					
16. Absorbent Boom		Bag	5		
17. Absorbent Pads		Bag	8		
Decon Equipment					
18. Brush, Scrub		Each	3		
19. Buckets		Each	2		
20. Hand Cleaner		Each	1		
21. Pool, Plastic Kiddie		Each	3		
22. Shower		Each	1		
23. Tubs		Each	3		
ADDITIONAL COMMENTS:					

Equipment Location: Santa Margarita Pump Station; 18781 El Camino Real; Atascadero, CA 93422					
Inspection Date:		**Inspector:**			
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Year Purchased**	**Comments****
*Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)					
Emergency Response Trailer #2					
24. Trailer		Each	1		
25. Tires		Each	2		
Personal Protective Equipment					
26. Absorbent Boom, Large		Each	6		
27. Absorbent Boom, Small		Each	3		
28. Absorbent Pads		Bag	6		
29. Anchor		Each	10		
30. Boom, Containment		Feet	500		
31. Can, Gasoline (5-Gallon)		Each	1		
32. Face Shield (Clear)		Each	6		
33. Life Vests		Each	13		
34. Rope, 600’		Roll	1		
35. Sponge, Scrub		Each	38		
36. Stretcher		Each	1		
37. T-Posts		Each	6		

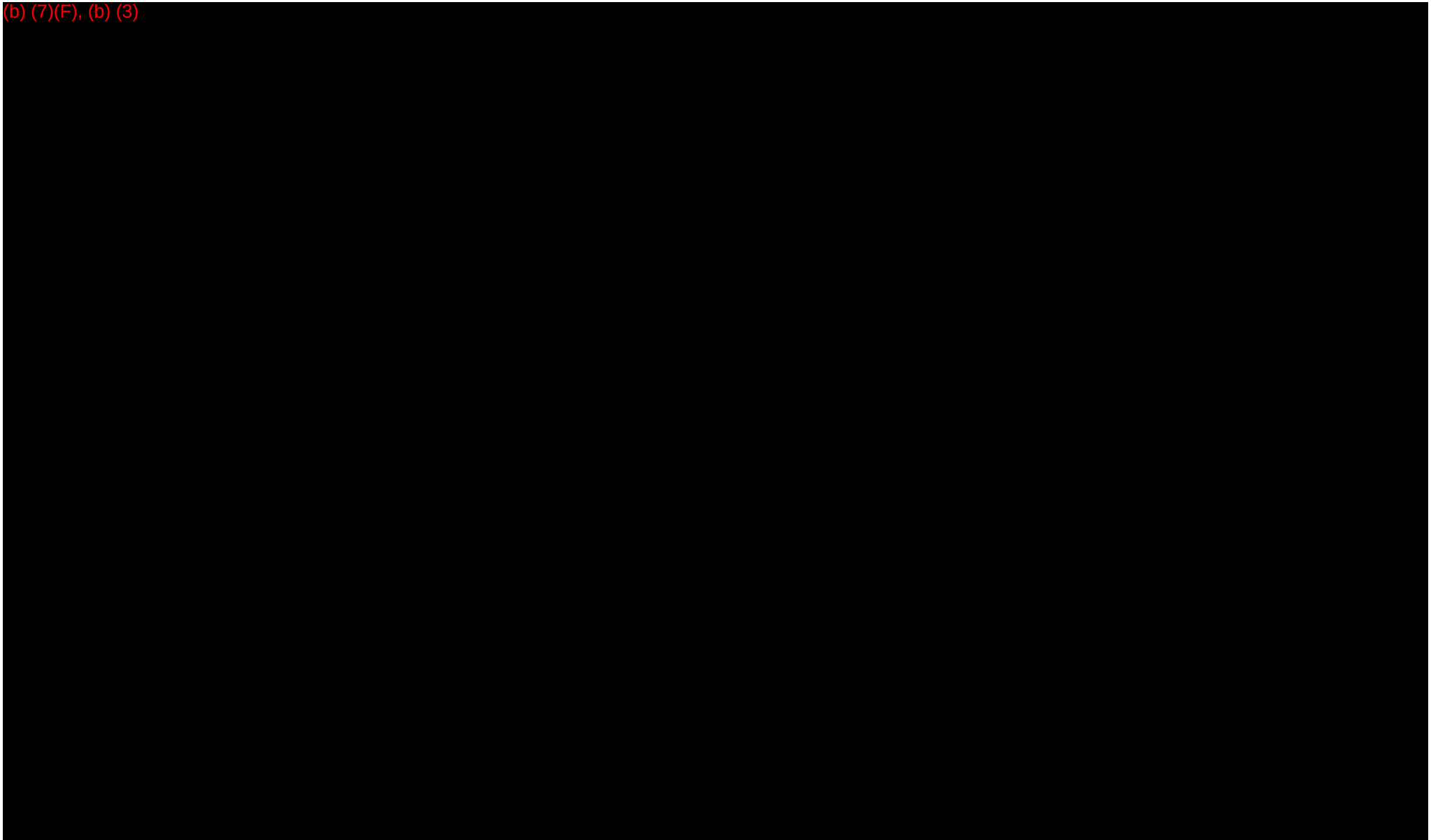
ADDITIONAL COMMENTS: _____

Equipment Location: Santa Maria Pump Station; 1580 East Battles Road; Santa Maria, CA 93454						
	Inspector:					
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
*Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
Emergency Response Trailer #1						
1. Trailer		Each	1			
2. Tires		Each	2			
Response Equipment						
3. Calibration Station, 4-Way		Each	1			
4. Generator, EB 5000	Honda	Each	1			
5. Sample Kit		Each	1			
6. Lights, Work w/ Stand		Each	1			
7. Lights, Portable-Trailer Mounted		Each	4			
8. Radio Base Station		Each	1			
9. Radio, Portable		Each	4			
10. Rope, Poly (500' x ⅝")		Roll	1			
Decon Equipment						
11. Brushes, Scrub		Each	8			
12. Buckets, 5-Gal w/ lids		Each	6			
13. Pool, Small Plastic		Each	3			
Personal Protective Equipment						
14. Eye Wash Station		Each	1			
15. Face Shield		Each	1			
16. First Aid Kit		Each	1			
17. Respirator		Each	6			
18. Respirator Cartridges	Assorted	Each	30			
19. SCBA		Each	6			
20. SCBA, Spare Bottles		Each	4			
21. Vest, Life		Each	6			
Spill Containment/Absorbant Materials						
22. Oil Snare		Each	1			
23. Sorbent Boom		Section	23			
24. Sorbent pads		Bundle	6			

Equipment Location: Santa Maria Pump Station; 1580 East Battles Road; Santa Maria, CA 93454						
	Inspector:					
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
*Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
Emergency Response Trailer #1						
Hand Tools						
25. Monitor, 4-Way		Each	1			
26. Post Driver, "T"		Each	1			
Miscellaneous Materials						
27. Battery Charger	120v x 120v	Each	1			
28. Fax Machine		Each	1			
29. Fax Machine Cartridge		Each	2			
ADDITIONAL COMMENTS:						

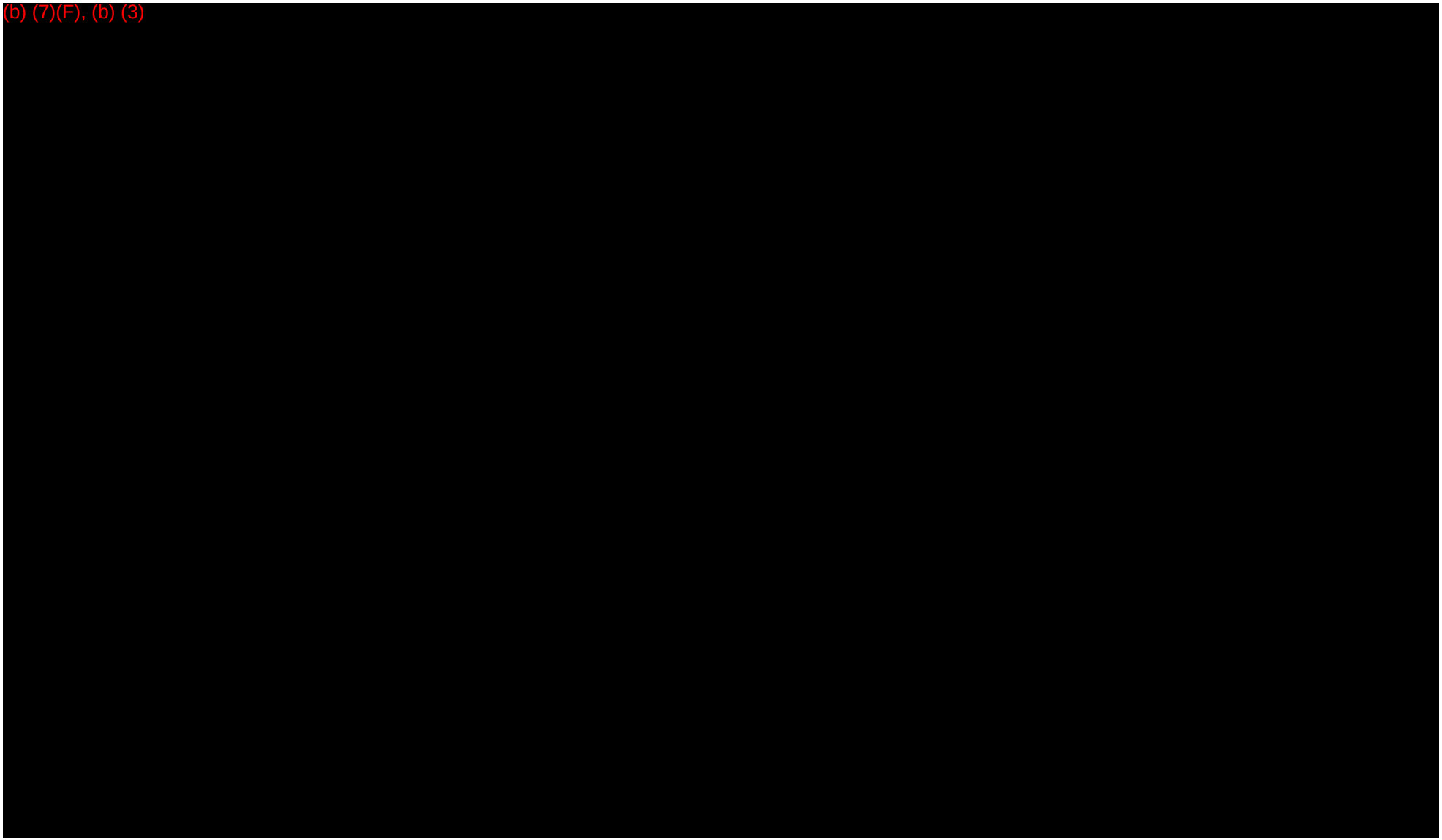
SANTA MARIA TOPOGRAPHICAL MAP 1

(b) (7)(F), (b) (3)

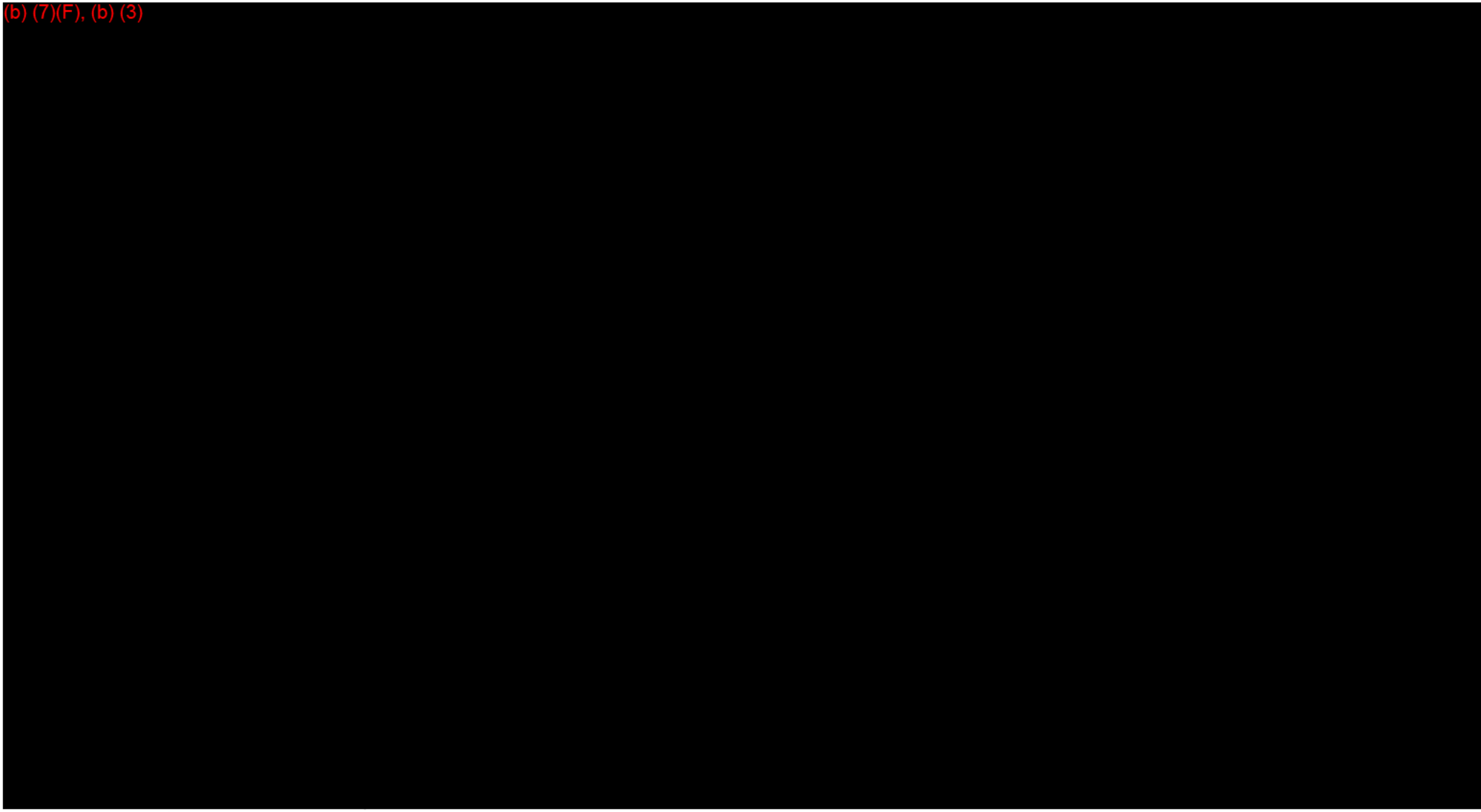


SANTA MARIA TOPOGRAPHICAL MAP 2

(b) (7)(F), (b) (3)

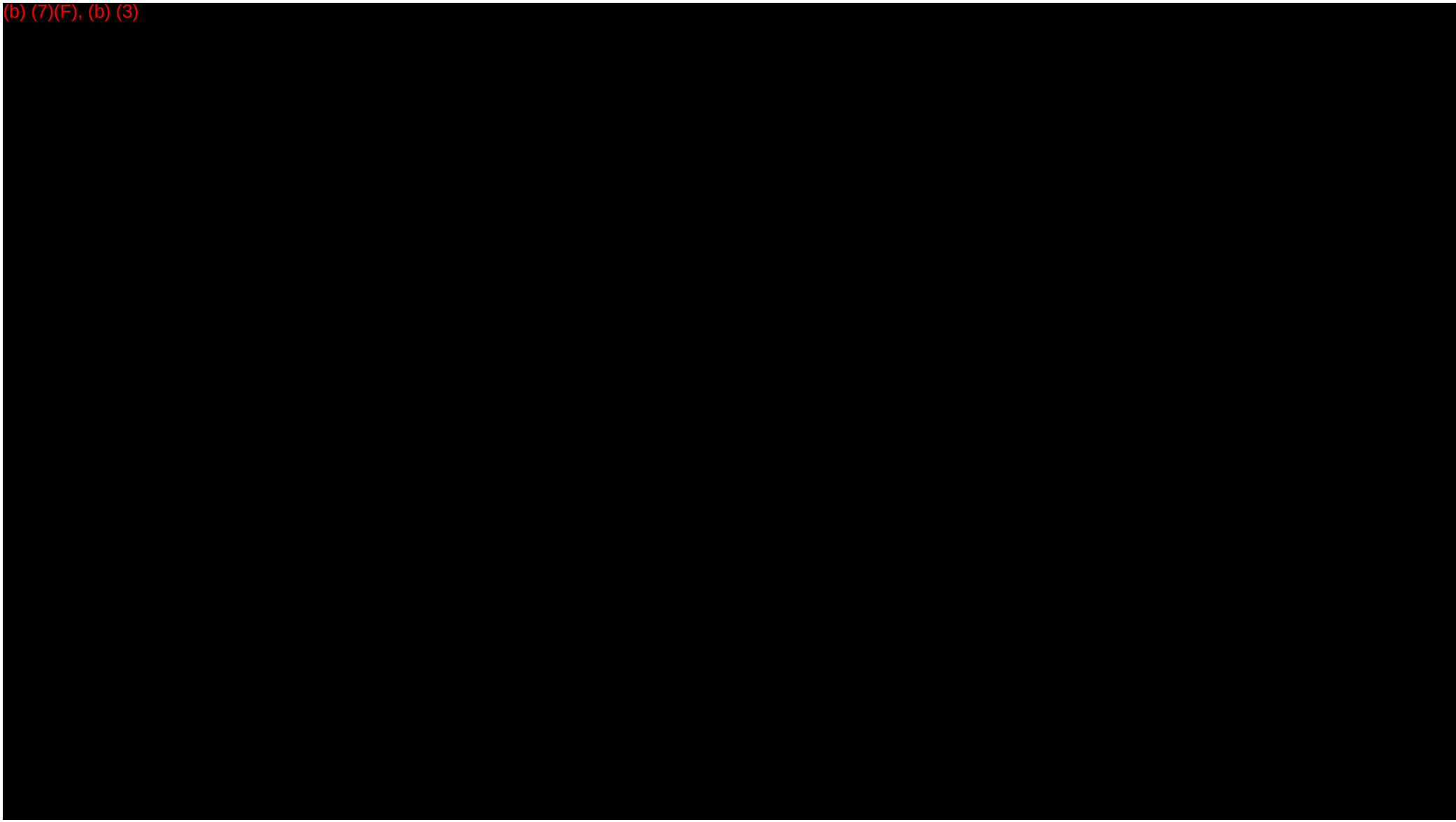


SAN LUIS OBISPO TOPOGRAPHICAL MAP 1



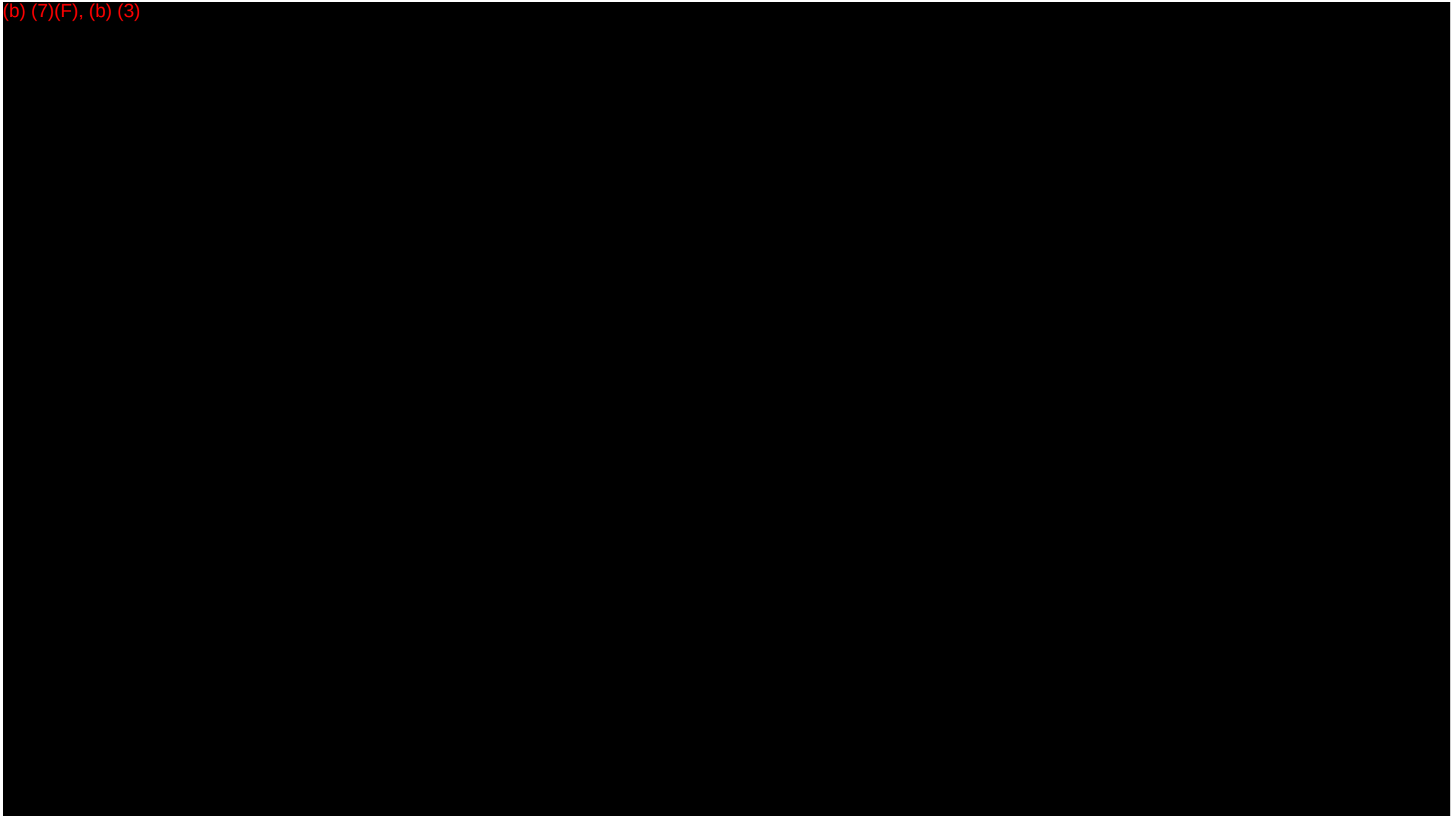
SAN LUIS OBISPO TOPOGRAPHICAL MAP 2

(b) (7)(F), (b) (3)



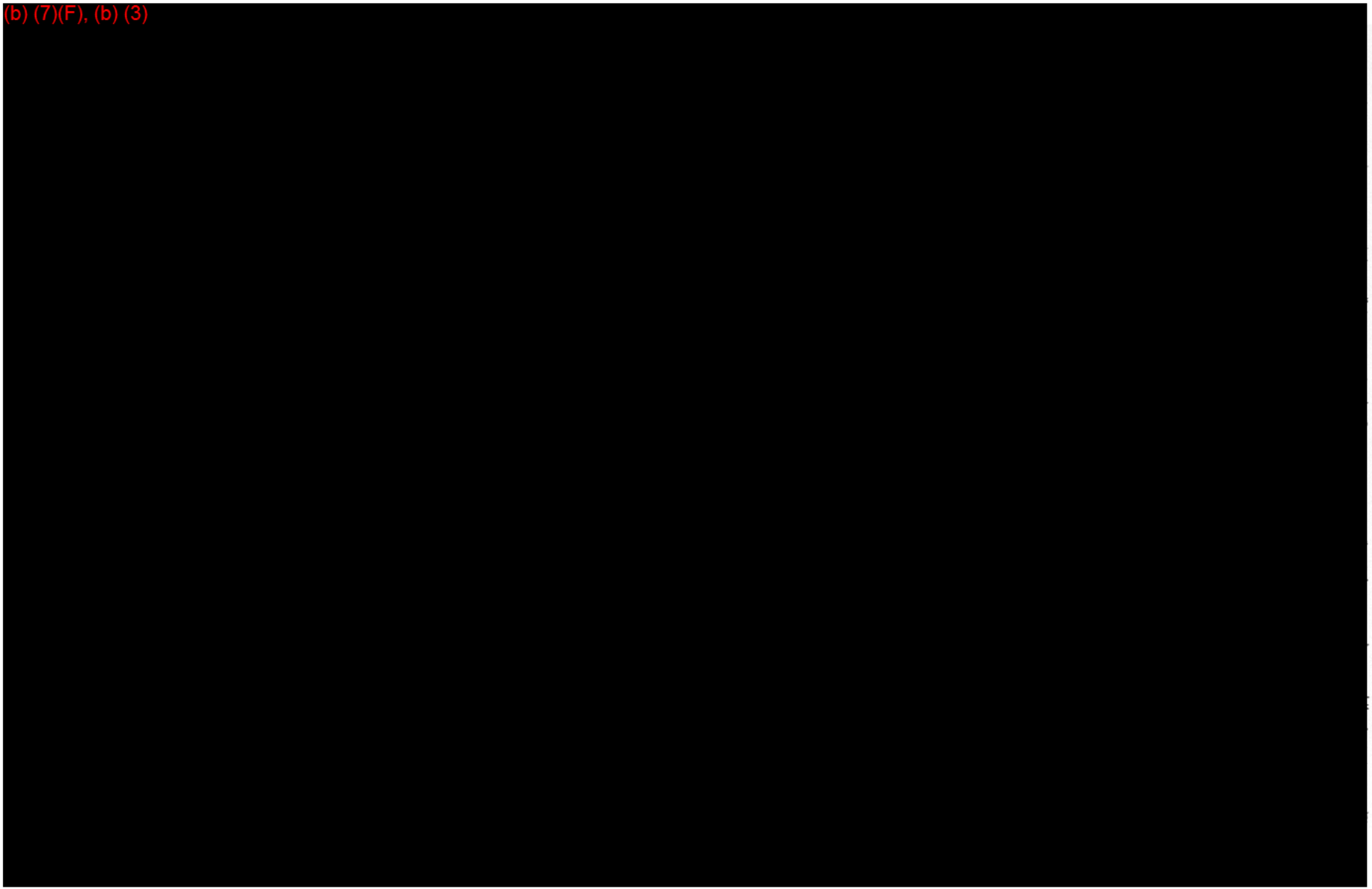
SAN LUIS OBISPO TOPOGRAPHICAL MAP 3

(b) (7)(F), (b) (3)



WELL LOCATION AND GROUNDWATER CONTOUR MAP, SAN ANTONIO VALLEY

(b) (7)(F), (b) (3)



4-340 -A Site Summary- San Luis Obispo Creek Inlet 4-340 -A

County: San Luis Obispo
USGS Quad: Pismo Beach
Thomas Guide Location 693 A-4
NOAA Chart:
Latitude N (b) (7)
Longitude W [redacted]

Last Page Update : 3/31/2011

SITE DESCRIPTION:
See Division I map. San Luis Obispo Creek Inlet, fronted by Avila Beach (medium to course grained sandy beach). Creek mouth inlet is approx. 75' across. There is a fringing marsh, a tidal flat area, and a small lagoon under bridge. This is a very popular recreational beach. Rip rap and mud flat on east side of creek approx. 300' upstream of creek mouth. A mixed sand and gravel beach and rocky platform on west side of creek.

SEASONAL and SPECIAL RESOURCE CONCERNS

Species of concern are present year round, except for Red-Necked Grebes present in winter. Steelhead (critical habitat) peak spawning March - July. Red-Legged frogs breed Nov.-March. Tidewater Goby peak nesting in estuary sediments is April-May.
Throughout Division I, black abalone (endangered) may be present in rocky intertidal habitat (proposed critical habitat).

RESOURCES OF PRIMARY CONCERN

Abundant shorebirds including gulls, Terns, Sandpipers, Killdeer, Coots, Western Grebes, Whimbrels, Egrets, Mallards, Herons, and Red-Necked Grebes. Seabirds include cormorants, belted Kingfisher, and the endangered Brown Pelican. Western snowy plovers (threatened species) utilize this beach.

Southern Sea Otters can be observed offshore.

In San Luis Obispo Creek, the endangered species Tidewater Goby and Steelhead Trout (threatened species) are present. Southwestern Pond Turtles (candidate species), and Red-Legged Frogs (federally threatened) may also be found here.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact SHPO and Native American Heritage Commission

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O	Salmon rearing pens	Central Coast Salmon Enhancement Inc.	(805) 473-8221
T	Melissa Boggs Environmental Scientist	DFG OSPR	(805) 558-1005
C	Lynn Gamble Historic Info Center	SHPO/UCSB	(805) 893-2474
T	Mike Harris Sea otter expert	DFG OSPR	(805) 772-1135
O	Brian Hatfield Marine mammal expert	Bio Res Div. USGS	(805) 927-3893
O	Brian Johnson Live fish market	B&J Enterprises	(805) 680-5143
T	Mathew McGoogan Steelhead trout expert	National Marine Fisheries Service	(562) 980-4026
O	Steve McGrath Harbor Manager	Port San Luis Harbor	(805) 595-5400
T	Dennis Michniuk Inland Fisheries Bio	DFG	(805) 549-6117
T	Elizabeth Petras Listed Species Biologist	National Marine Fisheries Service	(206) 619-1547
C	Katy Sanchez	Native American Heritage Commission	(916) 653-4040
O	Norm Scott Amphibian/reptile expert	Bio. Res. Div. USGS	(805) 927-3893
C	SHPO	State Office of Historic Preservation	(916) 445-7000
O	Carolyn Skinder Biologist	Monterey Bay National Marine Sanctuary	(805) 801-0773
T	Denise Steurer Biologist	U.S. Fish and Wildlife Service	(805) 644-1766

ADDITIONAL SITE SUMMARY COMMENTS:

4-340 -A Site Strategy - San Luis Obispo Creek Inlet 4-340 -A

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
693 A-4 San Luis Obispo		(b) (7)	[redacted]
		Last Page Update :	4/25/2008

CONCERNS and ADVICE to RESPONDERS:

Nov-March minimize trampling estuary/creek vegetation due to frog breeding. Avoid disturbing bottom lagoon sediments to protect tidewater gobies especially April-July goby nesting season. Peak steelhead (critical habitat) spawning March - July. Throughout Division I, black abalone (endangered) may be present in rocky intertidal habitat (proposed critical habitat).
Streamside Vegetation - Minimize disturbance to streamside vegetation.
Wave washover - May carry oil over natural berm into the lagoon during extreme onshore and tidal conditions.

Wetland/riparian habitat – Mud flats, marshlands, and creeks contain fragile habitat subject to damage from human activities such as walking and vehicle use. Oil can be trampled into sediments by responders where it will not be recoverable. Avoid walking in mudflats, marshy areas, and riparian habitat/waterways whenever possible. Use skiffs to access response sites if conditions permit. When crews must walk in soft bottom wetland areas to access cleanup sites, restrict the number and size of pathways. Mark authorized pathways with flagging or tape. Place temporary ramps (e.g. plywood sheets) in sensitive marshy areas where heavy use is expected.

SHORELINE PRE-CLEANING may be warranted before oil reaches the beach when the shoreline is covered with kelp, driftwood, etc which could become oiled and create more oiled waste. Consult with trustees prior to engaging in activities on shoreline. Move unoiled vegetation, driftwood, etc. above the high tide line. When the shoreline is narrow, un-oiled debris may need to be stockpiled elsewhere. It is suggested that photos be taken to document distribution of beach debris prior to collection so that it can be replaced to its pre-spill distribution when spill cleanup is complete. Pre-cleaning of shorelines should be conducted by hand crews to the greatest practical extent to minimize disturbance to wildlife and their habitats.

HAZARDS and RESTRICTIONS:

Avila Beach is under the Harbor District's Jurisdiction. This is a highly used recreational beach. Live fish markets with water intakes on Hartford Pier.

SITE STRATEGIES

Strategy 4-340.1 Objective: Deflect/exclude oil from entering creek.

For winter or high flows, when creek mouth is open, High flow-deflection booming to deflect oil onto sandy beaches on either and or both sides of creek. Suggest 1,000 ft of 12" to 20 " containment boom can be walked across creek or can use small boat to tow containment boom across. May need to get permission from Avila Beach Resort Golf Course along west creek bank, (805) 595-2307. Boom at appropriate angle for swift currents and changing tidal influences. Deploy exclusion/containment boom across mouth of lagoon to minimize likelihood of oiling estuary. Install boom in a configuration which blocks channel and diverts oil to a collection point. If needed, line river/stream bank, rip-rap, side channels, and sandy beaches within lagoon, seaward of the exclusion/containment booms to restrict oil to open water area of main channel to protect vegetated banks and sensitive areas within the inlet/estuary. Use swamp boom backed by sorbent booms, if waters are shallower, and use harbor boom backed by sorbent booms, when water depths are greater. Check/maintain boom for effectiveness and integrity, overwash, and leakage problems, boom positioning and security, and sorbent replacement as necessary.

Strategy 4-340.2 Objective: Exclude oil from entering creek.

During summer or low flow, when creek mouth is open block entrance with sediment berm or sandbag berm (fine to medium grained sand), and install flow through pipes as necessary to prevent flooding. When erosion from waves or overflows could erode berm, armor berm and banks by covering with plastic sheeting anchored by sand bags. When overflow could occur due to accumulation of water behind the containment berm install underflow piping and/or a spillway in the berm. When underflow pipes are installed, prevent entrainment of oil in vortices by anchoring containment and sorbent booms upstream of the pipe intake, venting the pipes, beveling inlets, or placing beach balls over the vortices. When overwash could bring oil into inlet over berm back exclusion/containment berm with containment and/or sorbent booms and/or snare. Regular monitoring and maintenance will be necessary (2 staff twice daily). Check for berm effectiveness and integrity, overwash, and leakage problems, boom position and security, and sorbent replacement as necessary.

Strategy 4-340.3 Objective: Exclude oil from creek/estuary.

When creek mouth is closed consider installing excelsior fencing along top of natural berm to capture oil when there is a potential for high tidal washover.

When creek mouth is open use filter barrier for exclusion/containment – Use this method when the cross-section of the watercourse does not exceed 20 feet in width, water flow volume is low, the channel bottom is capable of receiving and holding metal stakes, the spill consists of heavy petroleum, and berming or booming methods are not feasible due to lack of materials or accessibility. Construct a filter barrier across the channel using two parallel rows of metal stakes, upon which construction fencing is fastened. Place permeable sorbent materials such as snare or excelsior, between the two lines of fencing to capture oil. Re-adjust sorbent materials as necessary minimize entrainment and/or leakage and to accommodate flow, tidal, oceanic, and meteorological changes. Replace sorbent materials as necessary to maintain sorbent quality.

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
4-340.1	1000				2			1	1	SSS			6	
4-340.2									1	SSS		Backhoe or sandbags, piping, plastic sheeting	6	
4-340.3			300 FF						1	SSS		Excelsior fencing, metal stakes	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From the south: Take Hwy 101 N to Avila Beach Dr. exit. Take Avila Beach Dr. to the end to Port San Luis parking area. From the north: Take Hwy 101 S (or Hwy 5 S to Hwy 41 W to Hwy 46 W to Hwy 101 S), to Avila Beach exit San Luis Bay DR. Take San Luis Bay Dr. to stop sign, turn right on Avila Beach Dr. follow directions above.

LAND ACCESS: Vehicle/ATV access possible w/ Harbor Dept. permission

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Port San Luis boat launch.

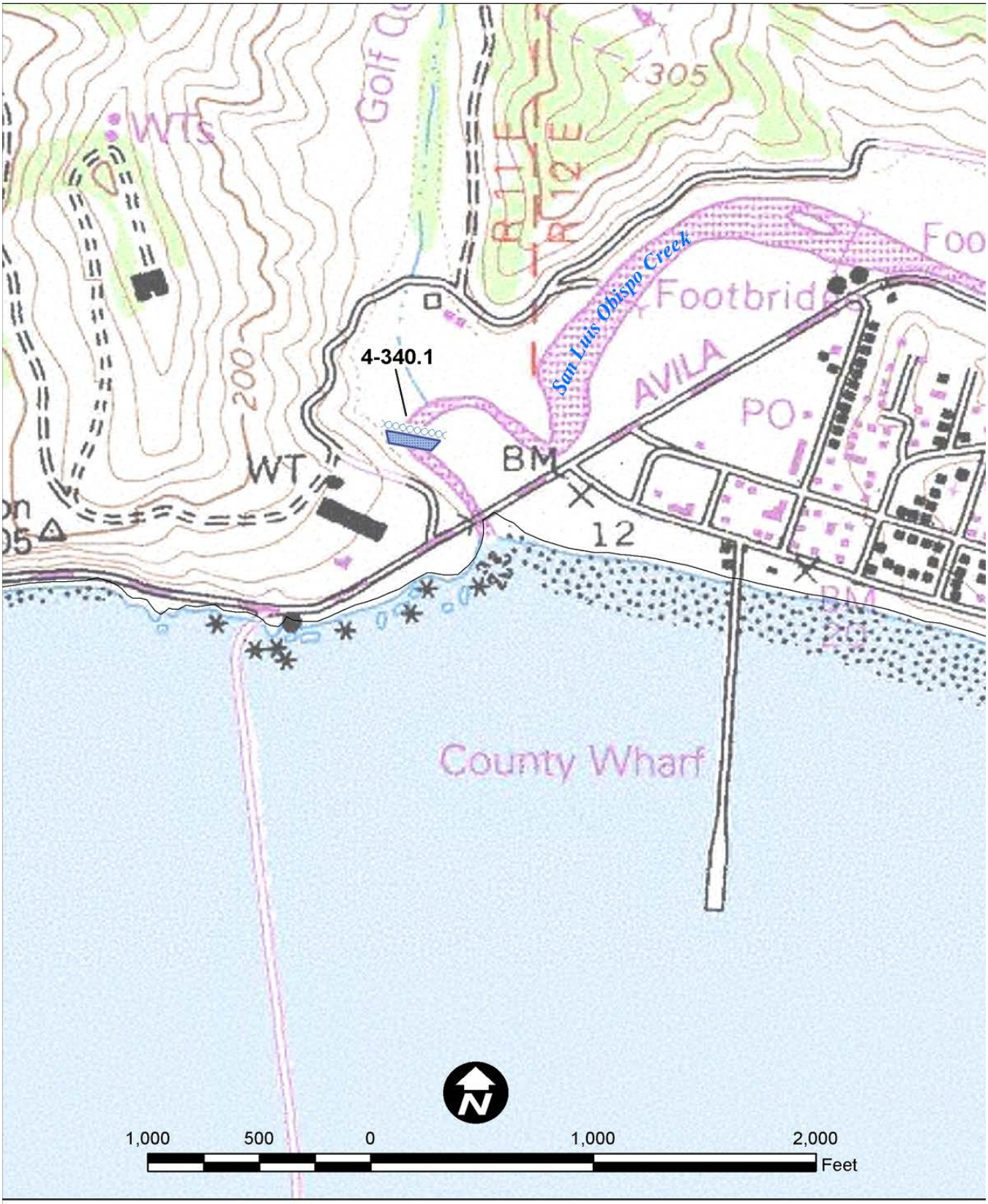
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging Area: Port San Luis Harbor District parking lot.
Command Post: Port San Luis Harbor District. DFG office in San Luis Obispo.
Airports: SLO County Airport is approx. 15 min.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

4-340 -A Strategy Diagram- San Luis Obispo Creek Inlet 4-340 -A



CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site: 4-340-A Site Name: San Luis Obispo Creek Inlet

Source: Melissa Boggs (OSPR)
Map produced by: Greg Ewing (OSPR) April 15, 2011

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

4-345 -B Site Summary- Avila Rock (Offshore rock) 4-345 -B

County: San Luis Obispo
USGS Quad: Pismo Beach

Thomas Guide Location
NOAA Chart:

Latitude N (b) (7)
Longitude W [redacted]

Last Page Update : 3/31/2011

SITE DESCRIPTION:
See Division I map. Avila Rock offshore from Fossil Point, just southeast of Avila Beach. This offshore rock is part of the Coastal National Monument under the jurisdiction of Bureau of Land Management.

SEASONAL and SPECIAL RESOURCE CONCERNS

California sea lions are present year round and pupping season is May-June. Brown pelicans roost summer-fall with peak numbers in Sept-Oct.

RESOURCES OF PRIMARY CONCERN

Brown pelicans roost on Avila Rock.

Large concentrations of California sea lions haulout year round. Southern sea otters can be observed in this area year round.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact SHPO and Native American Heritage Commission.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
T	Melissa Boggs Environmental Scientist	DFG OSPR	(805) 558-1005
C	Lynn Gamble Historic Info Center	SHPO/UCSB	(805) 893-2474
T	Rick Hanks Manager	U.S.BLM, Coastal Natl. Monument	(831) 372-6115
T	Mike Harris Sea otter expert	DFG OSPR	(805) 772-1135
O	Brian Hatfield Marine mammal expert	Bio Res Div. USGS	(805) 927-3893
O	Steve McGrath Harbor Manager	Port San Luis Harbor	(805) 595-5400
T	Elizabeth Petras Listed Species Biologist	National Marine Fisheries Service	(206) 619-1547
C	Katy Sanchez	Native American Heritage Commission	(916) 653-4040
C	SHPO	State Office of Historic Preservation	(916) 445-7000
T	Denise Steurer Biologist	U.S. Fish and Wildlife Service	(805) 644-1766
T	Sarah Wilkin Pinnipeds, turtles	National Marine Fisheries Service	(301) 755-4981

ADDITIONAL SITE SUMMARY COMMENTS:

4-345 -B Site Strategy - Avila Rock (Offshore rock) 4-345 -B

County and Thomas Guide Location
San Luis Obispo

NOAA CHART

Latitude N (b) (7) **Longitude W** (b) (7)

Last Page Update : 3/31/2011

CONCERNS and ADVICE to RESPONDERS:

Sensitive Biota including roosting birds, sea otters, and other marine mammals.
This offshore rock is part of the Coastal National Monument under the jurisdiction of Bureau of Land Management.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 4-345.1 Objective: Deflect oil from this offshore rock.

- Offshore containment and recovery (OCR) is the preferred option although heavy surf may hinder these operations. No specific response equipment listed due to the many variables associated with each spill regarding OCR. Early consideration should be given to the use of applied response technologies.

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
4-345.1												Offshore containment & recovery		

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From the south: Take Hwy 101 N to the Avila Beach Dr. exit. Take Avila Beach Dr. to the town of Avila. Turn left on San Miguel St. to Front St. to get to Avila Beach. Avila Rock is offshore southern end of Avila Beach.
From the north: Take Hwy 101 (or 5 S to Hwy 46 W to 41 W to 101 S) to Avila Beach exit, San Luis Bay Dr. to stop sign, turn right on Avila Beach Dr. follow directions from above.

LAND ACCESS: Boat access only.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Port San Luis Boat launch.

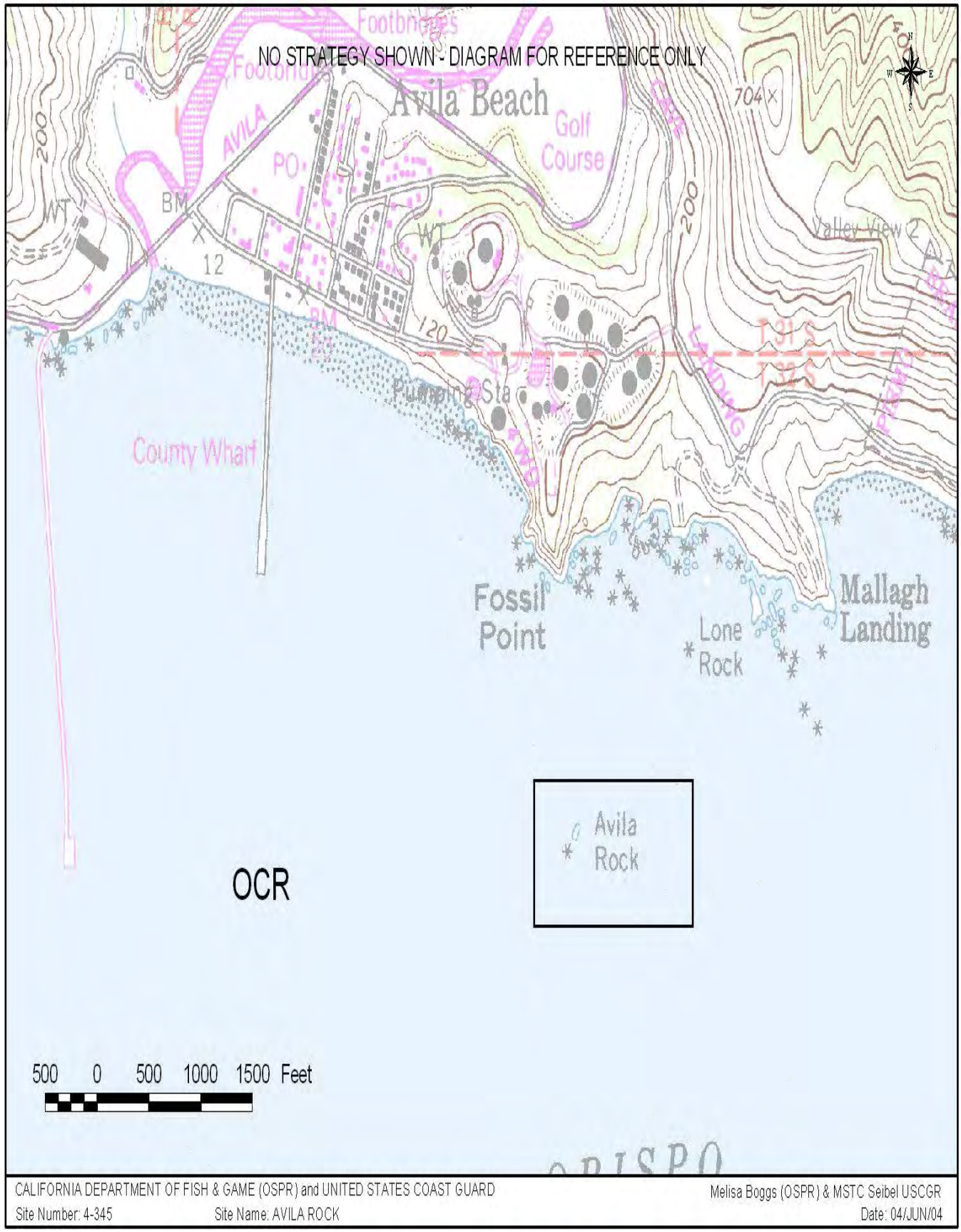
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging Area: Port San Luis Harbor District parking lot.
Command Post: Port San Luis Harbor District office. DFG office in San Luis Obispo.
Airports; SLO County Airport is approx. 15 min.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

4-345 -B Strategy Diagram- Avila Rock (Offshore rock) 4-345 -B



1.8 Northern Lines - Valley Area

1.8.1 Pipeline Description

The Valley Area of operations contains line sections that meet the PHMSA criteria for identifying pipeline facilities that could reasonably be expected to cause "significant and substantial harm" (49 CFR 194.103). The Valley Area contains line sections that:

- have experienced a release greater than 1,000 barrels within the previous five years [194.103(3)(1)];
- have experienced two or more reportable releases (49 CFR 195.50) within the previous five year period [194.103(c)(2)];
- are located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes [194.103(c)(4)]; and/or
- are located within a one-mile radius of environmentally sensitive areas, and could reasonably be expected to reach these areas [194.103(c)(5)].

The Company operates the Valley Area onshore pipeline system from the Coalinga Area, Tracy Area and Taft Area offices. The Valley Area system is situated in Alameda, Contra Costa, Fresno, Kern, Kings, Merced, San Joaquin and Stanislaus Counties and includes the following pipelines and pump stations:

Kern Line	(out of service)
Rio Bravo Line	(out of service)
Line 100 Mainline Trunk Pipeline	
	Sunset to Midway (crude oil)
	Midway to Shale (crude oil)
	Shale to McKittrick (crude oil)
	McKittrick to Middlewater (No. 1 and No. 2 crude oil pipelines)
	Middlewater to Junction (No. 1 and No. 2 crude oil pipelines)
Elk Hills Lines	
	PN10 – 10G to 18g (crude oil)
	PN18 – 18G to McKittrick (crude oil)
Line 100 Gathering System, including:	
Line 151	Sunset Field to San Joaquin Valley Trunk (crude oil) (idle)
Line 152	Gathering to Sunset (crude oil) (idle)
Line 153	Gathering to Sunset (crude oil) (idle)
Line 154	Gathering to Sunset (crude oil)
Line 155	Gathering to Midway (crude oil)
Line 156	Gathering to Shale (crude oil)
Line 157	Gathering to Line 100 Mainline Trunk (crude oil)
Line 158	Gathering to Line 100 Mainline Trunk (crude oil)
Line 159	Gathering to McKittrick (crude oil)
Line 160	Gathering to McKittrick (crude oil)
Line 161	Gathering to Line 100 Mainline Trunk (crude oil)
Line 162	Gathering to Line 100 Mainline Trunk (crude oil)
Line 163	Petro Lewis Tie-in to Line 100 Mainline Trunk (crude oil) (idle)

Line 164	Gathering to Middlewater (crude oil)
Line 2004	Gathering to Tulare Line (crude oil)
Line 2017	Gathering to Gibson Line (crude oil)
Kern Gathering System including: (idle)	
	Arvin
	Bellevue
	Gosford
	Paloma
	Line 166
Line 200 Mainline Trunk	
	12” Junction to Tar Canyon (crude oil and semi-refined products)
	12” Tar Canyon to Coalinga (crude oil and semi-refined products)
	16” Coalinga to Panoche (crude oil and semi-refined products)
	16” Panoche to Patterson (crude oil and semi-refined products)
	16” Patterson to Byron (crude oil and semi-refined products)
	16” Byron to San Francisco Refinery (crude oil and semi-refined products)
Richmond Products Line	6” San Francisco Refinery to Richmond (products)
Associated Valley Area pumping stations, metering facilities and breakout tanks:	
Sunset Pump Station	
Midway Pump Station	
Shale Pump Station	
McKittrick Pump Station	
Middlewater Pump Station	
Kern Pump Station (inactive)	
Junction Pump Station	
Tar Canyon Pump Station	(inactive)
Coalinga Pump Station	
Patterson Pump Station	
Byron Pump Station	
18G Station	
Panoche Pump Station	(inactive)
Rio Bravo Pump Station	(inactive)
10G Station	

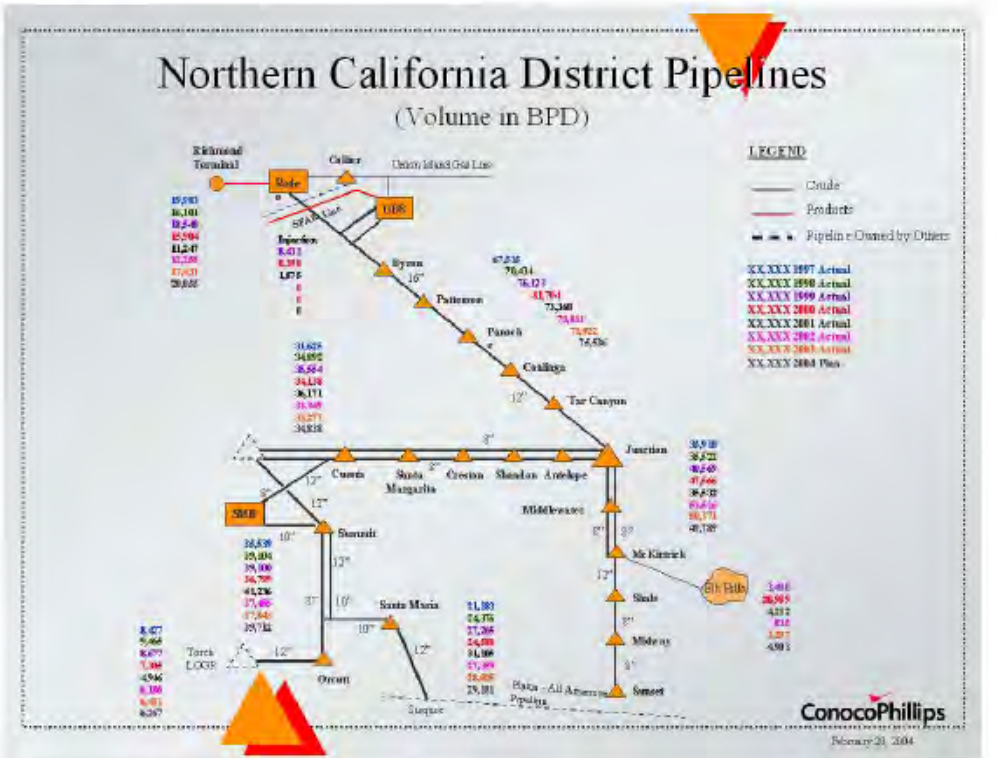
The Valley Area onshore pipeline system consists of the trunk and gathering pipelines from Kern County in the southern Central Valley to the San Francisco Refinery at Rodeo. It also includes the products pipeline between the San Francisco Refinery and Richmond in Contra Costa County. The onshore pipeline system continues from Junction Station to the coastal areas of San Luis Obispo and Santa Barbara Counties.

1.8.2 Tank Table

Location	Equipment	Tank or Vessel	Product	Capacity (bbls)	Diameter	Height or Length	Year Built	Type
Junction	Tk-Large (>29' dia)	2	Water	(b) (7)(F), (b) (3)			1955	Cone Roof
Junction	Tk-Large (>29' dia)	1	Water				1955	Cone Roof
Junction	Tk-Large (>29' dia)	80018	PD				1973	EFR
Junction	Tk-Large (>29' dia)	110024	Crude O				1976	EFR
Junction	Tk-Large (>29' dia)	40010	PD				1957	EFR
Junction	Tk-Large (>29' dia)	110022	Crude O				1974	EFR
Junction	Tk-Large (>29' dia)	110026	Crude O				1976	EFR
Junction	Tk-Large (>29' dia)	110020	Gas Oli				1973	EFR
Coalinga	Tk-Large (>29' dia)	W1	Empty				1957	CR
Coalinga	Tk-Large (>29' dia)	135009	Coker				1956	EFR
Coalinga	Tk-Large (>29' dia)	135007	Gas Oil				1956	EFR
Coalinga	Tk-Large (>29' dia)	135001	Gas Oil/Crud				1956	EFR
Coalinga	Tk-Large (>29' dia)	135011	Coker/ Slops				1956	EFR
Coalinga	Tk-Large (>29' dia)	135005	Coker Oi				1956	EFR
Coalinga	Tk-Large (>29' dia)	135003	Gas Oil/Crud				1956	EFR
McKittrick	Tk-Large (>29' dia)	110815	Crude O				1981	EFR
McKittrick	Tk-Large (>29' dia)	110813	Crude O				1979	EFR
Shale	Tk-Large (>29' dia)	37819	Crude O				1981	EFR
Sunset	Tk-Large (>29' dia)	84605	Crude O				1977	Floating Roof
Midway	Tk-Large (>29' dia)	55701	Crude O				1940	Cone Roof
Middlewater	Tk-Large (>29' dia)	80907	Crude O				1982	EFR

LINE MAPS

Northern California Pipelines



Richmond Products Line Segments 4, 5, 6

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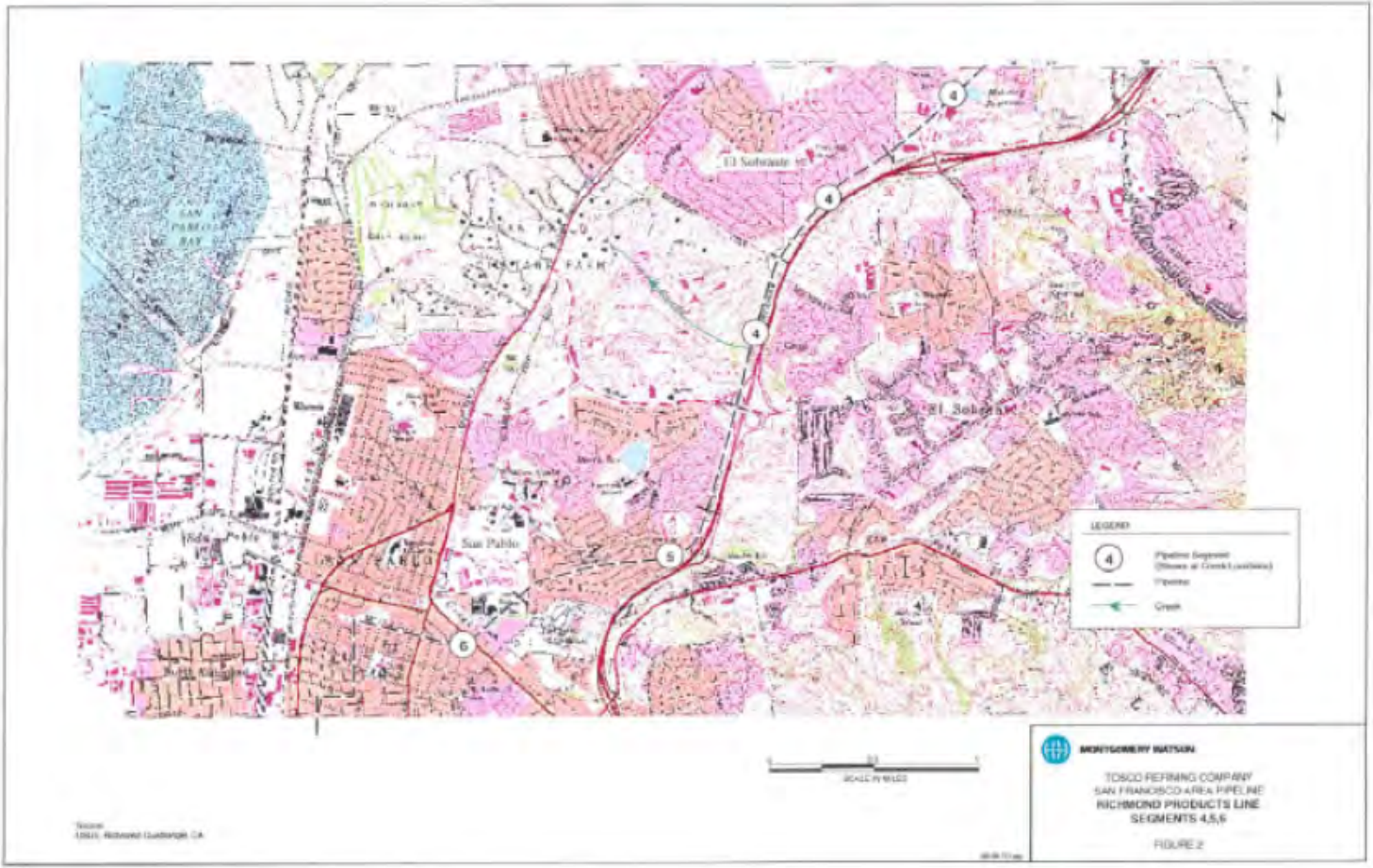

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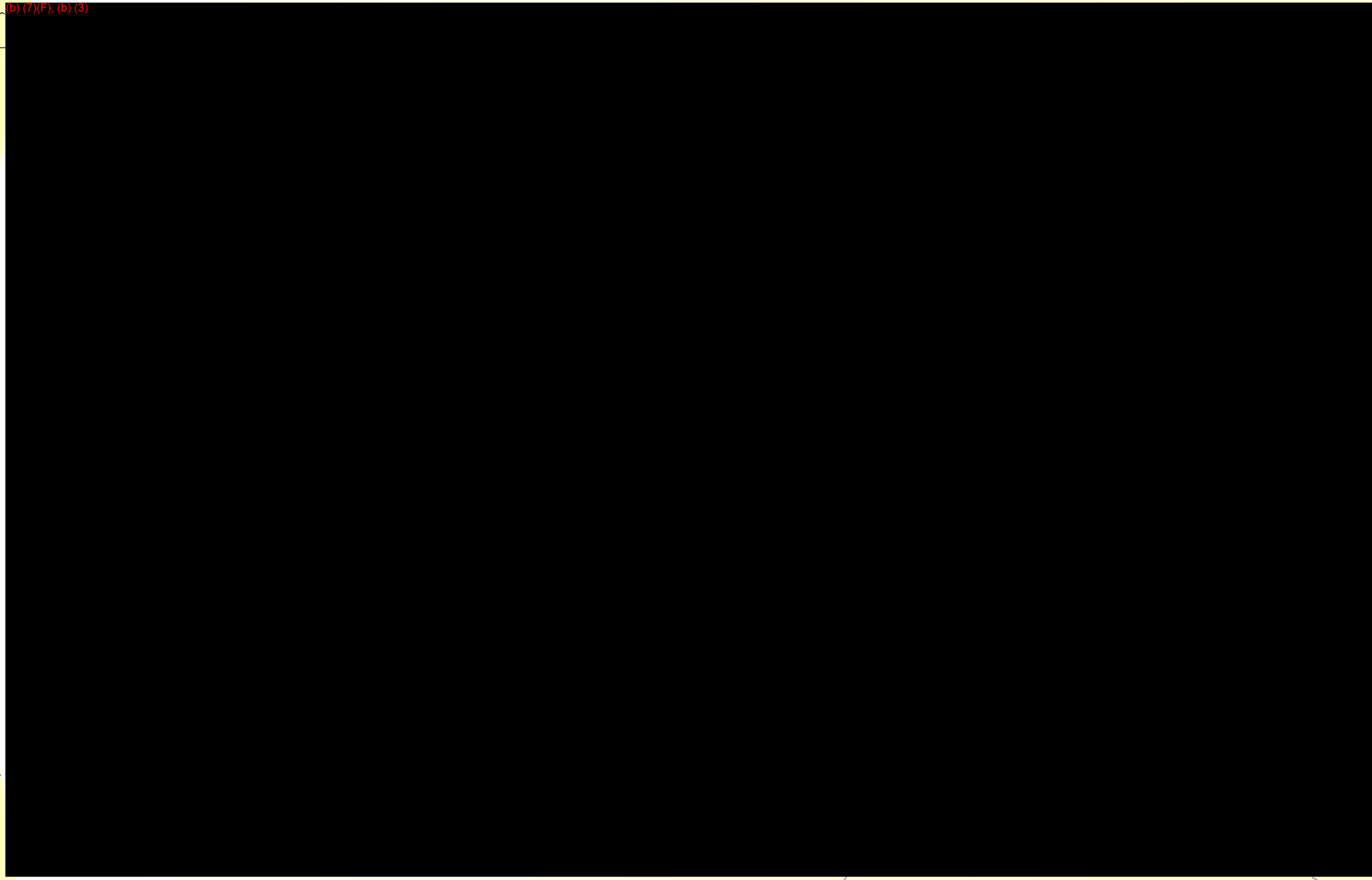
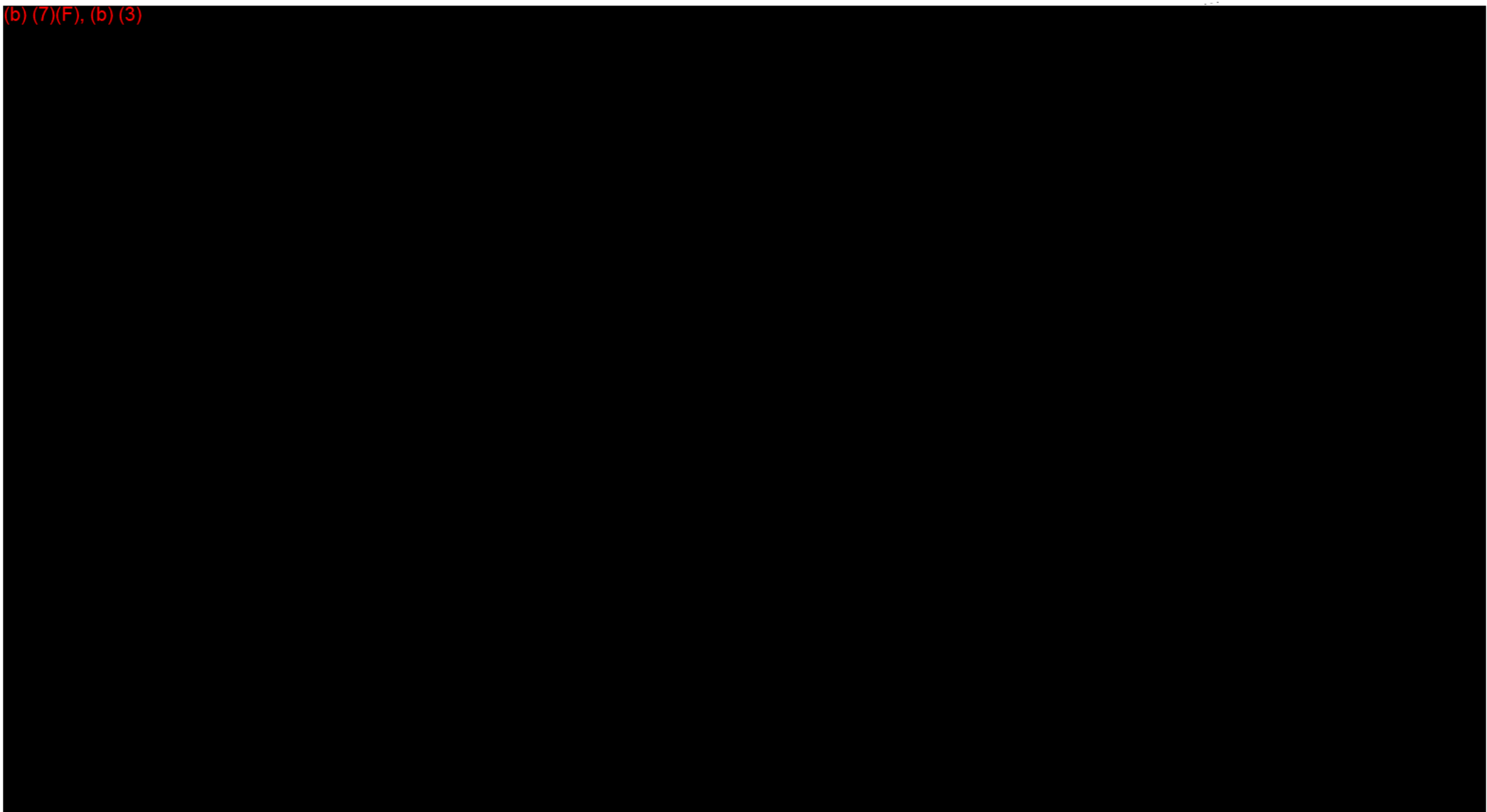


Valley Area – Sections 1-2



Valley Area – Sections 3-14

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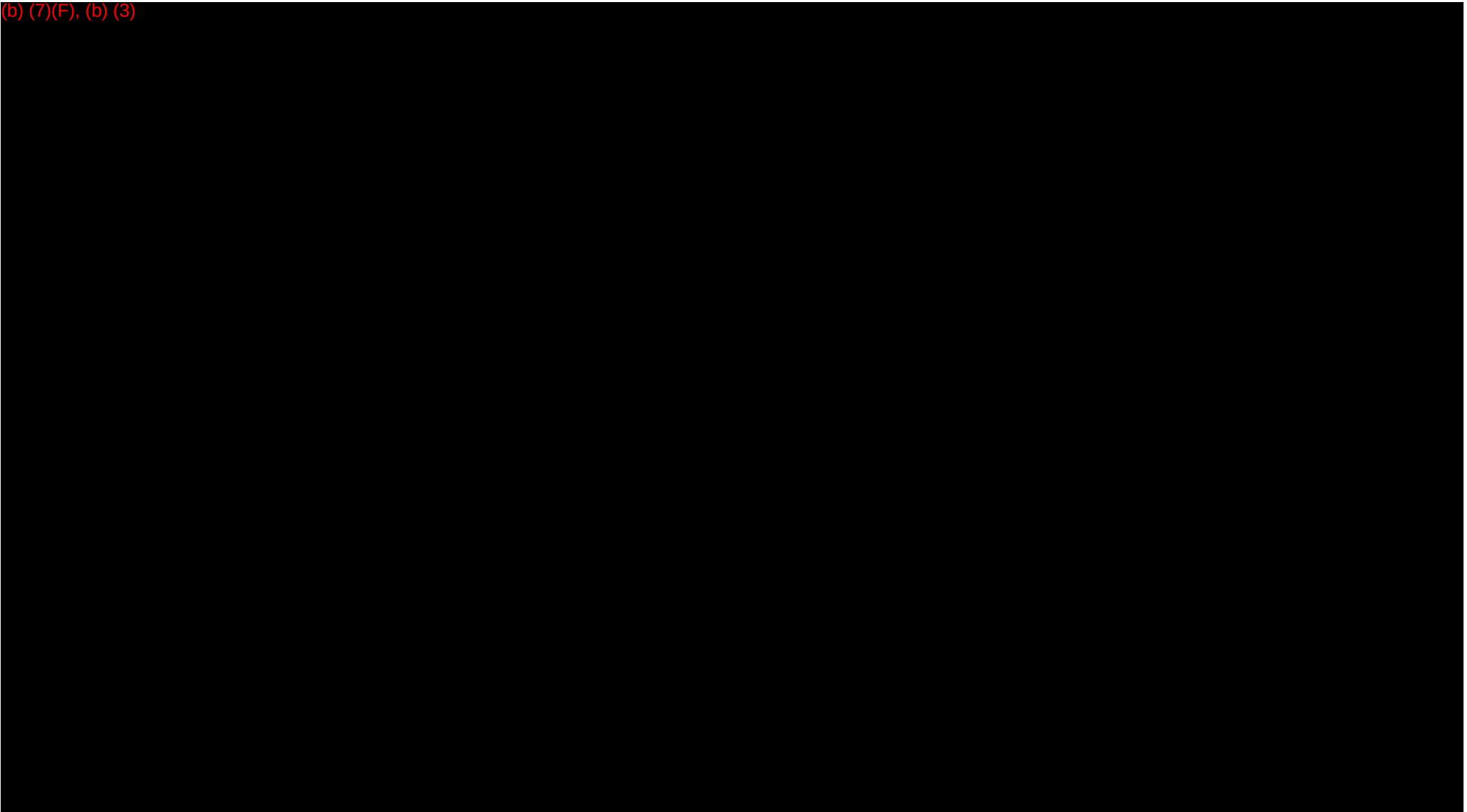

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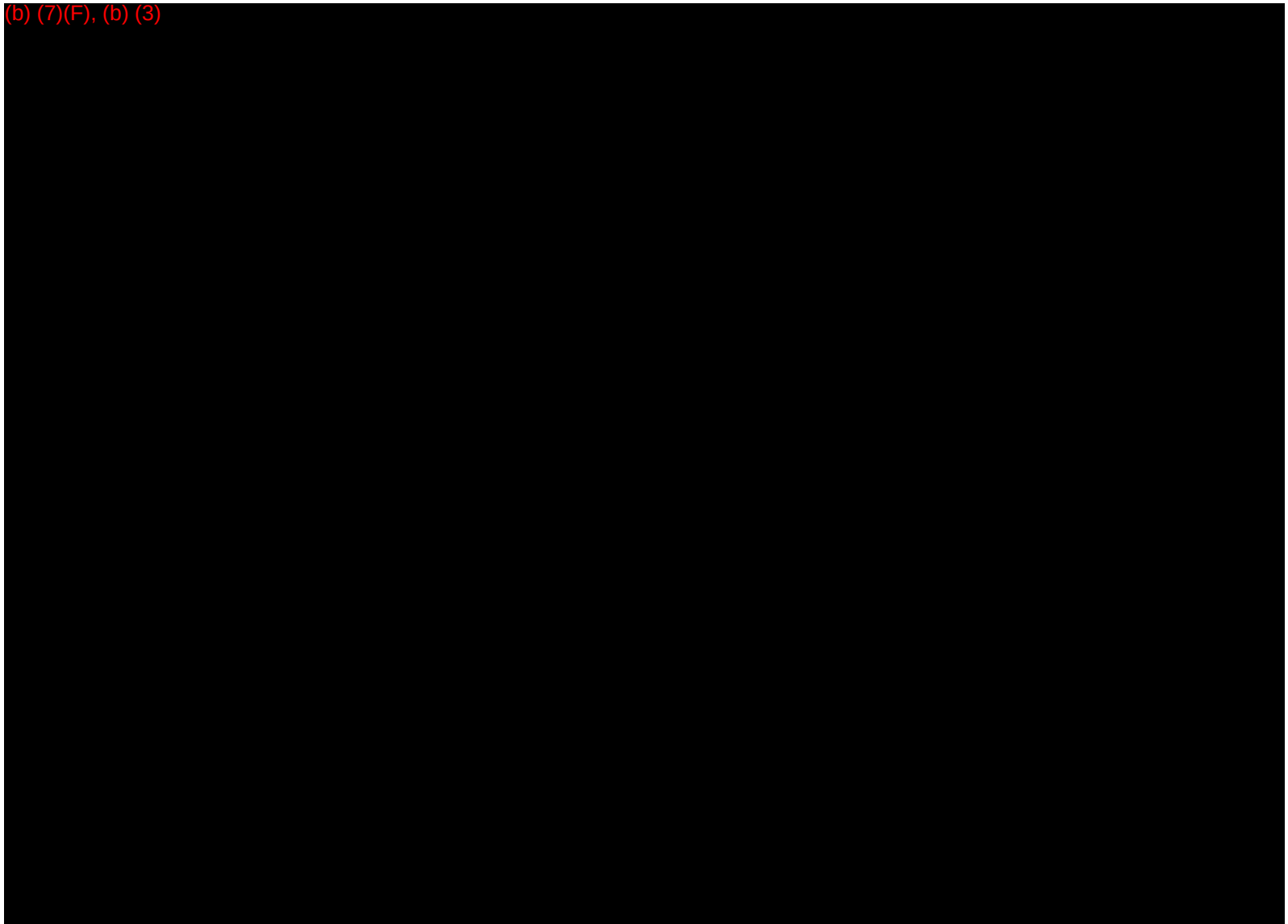

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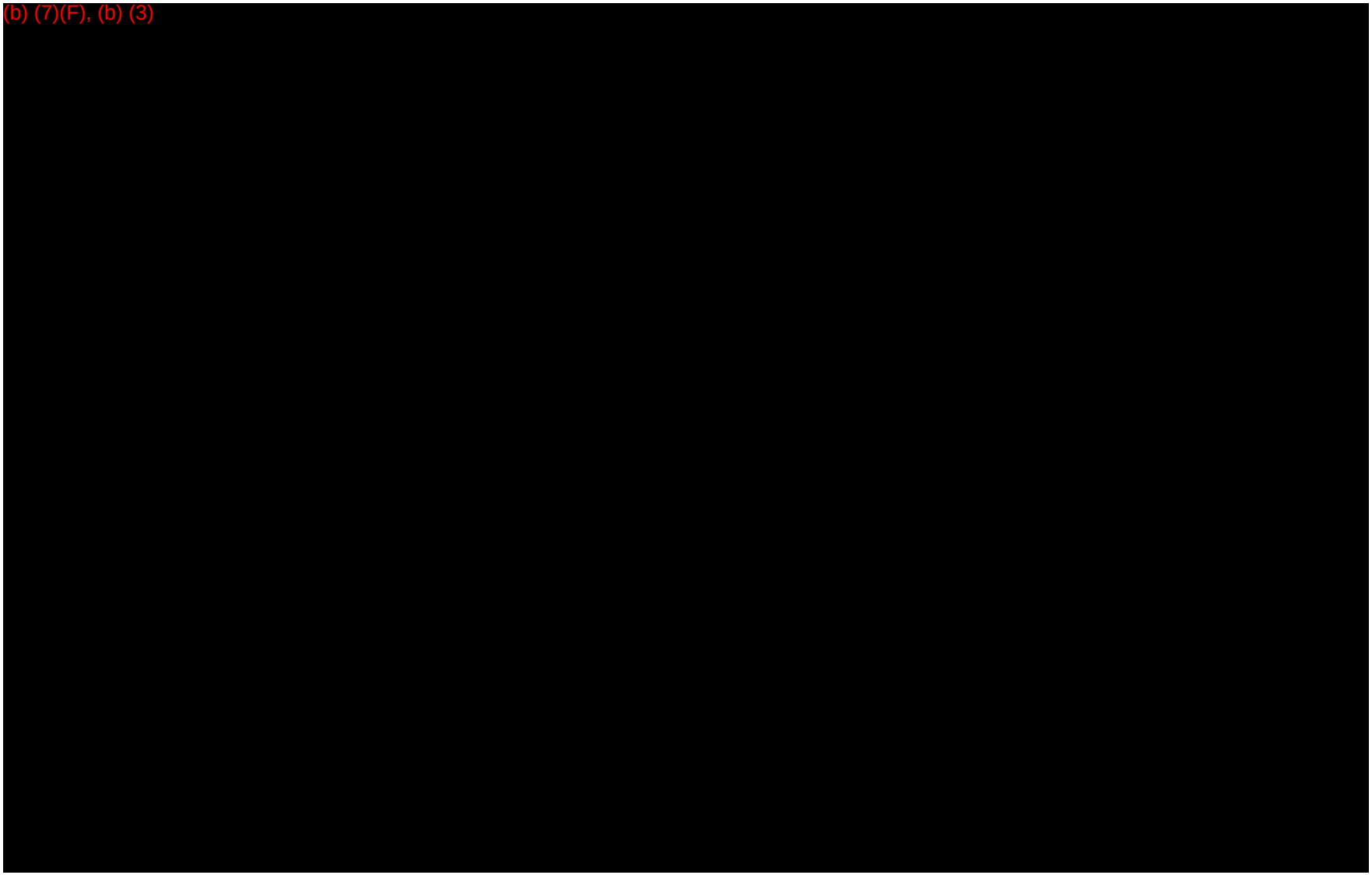
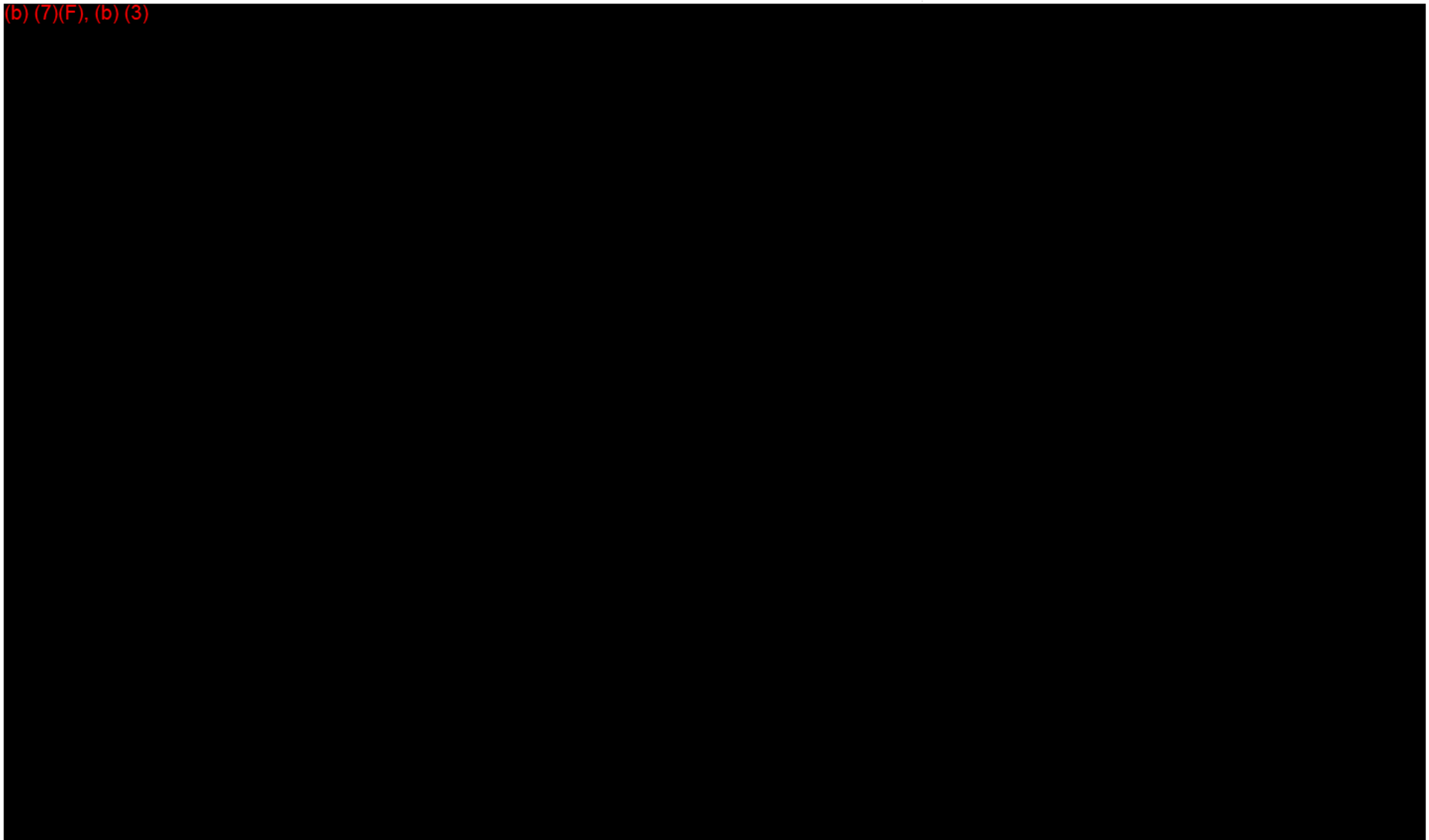


Valley Area – Section 17

Valley Area – Section 18



Valley Area – Section 19

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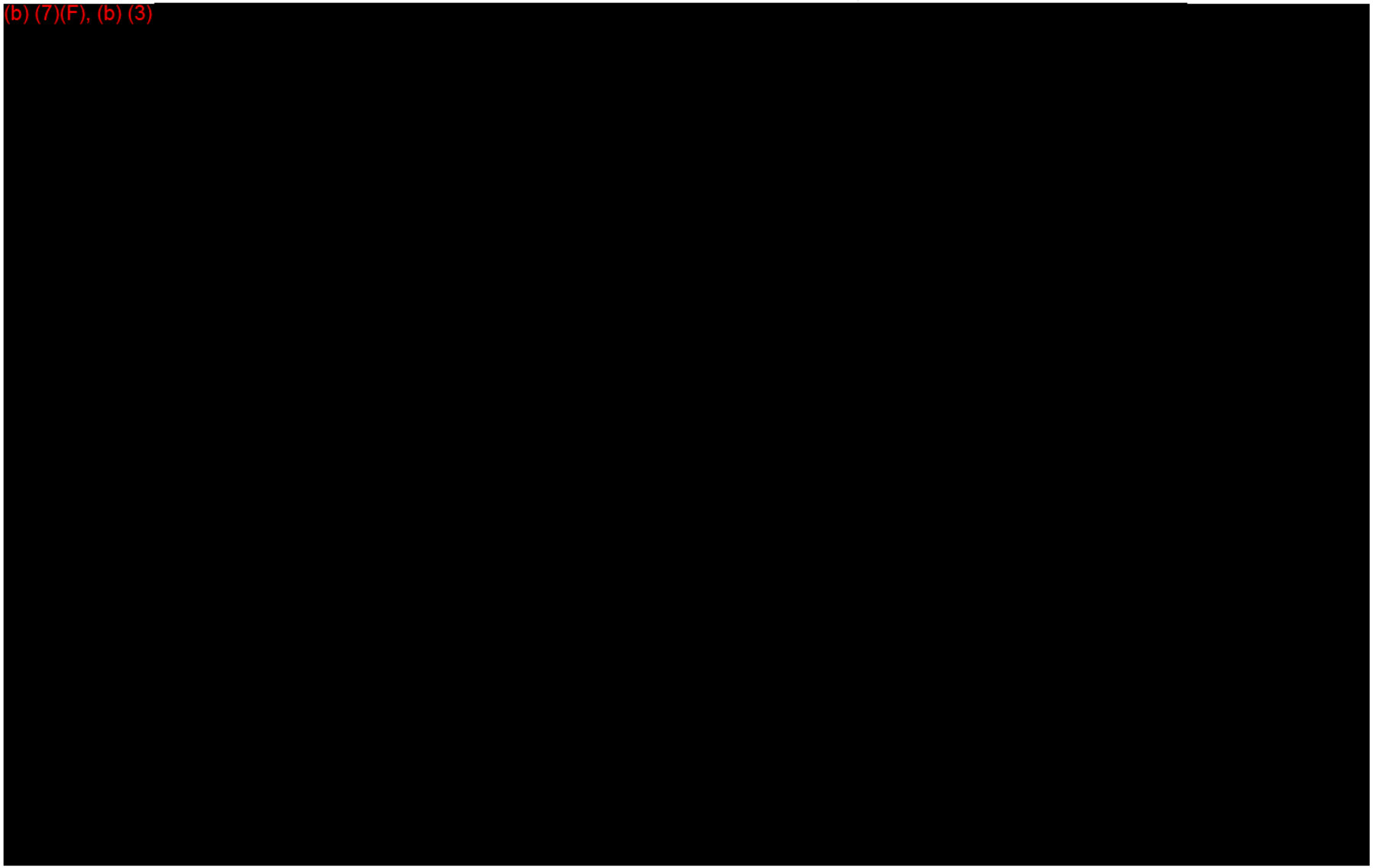

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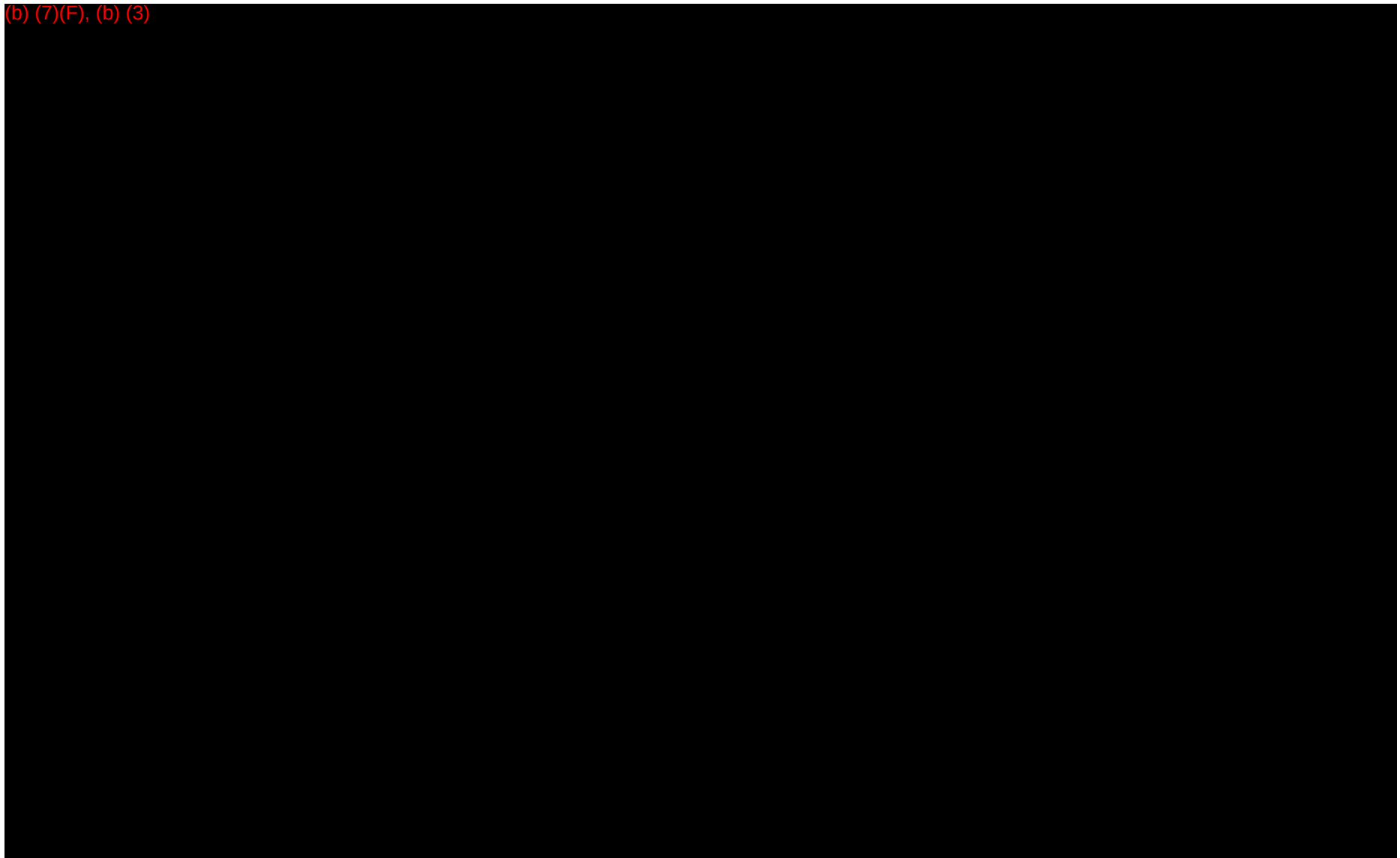

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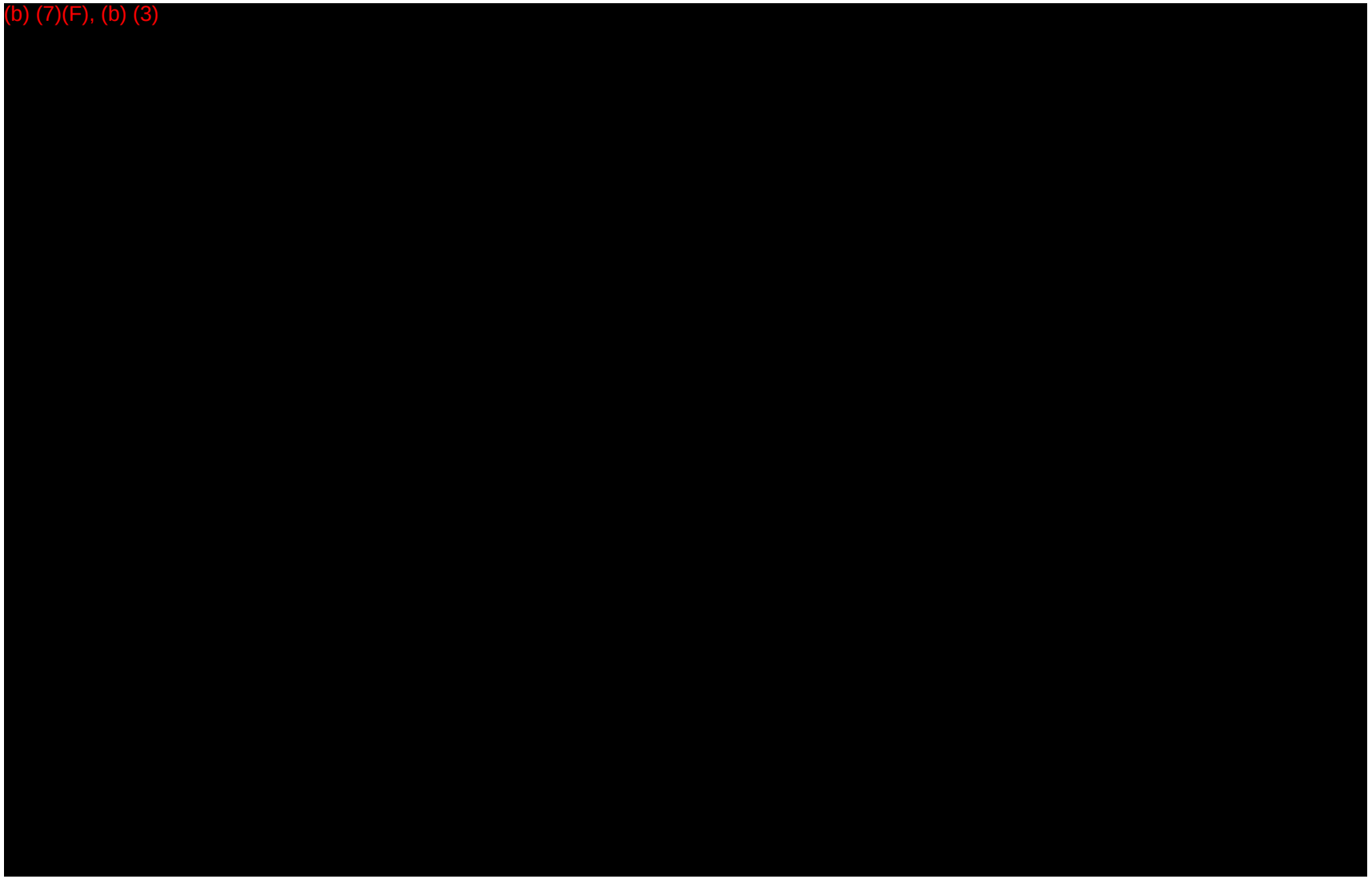

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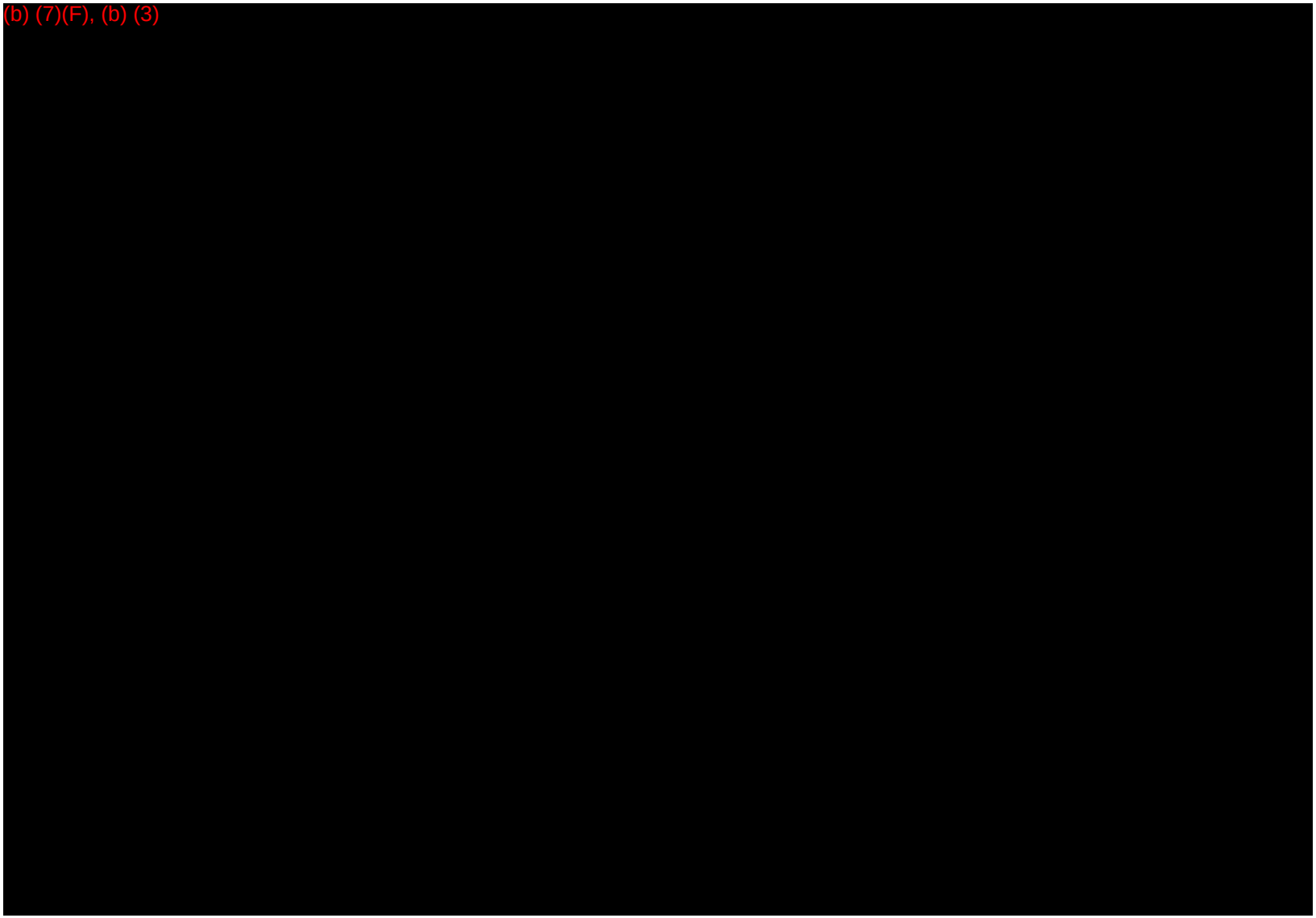

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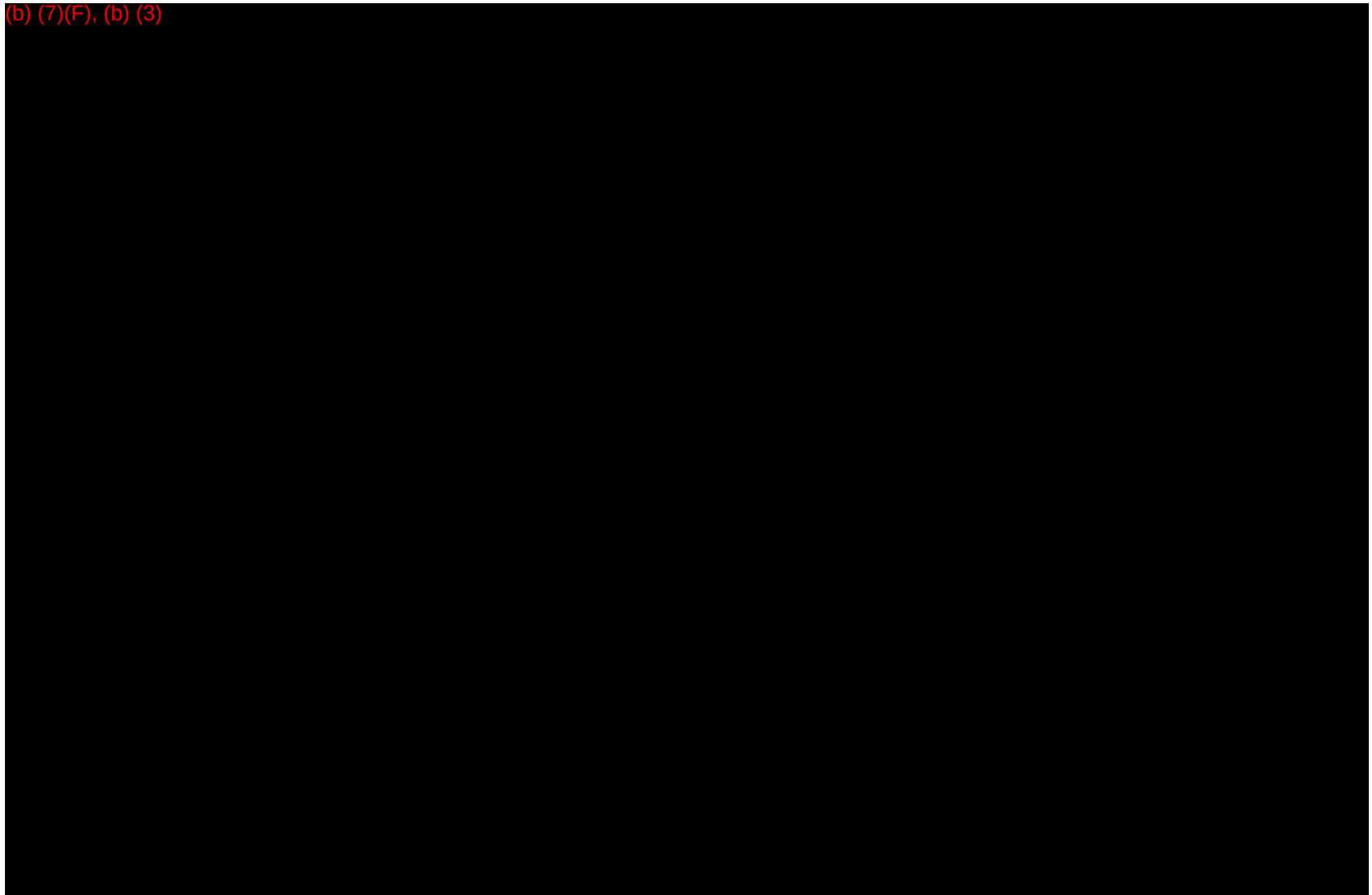
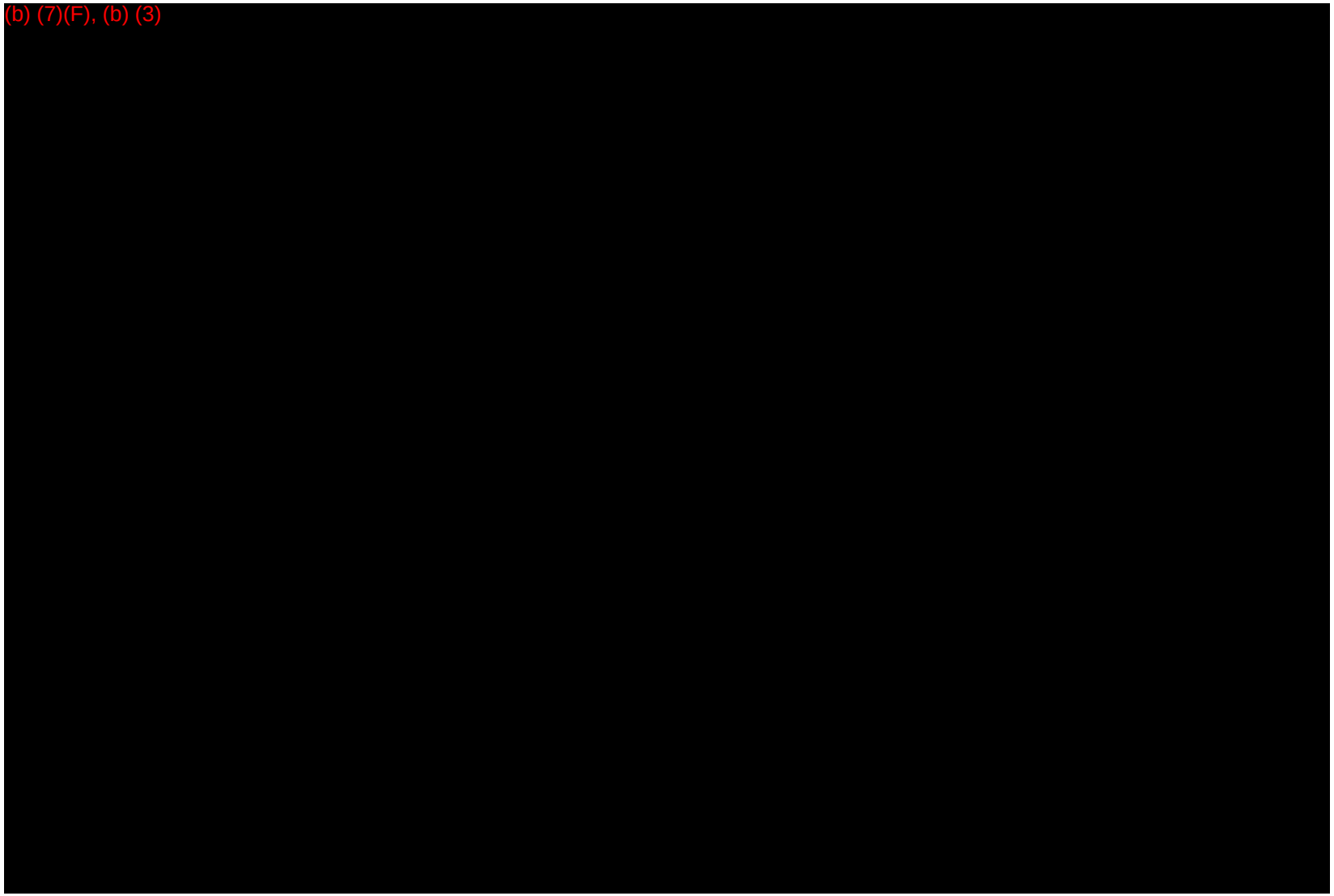
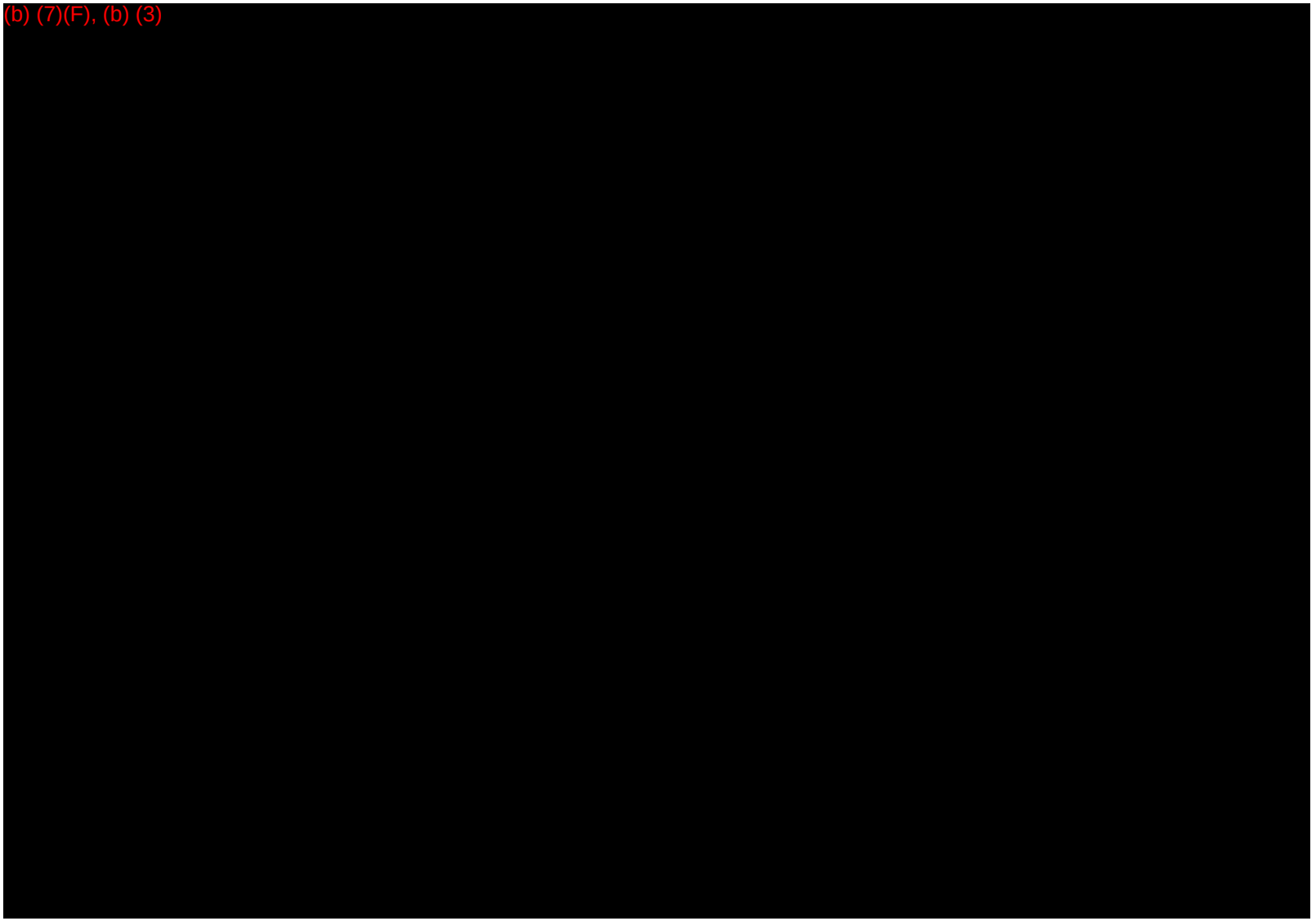


Valley Area – Section 24

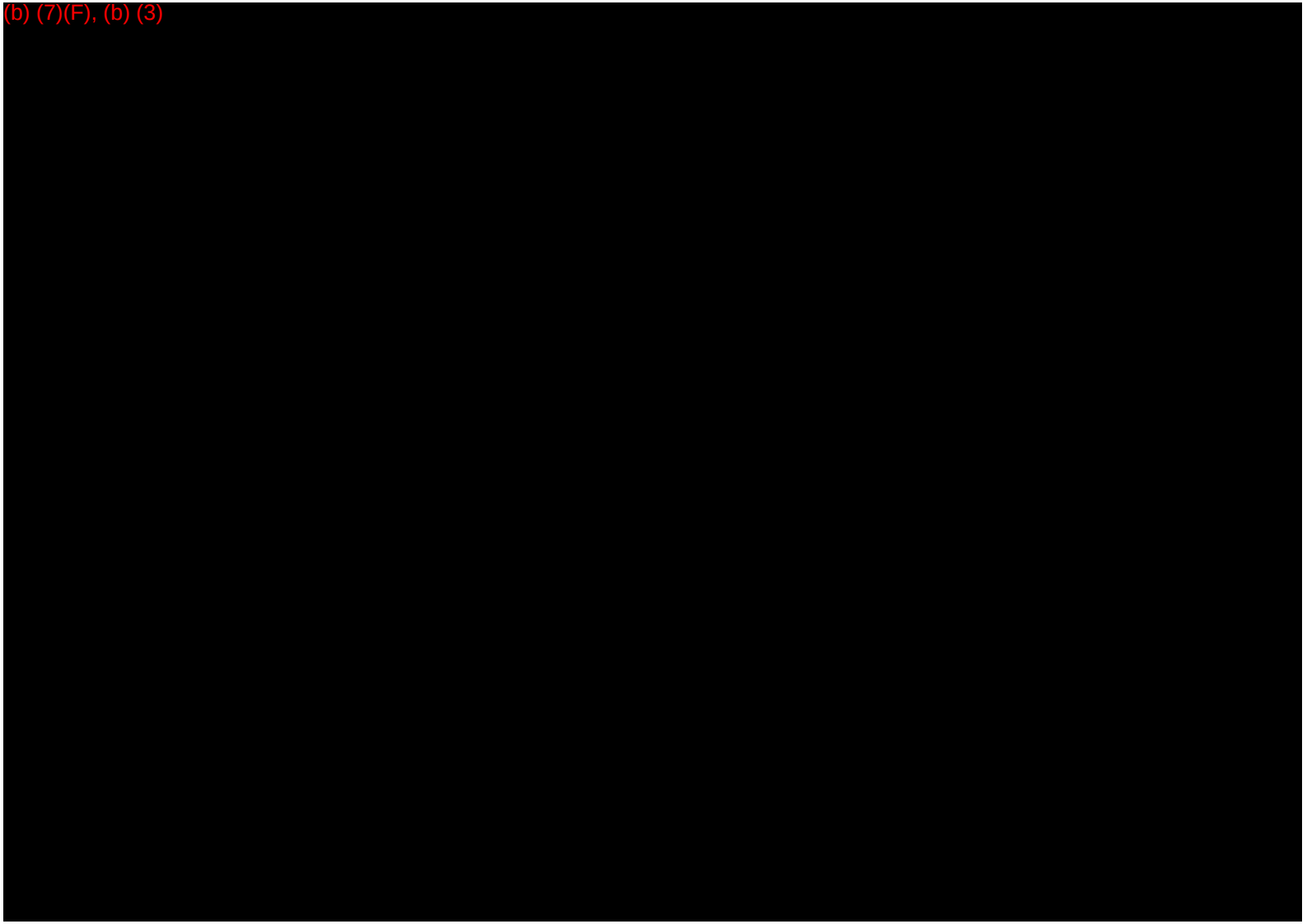


Valley Area – Section 25



Valley Area – Section 26

Valley Area – Section 27



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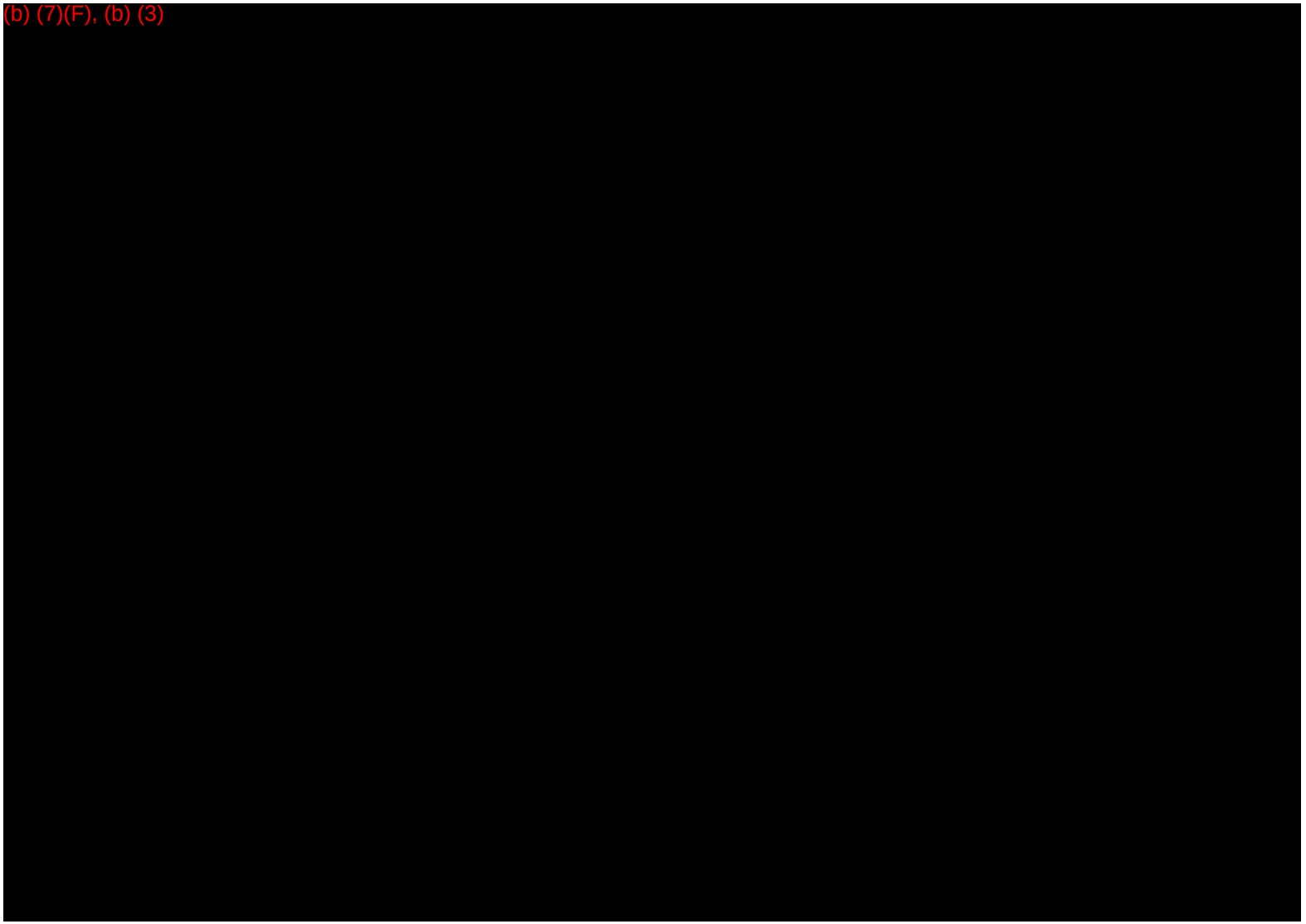

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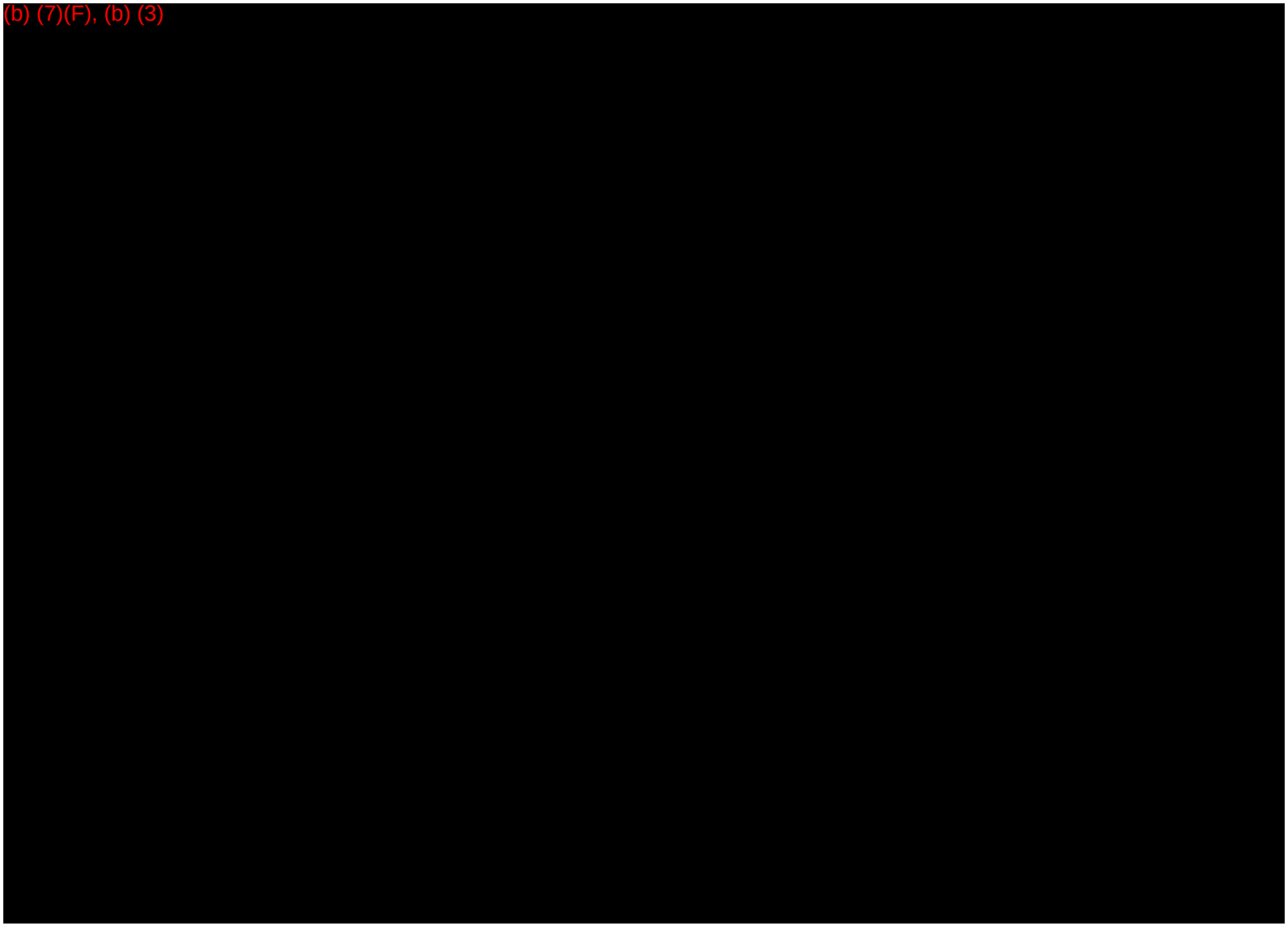
Valley Area – Section 82



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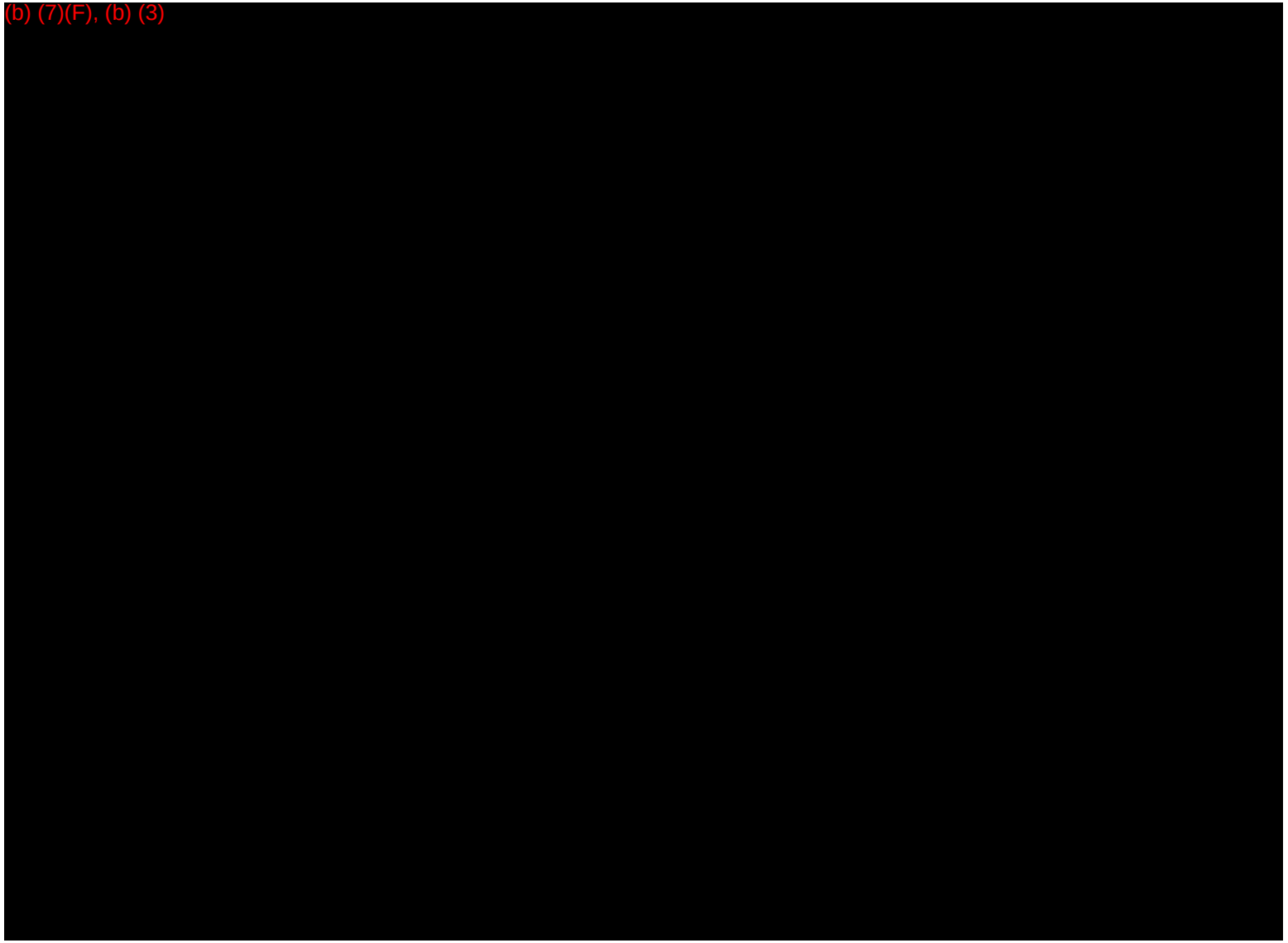
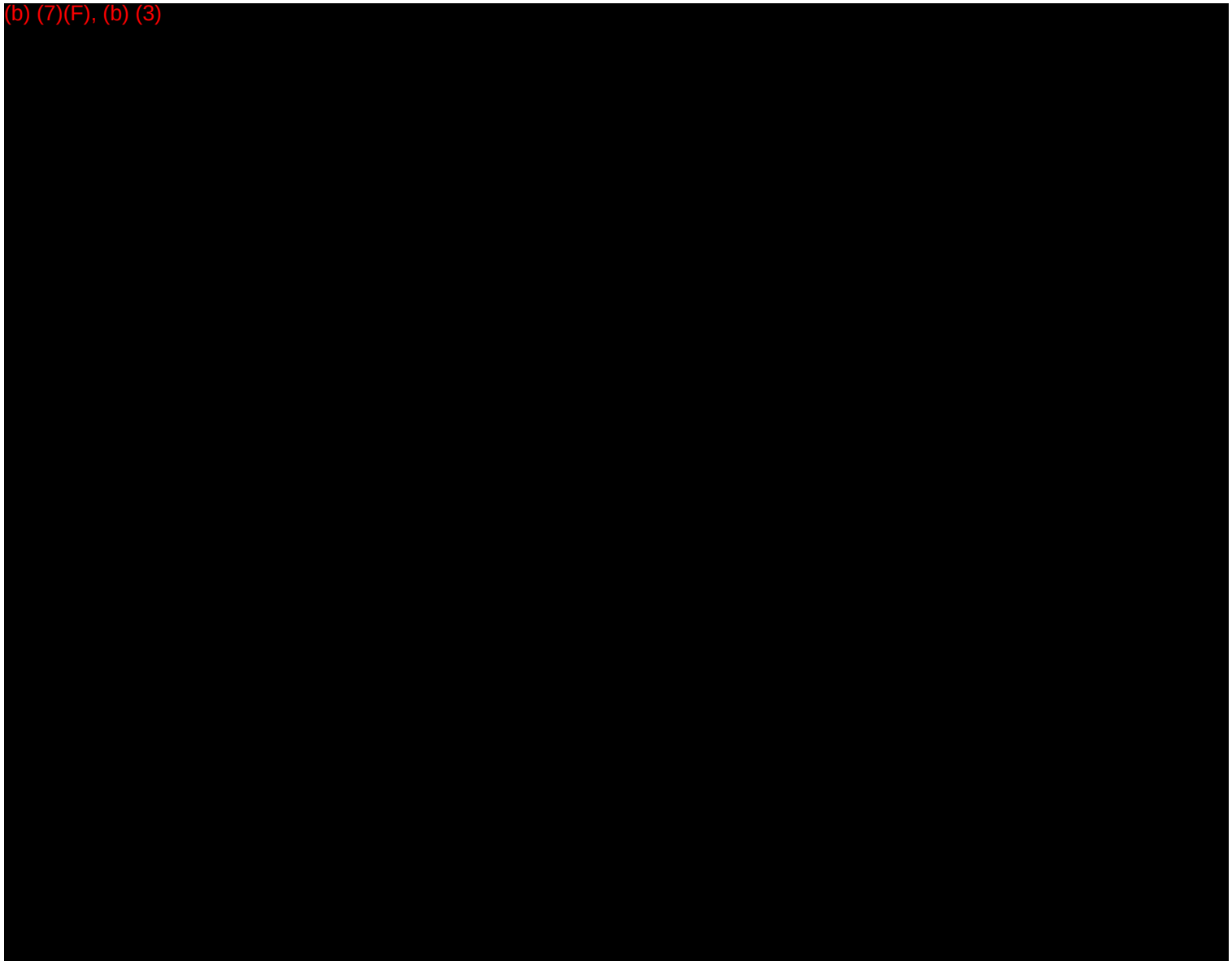
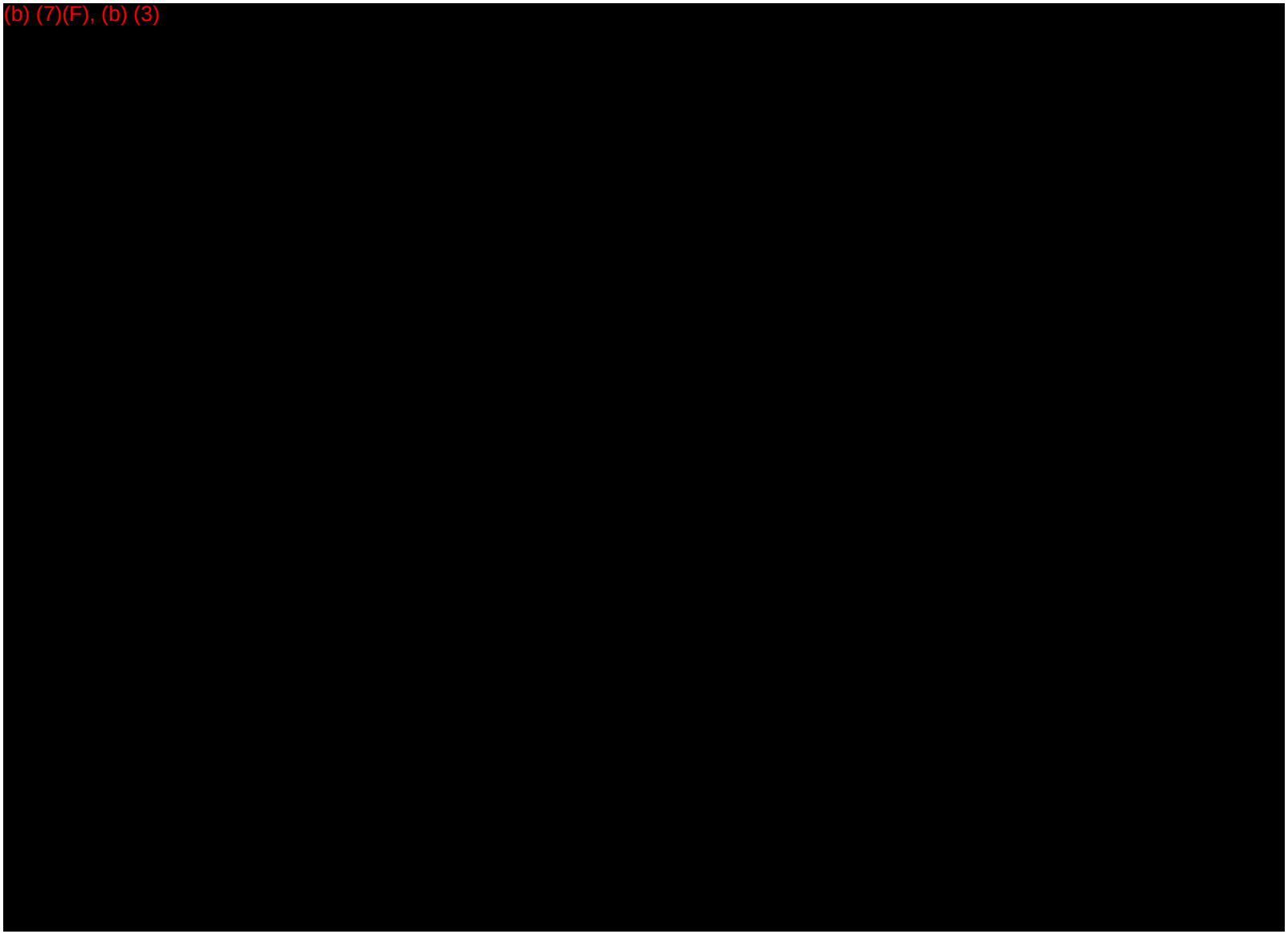


Valley Area – Sections 31-33



Valley Area – Sections 33-34



Valley Area – Sections 35-38

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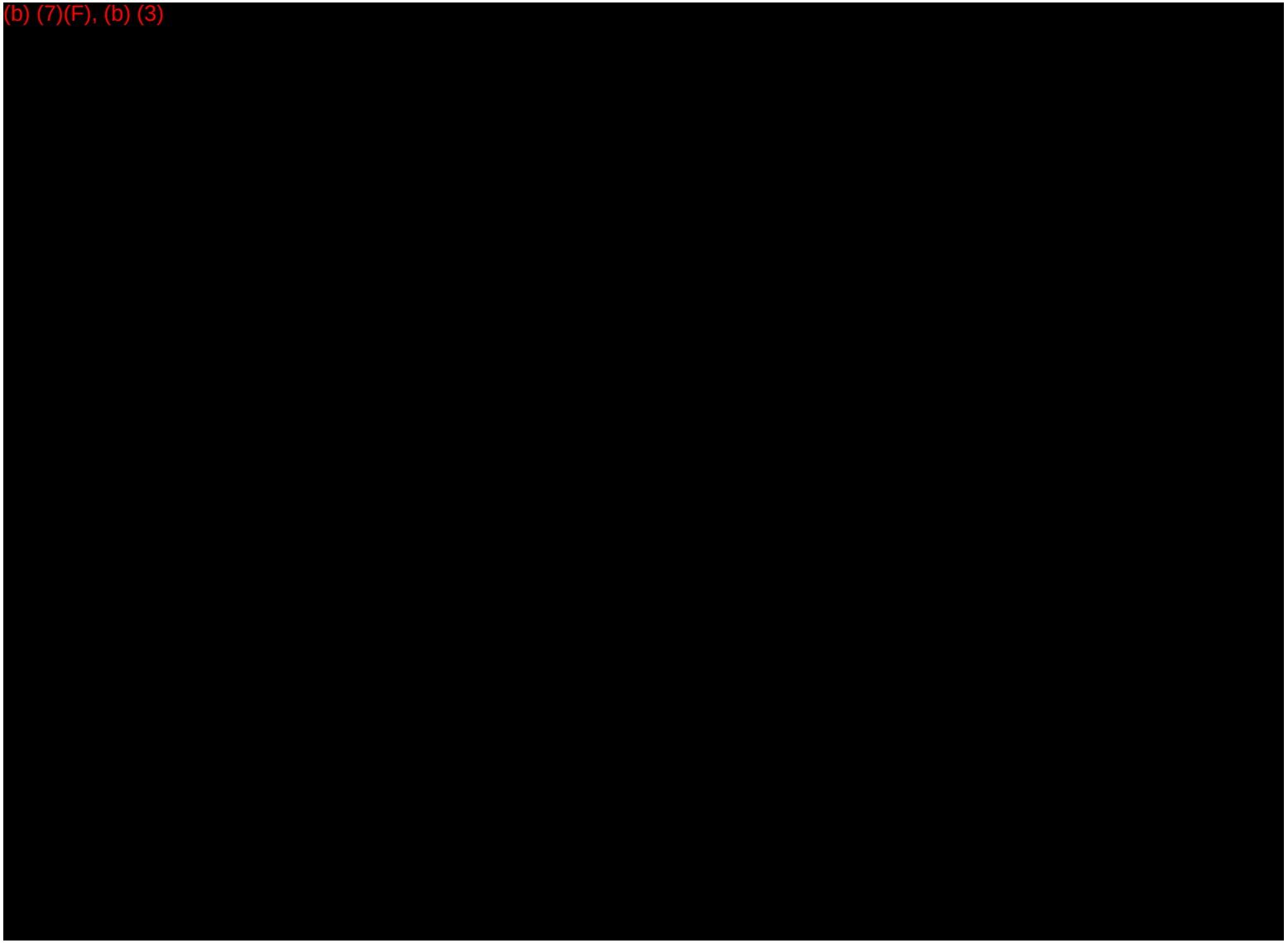

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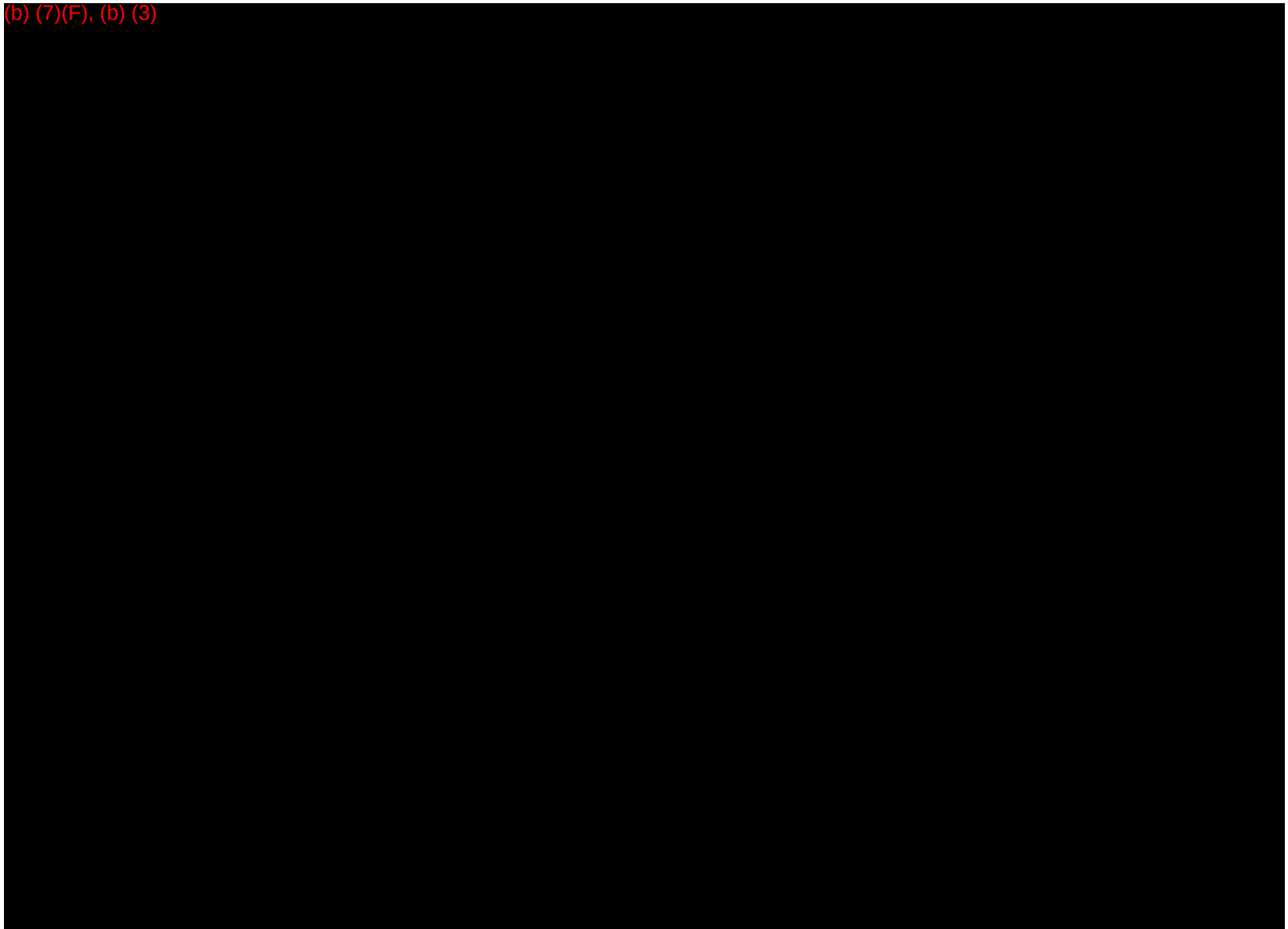
Valley Area – Sections 38-43



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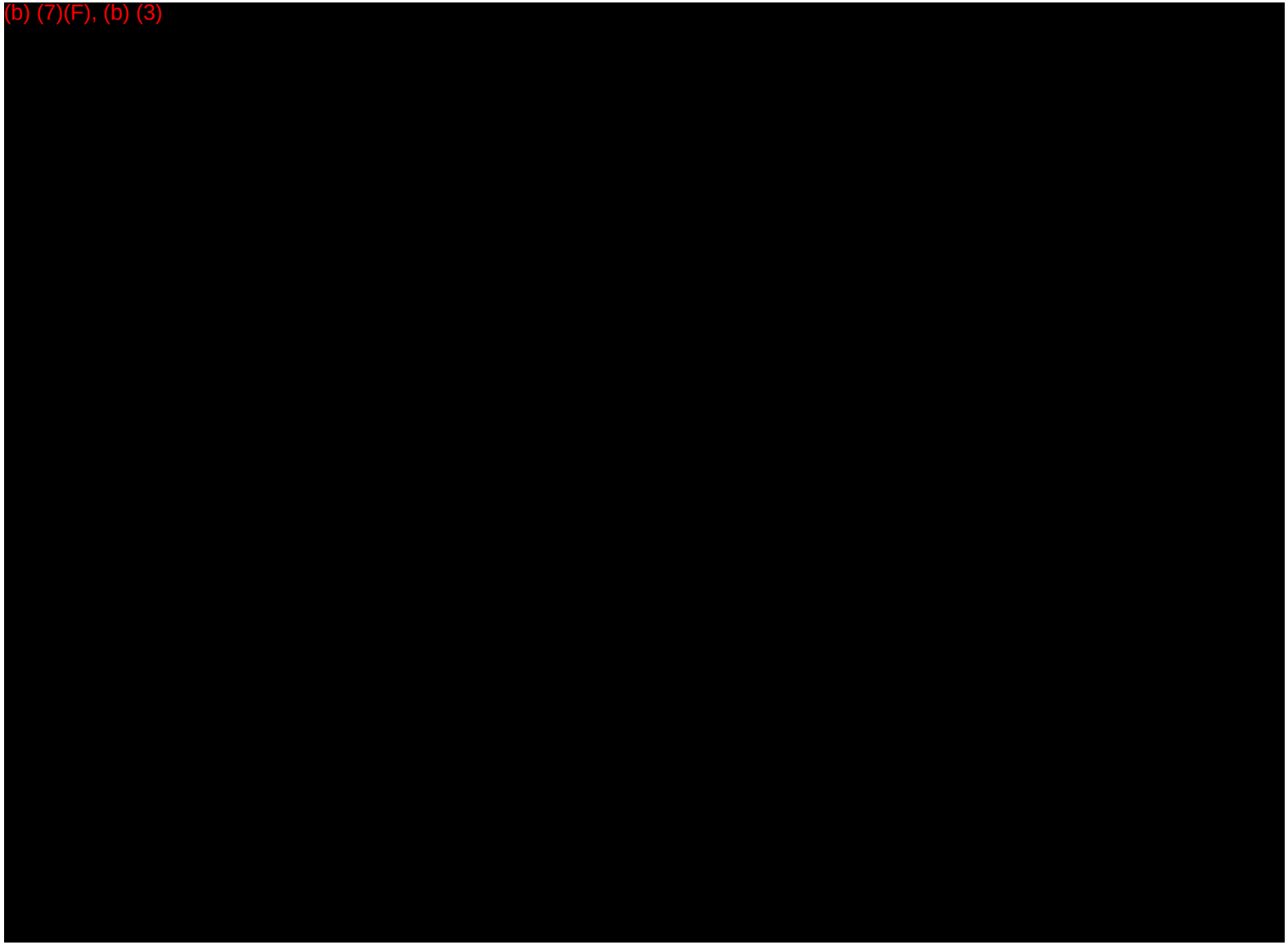
Valley Area – Sections 43-47

(b) (7)(F), (b) (3)

Valley Area – Sections 48-52



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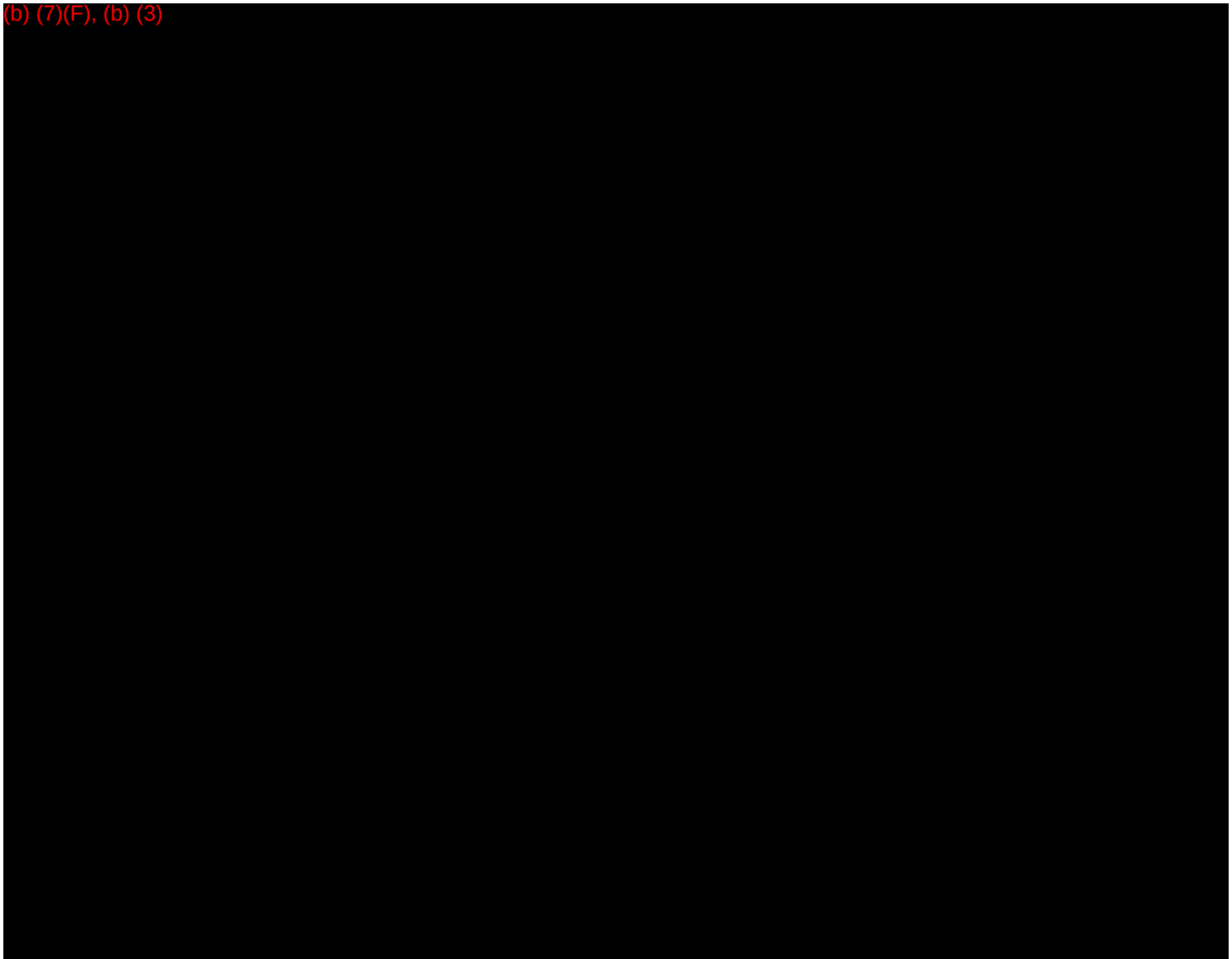
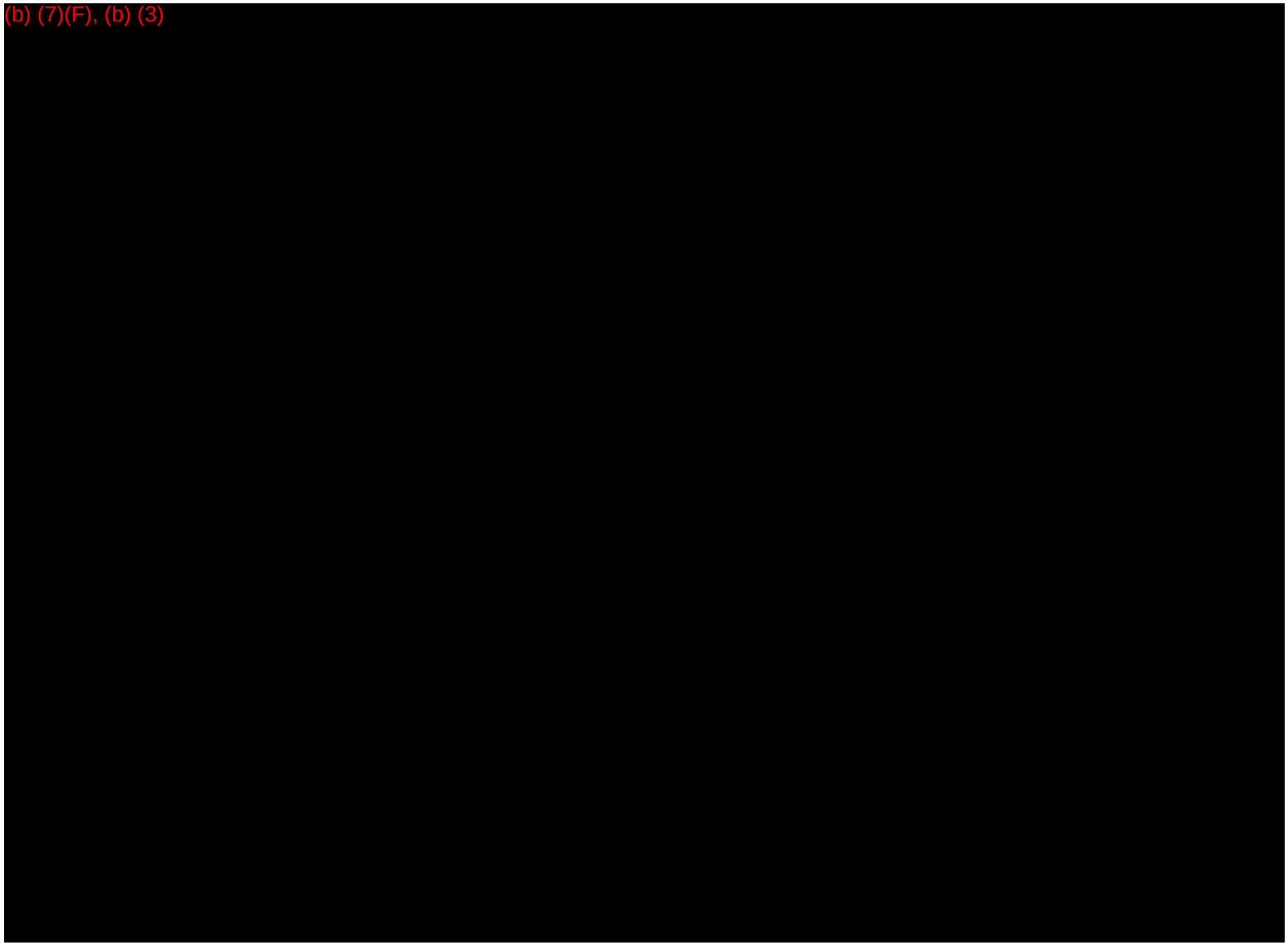
Valley Area – Sections 52-56

Valley Area – Sections 56-62

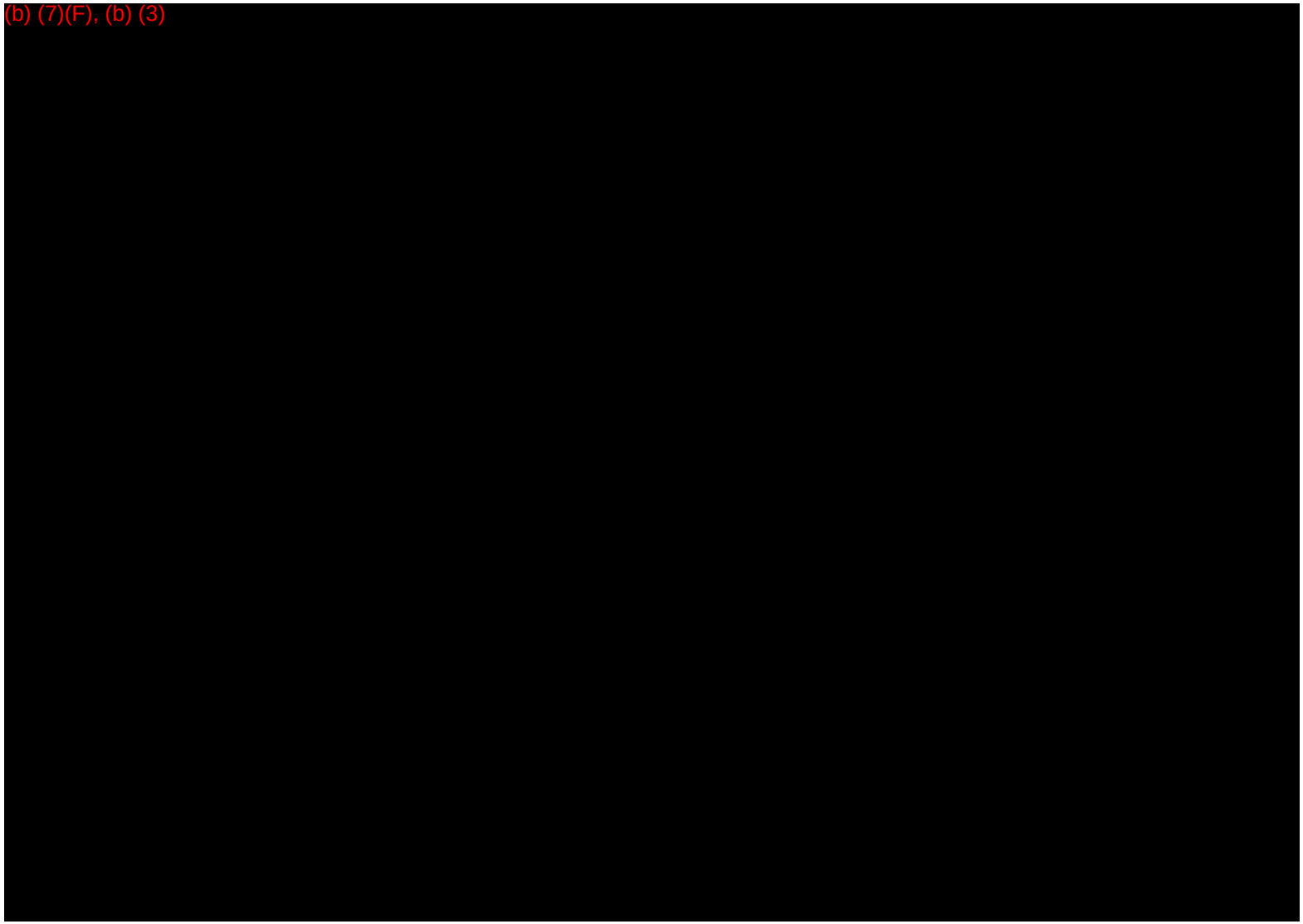


Valley Area – Sections 63-66

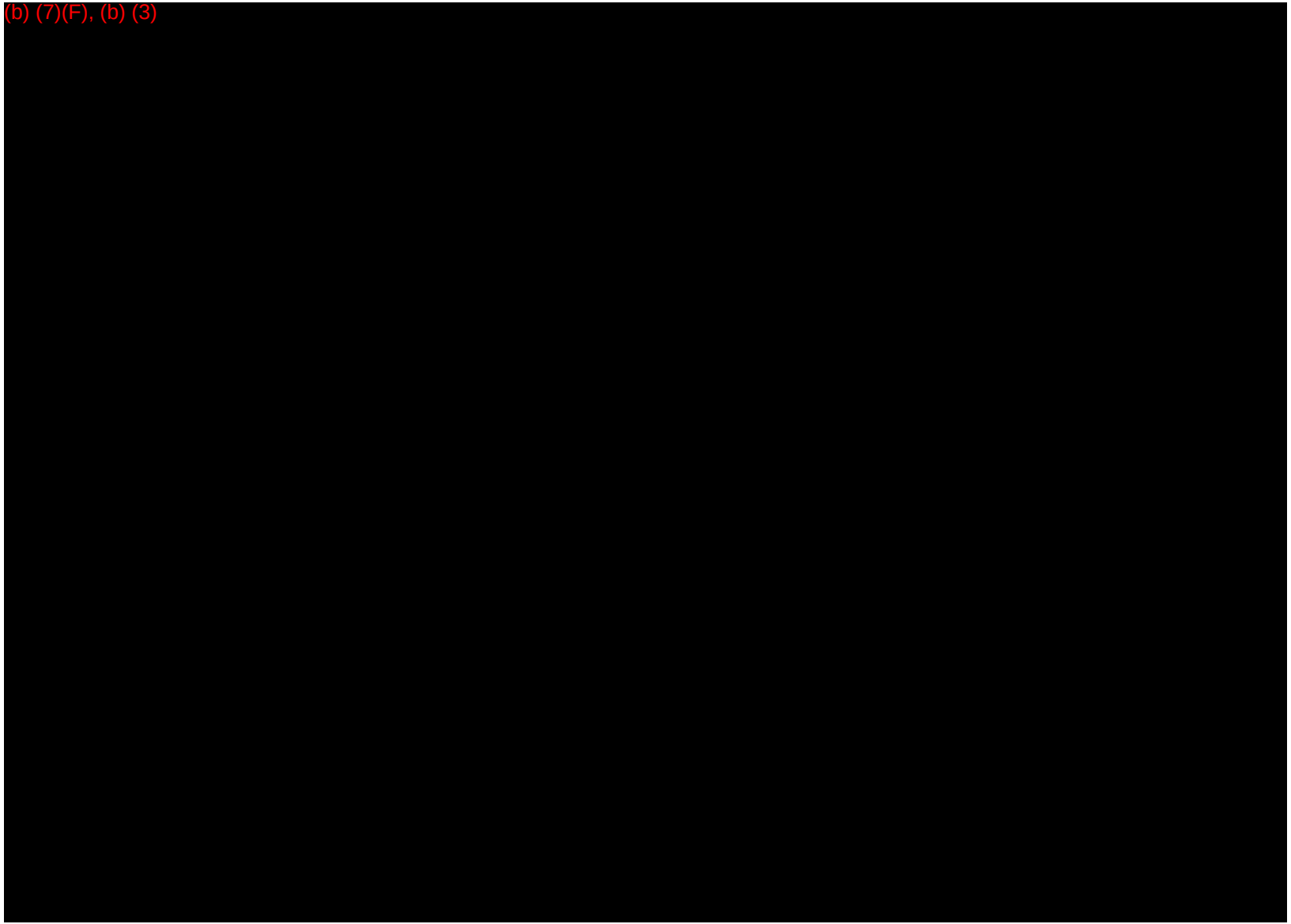


Valley Area – Sections 67-70

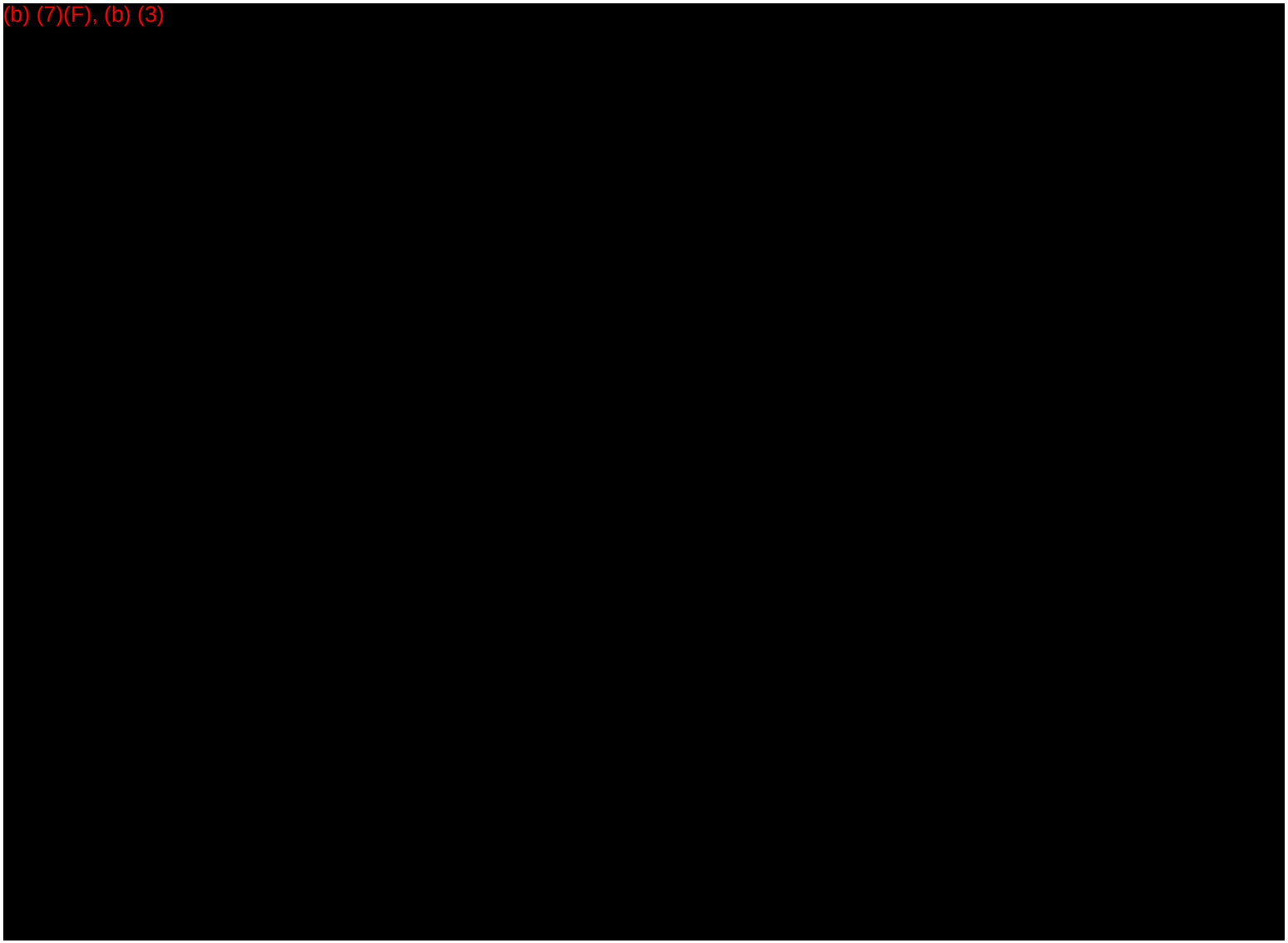
Line 166



Richmond Products Line



Line PN10



Line PN18

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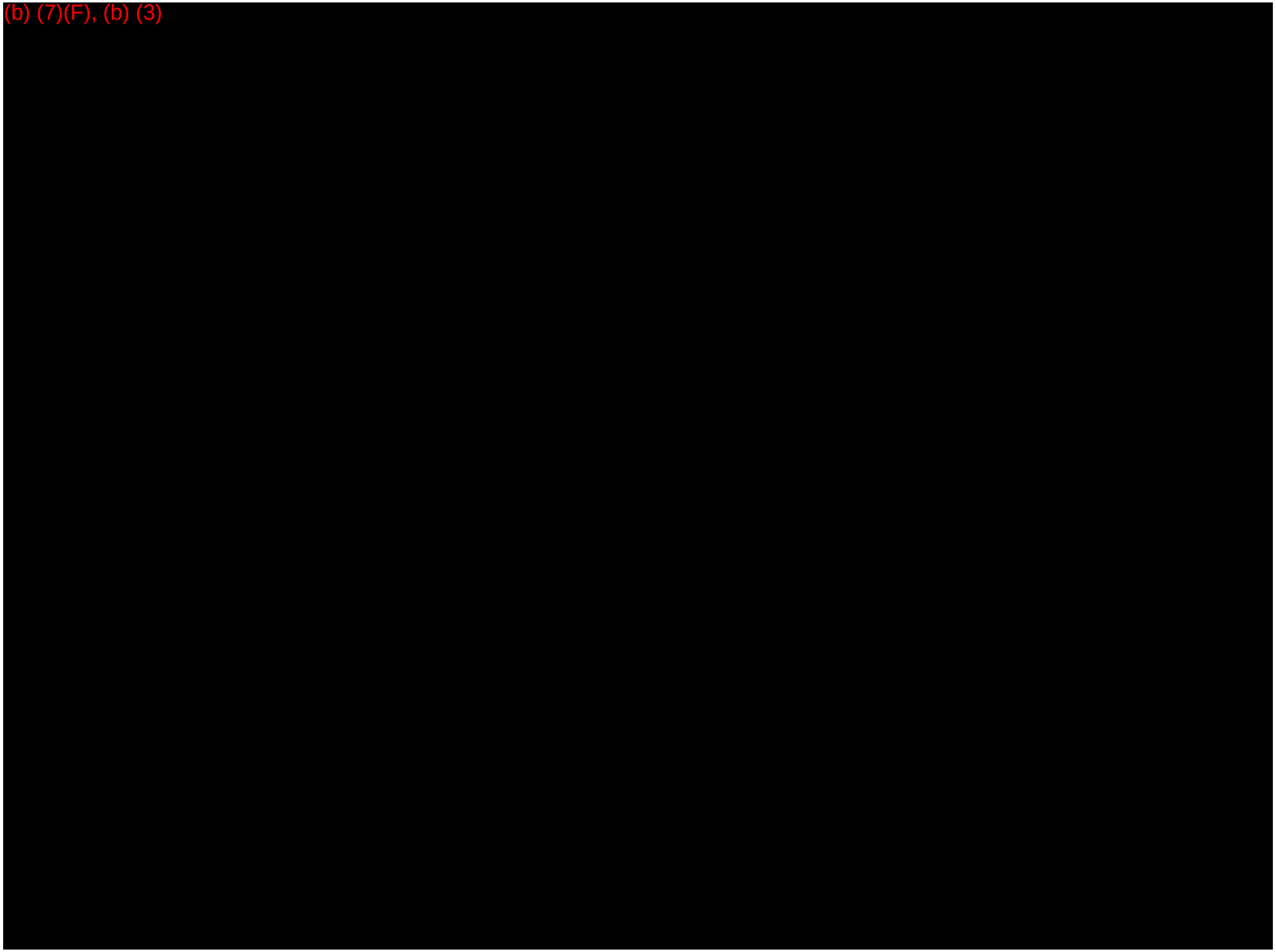

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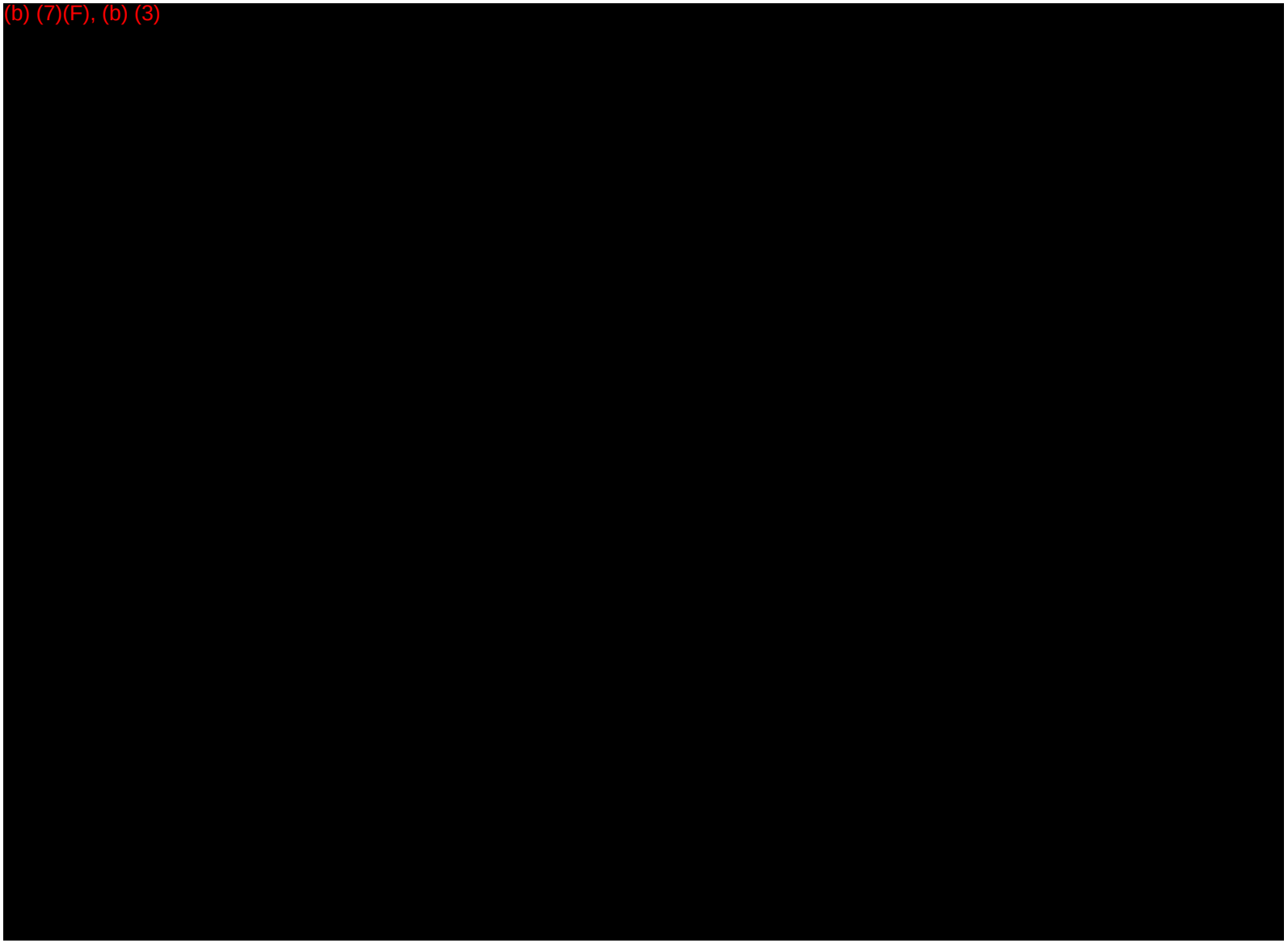
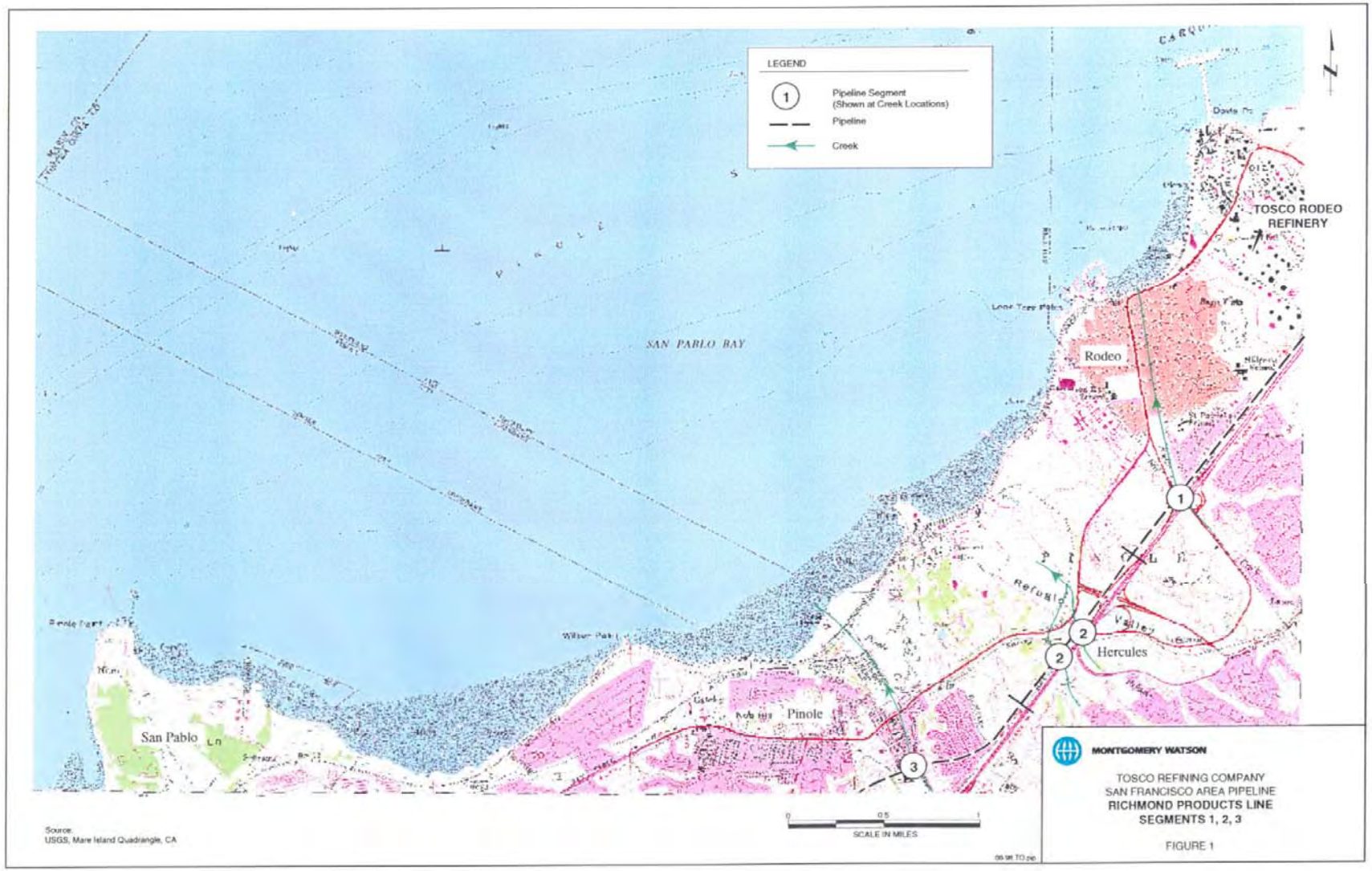
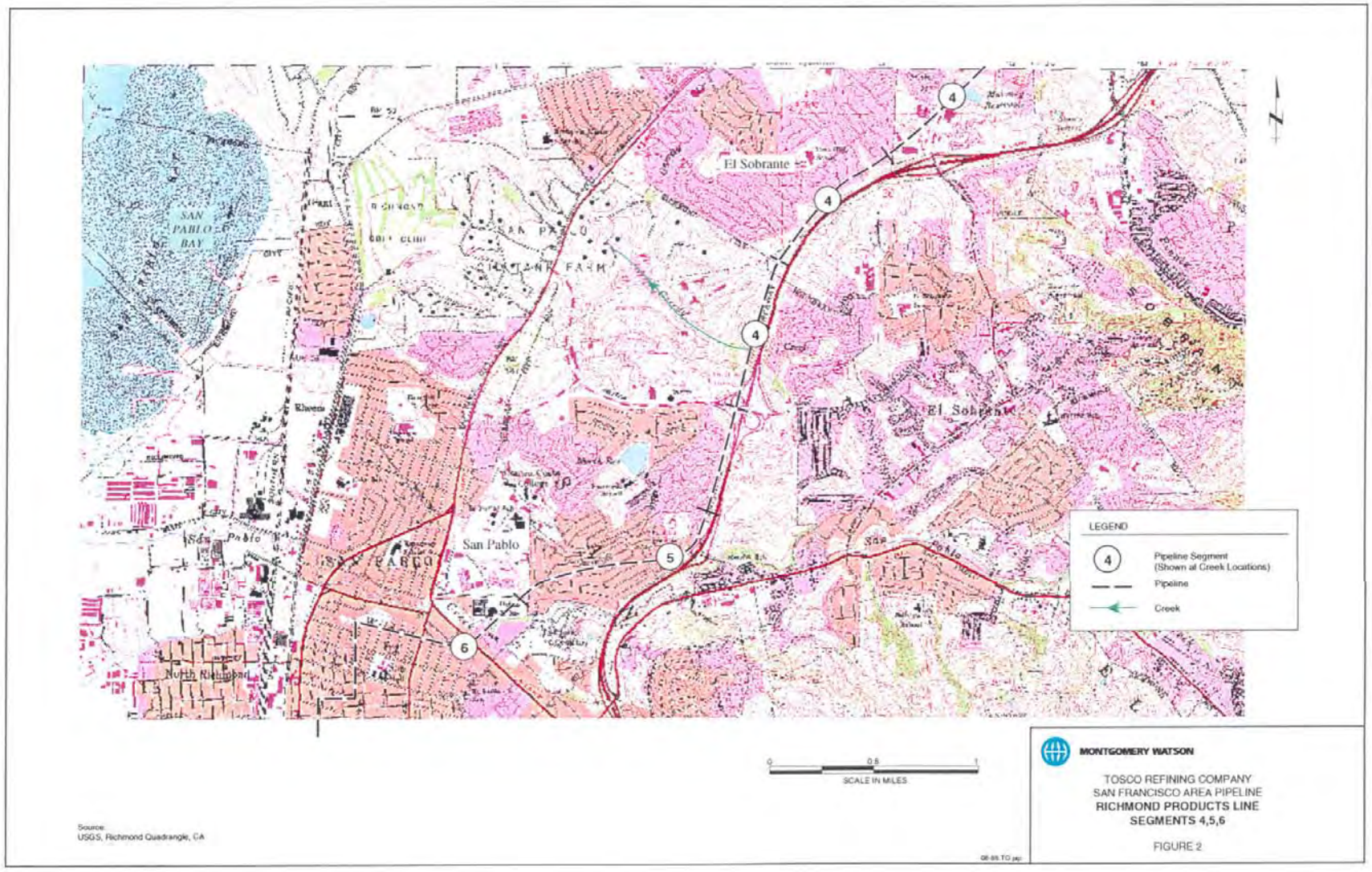
San Francisco Area Pipeline Maps



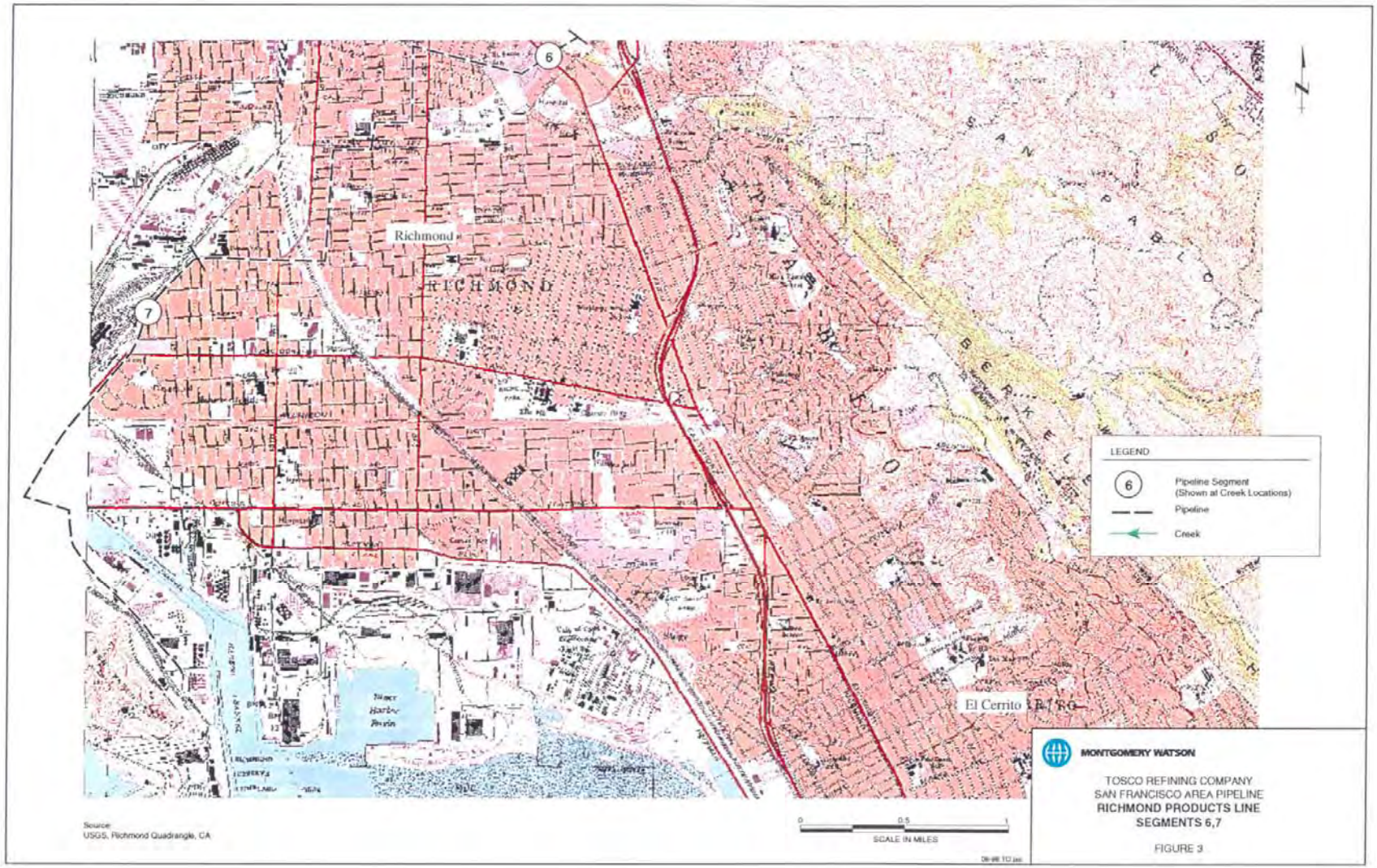
Richmond Products Line Segments 1, 2, 3



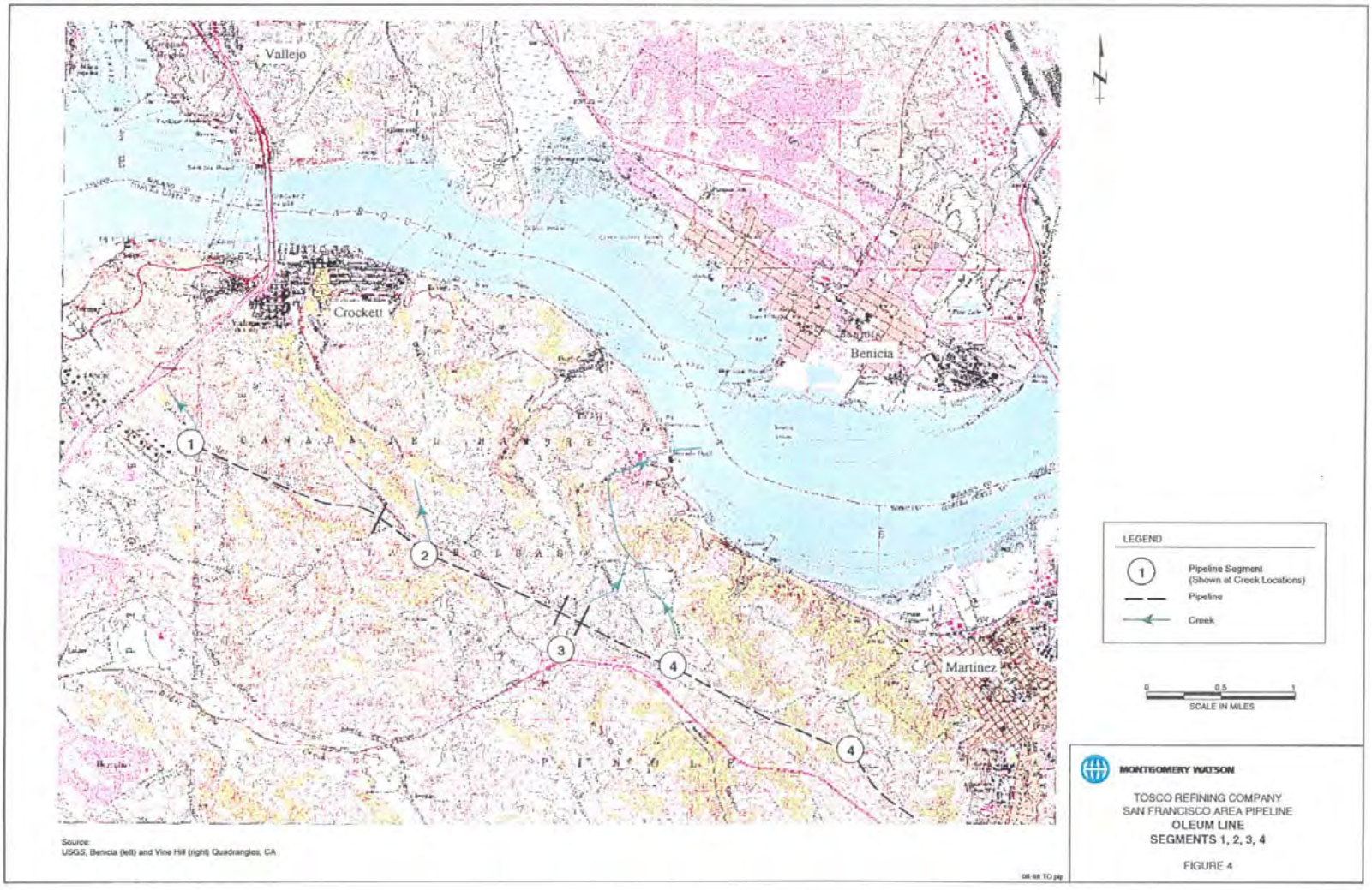
Richmond Products Line Segments 4, 5, 6



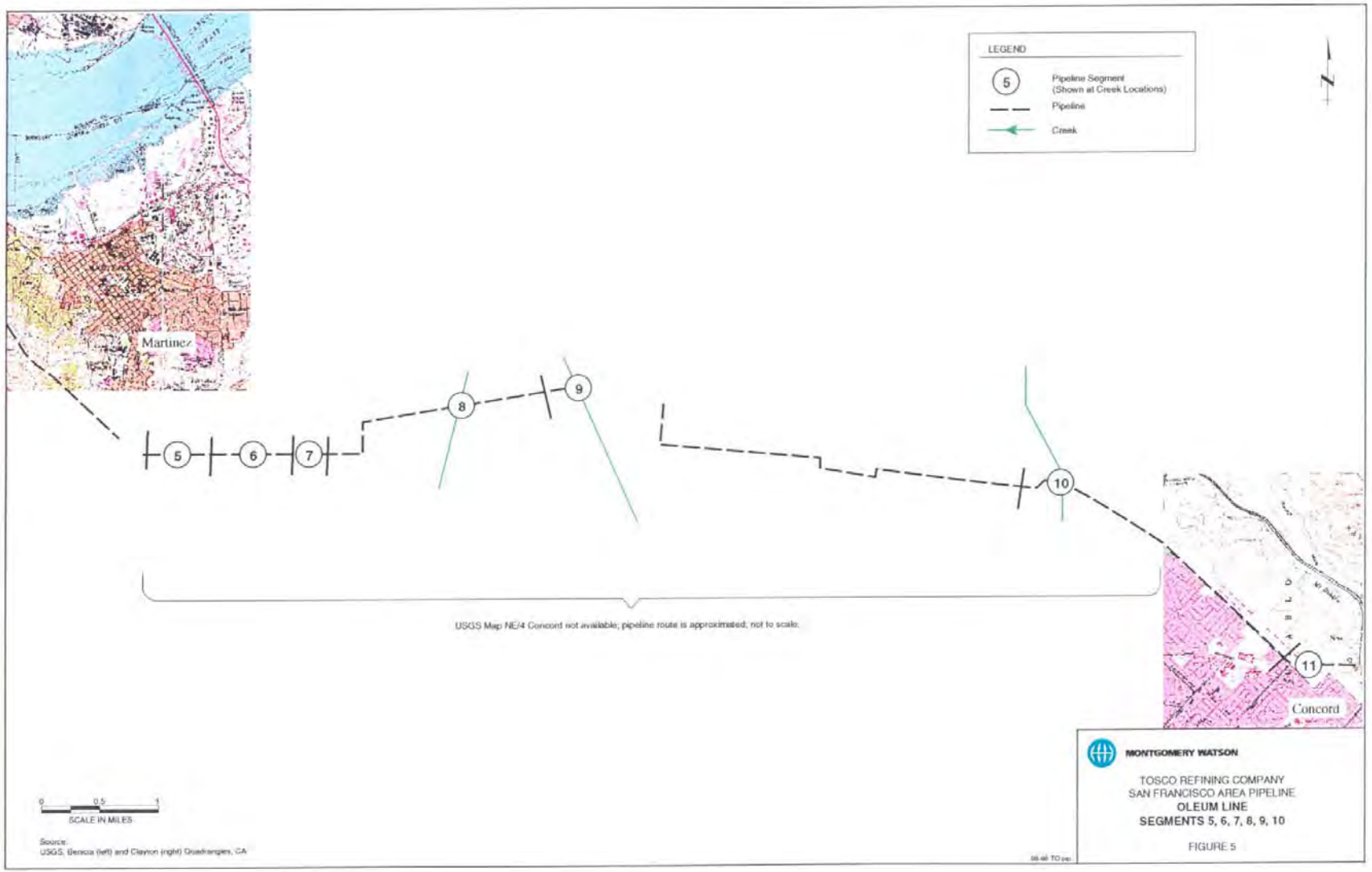
Richmond Products Line Segments 6, 7



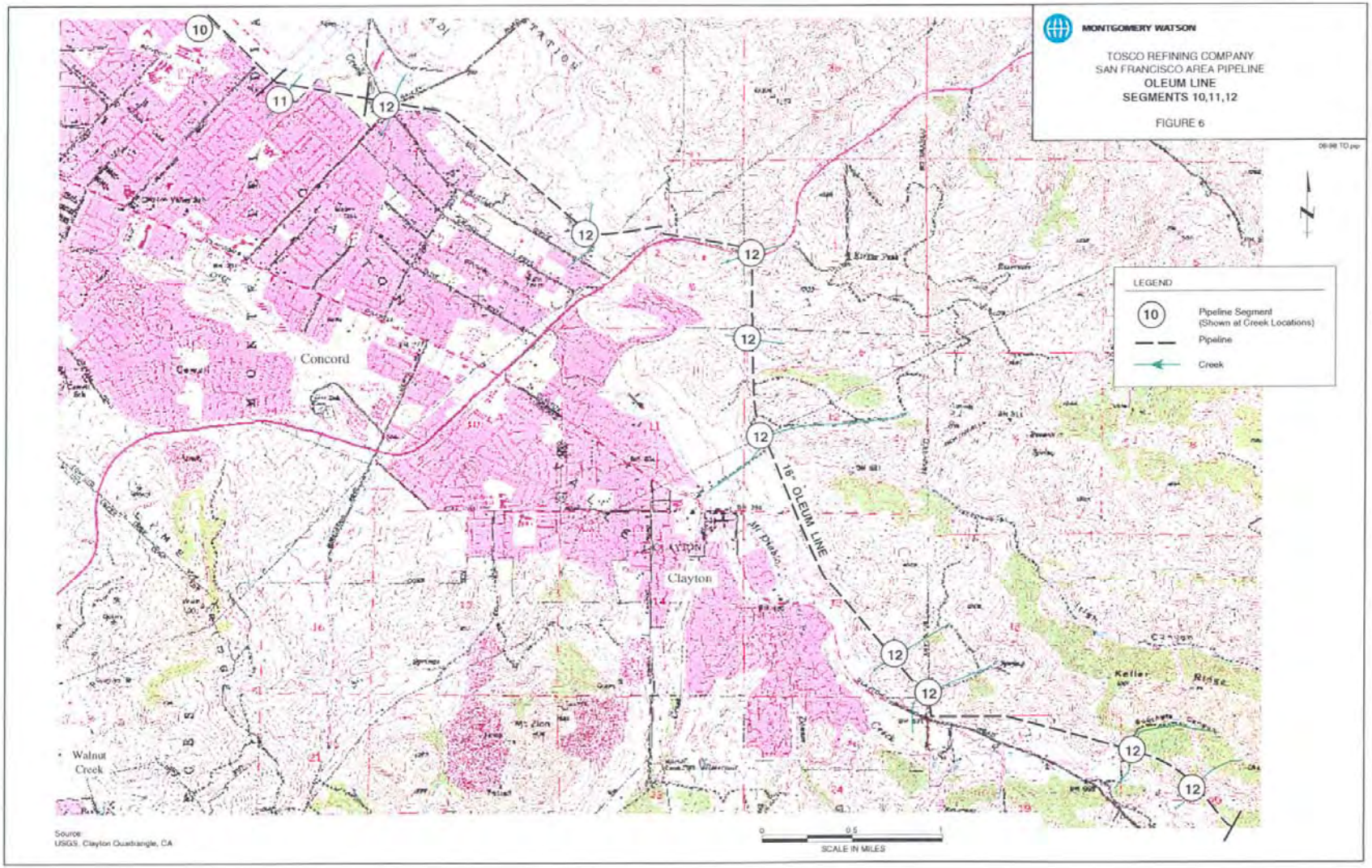
Oleum Line Segments 1, 2, 3, 4



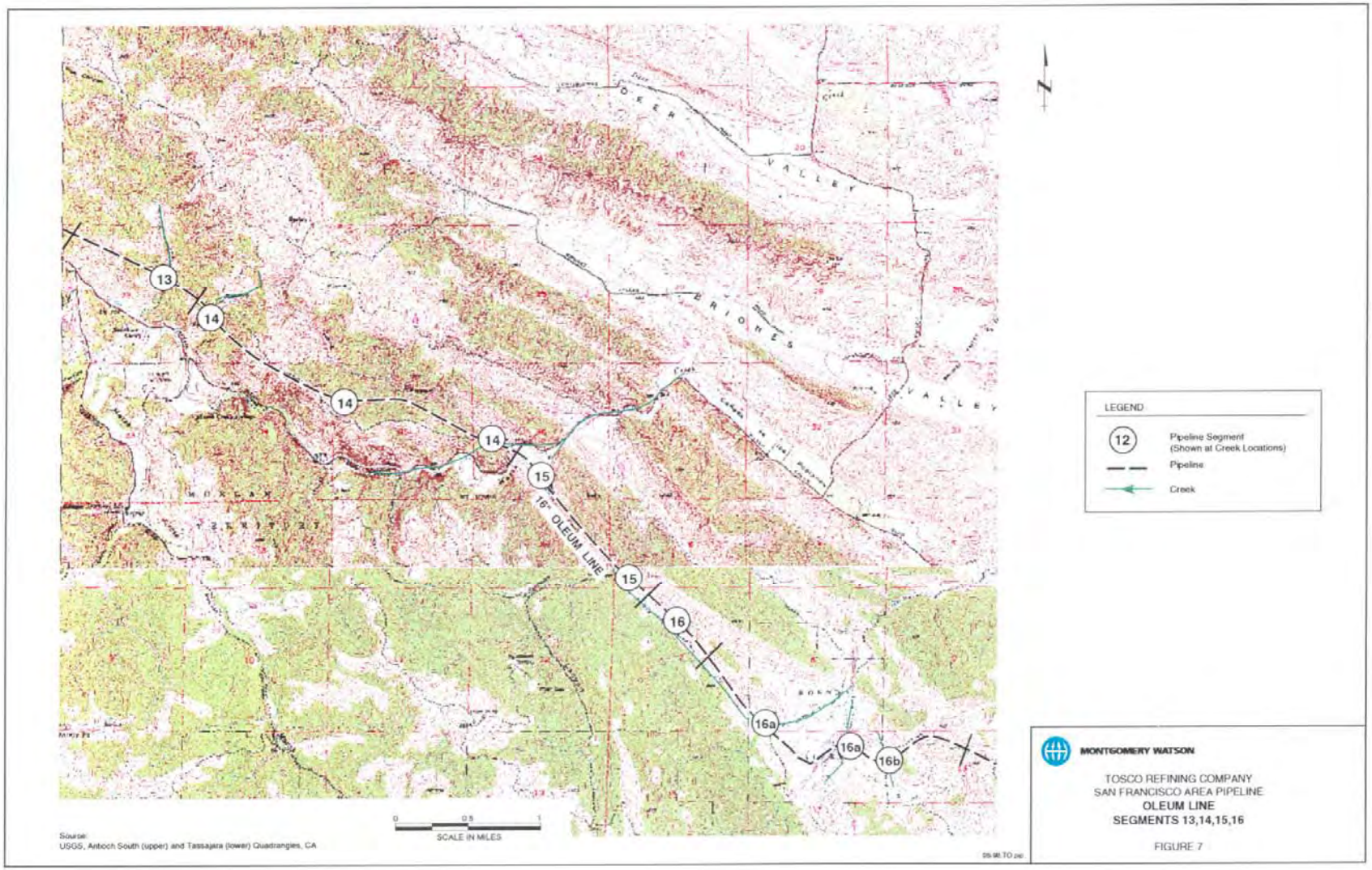
Oleum Line Segments 5, 6, 7, 8, 9, 10



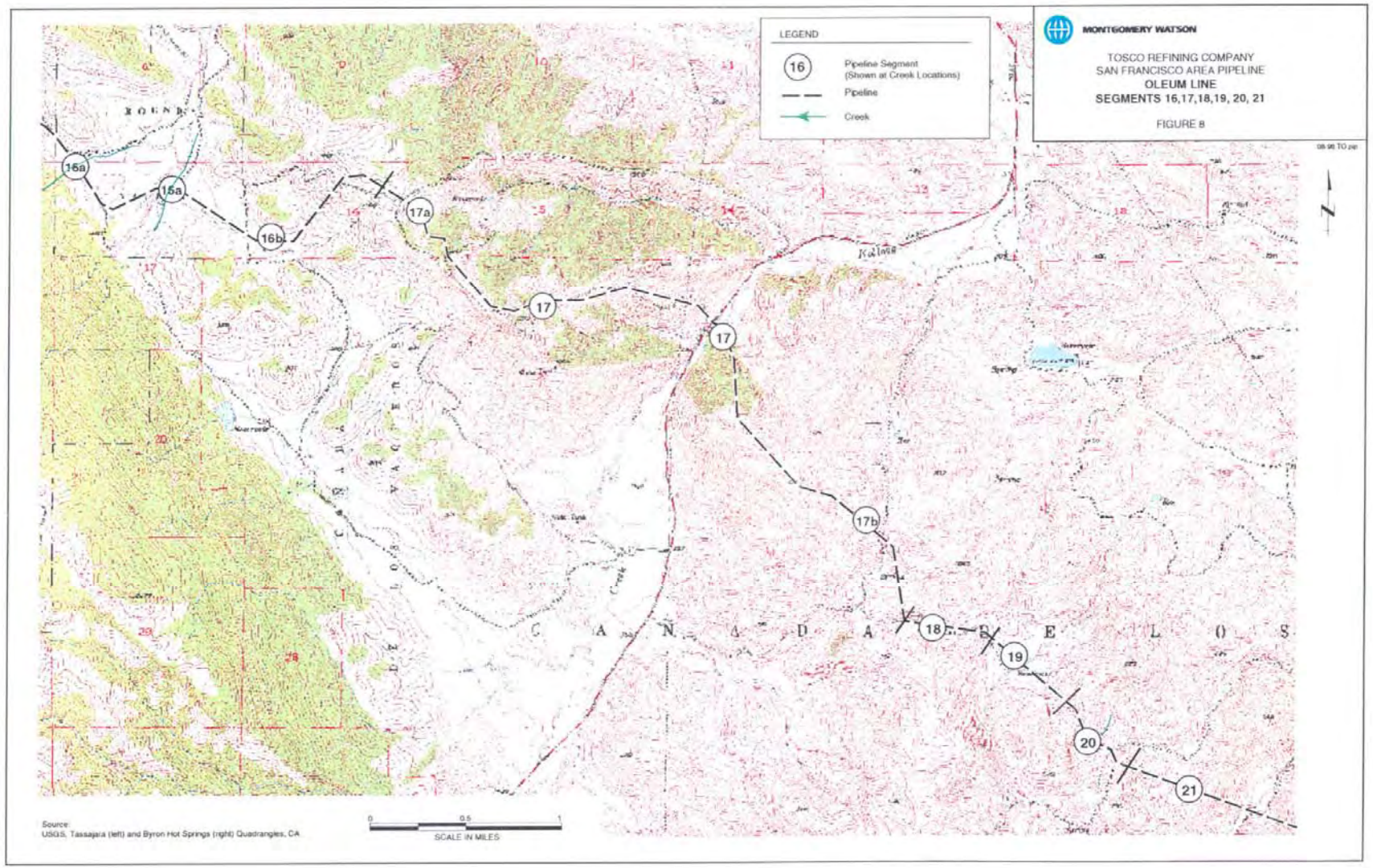
Oleum Line Segments 10, 11, 12



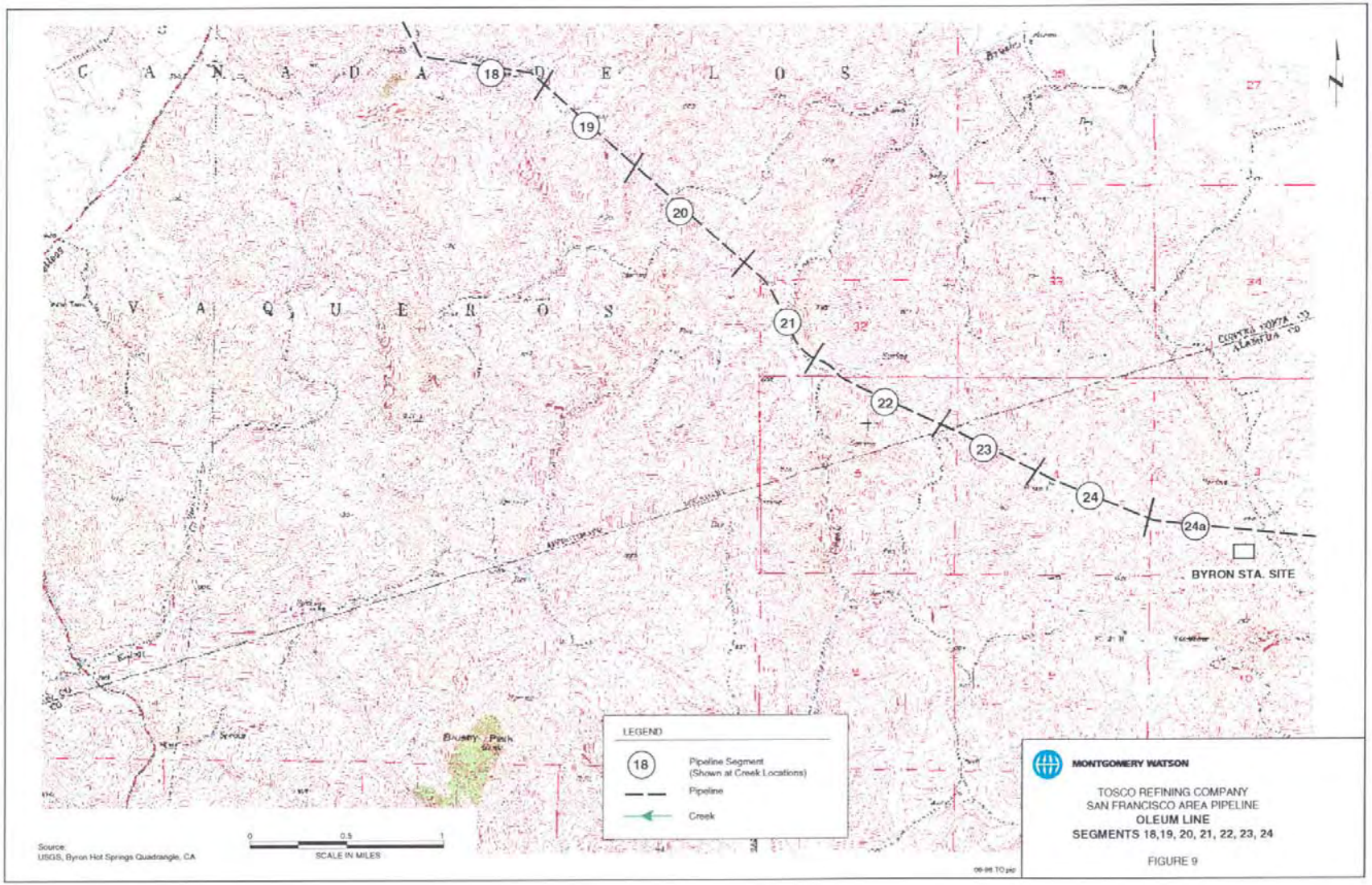
Oleum Line Segments 13, 14, 15, 16



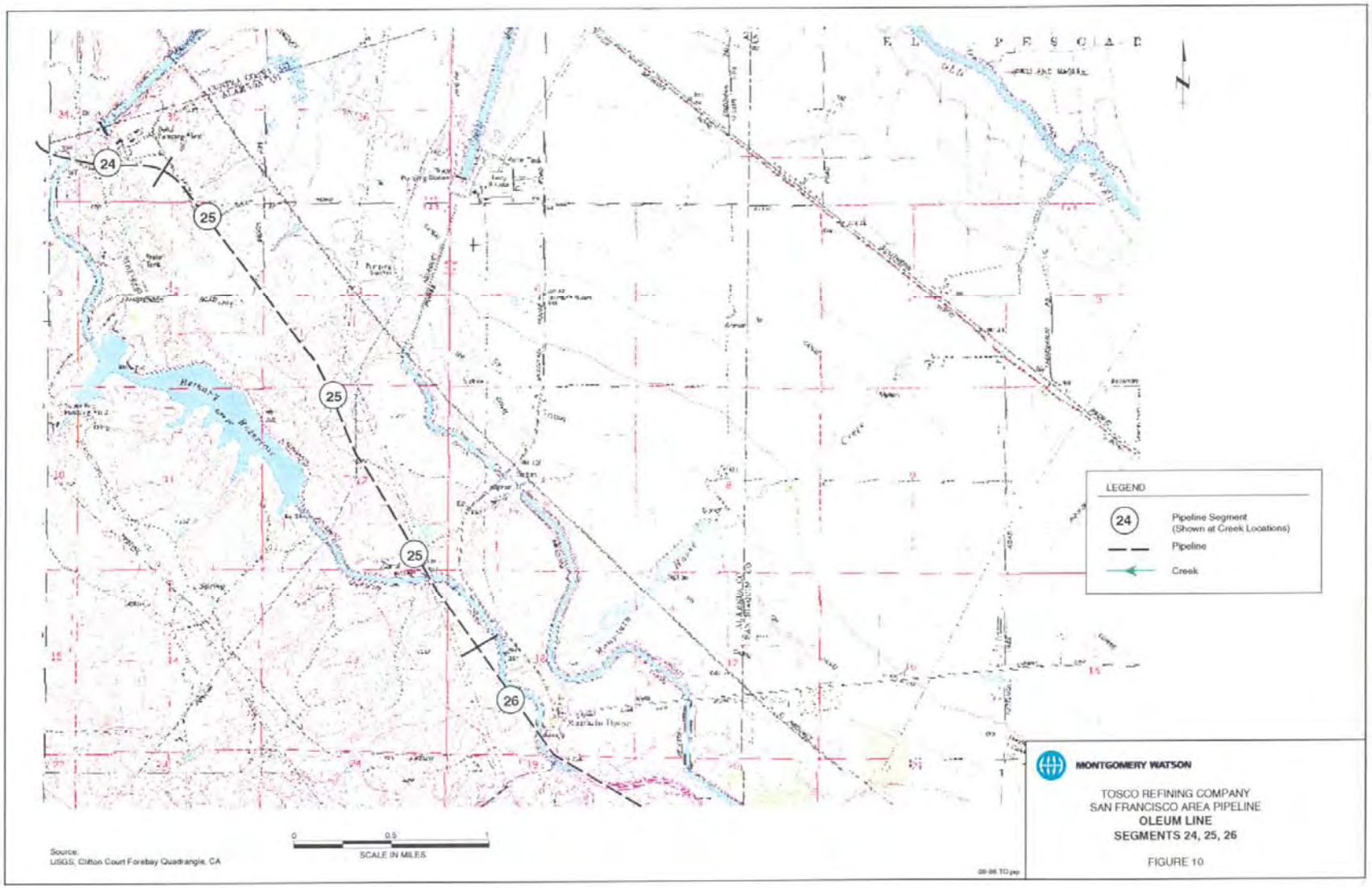
Oleum Line Segments 16, 17, 18, 19, 20, 21



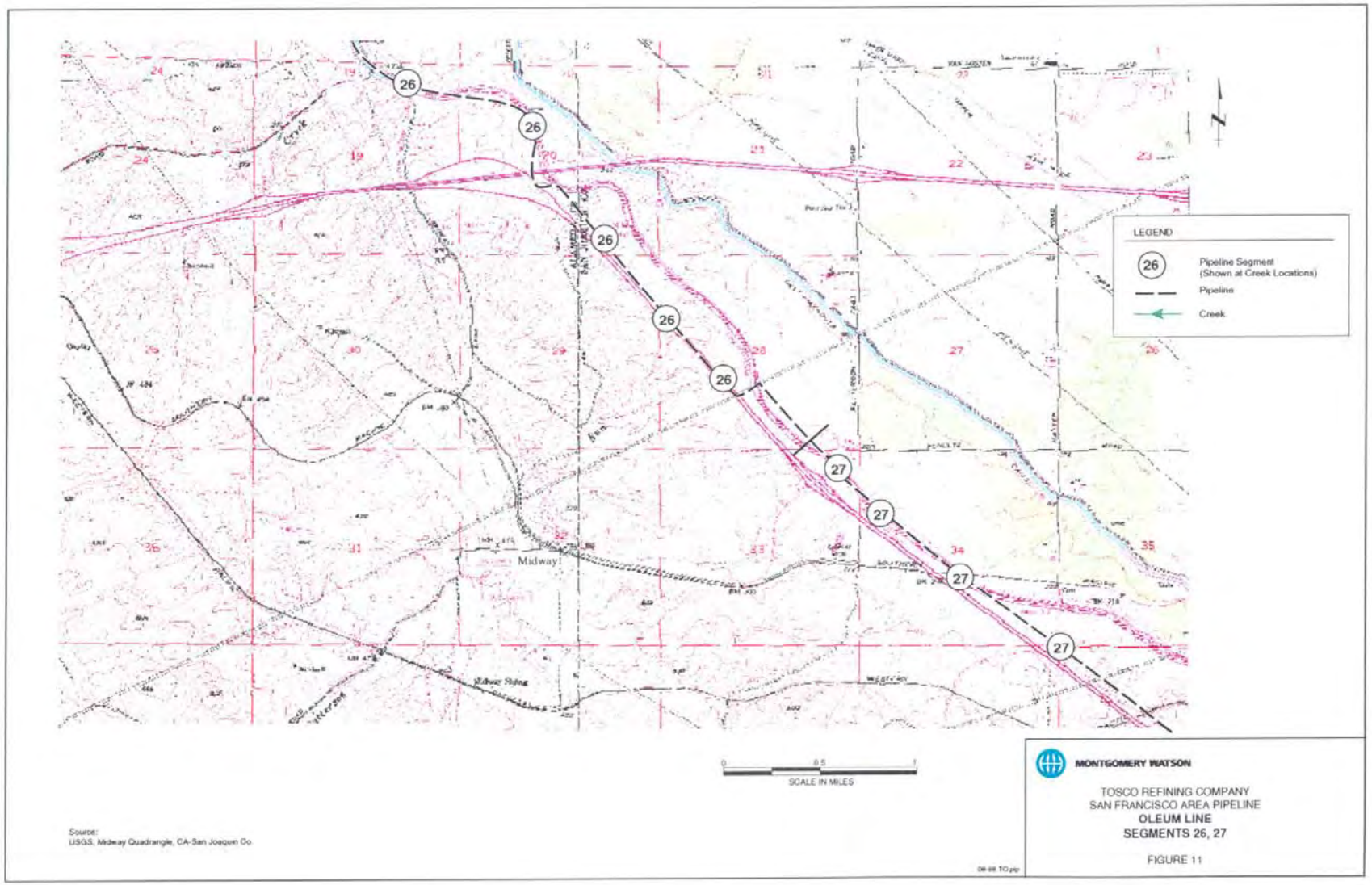
Oleum Line Segments 18, 19, 20, 21, 22, 23, 24



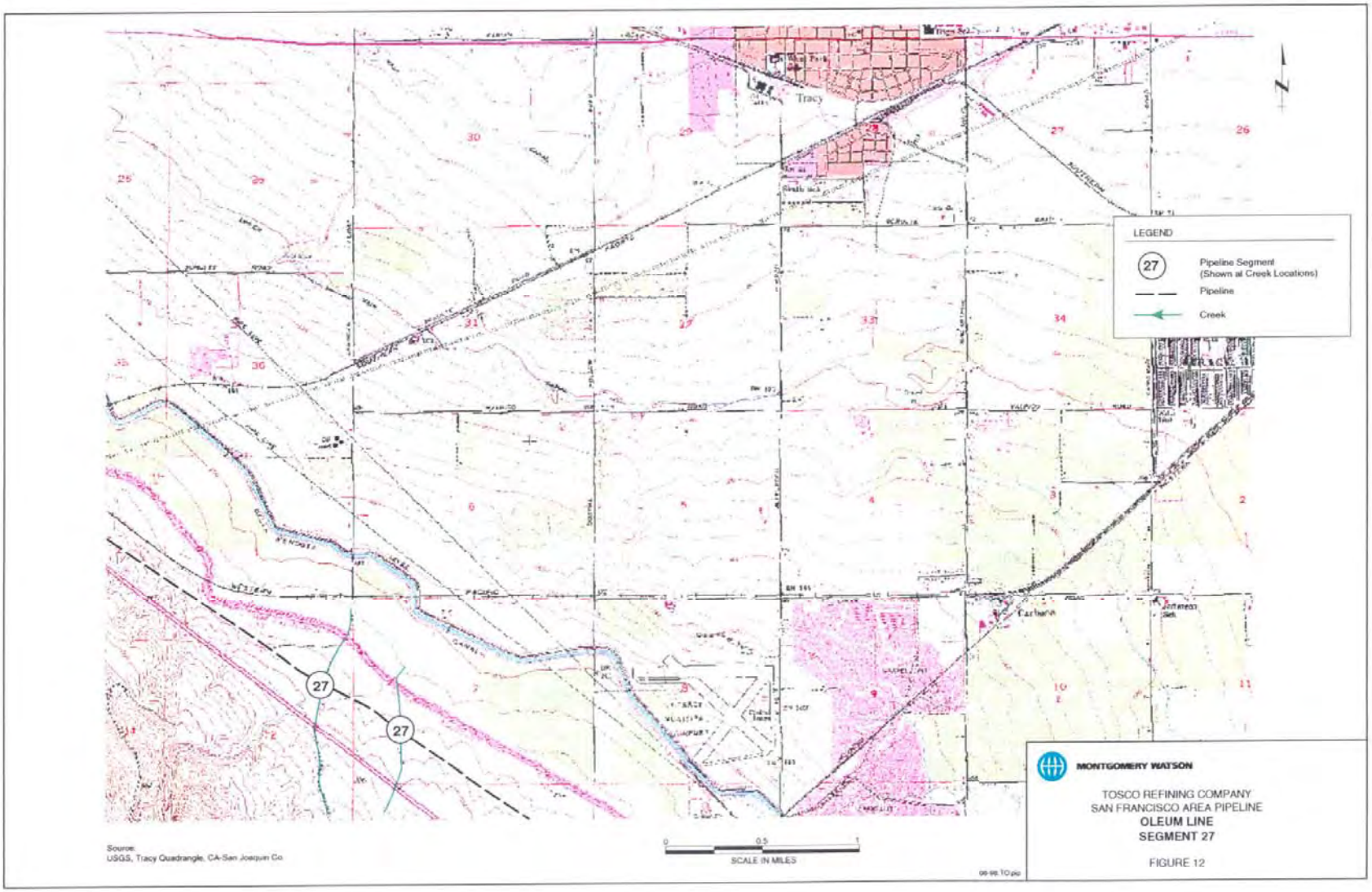
Oleum Line Segments 24, 25, 26



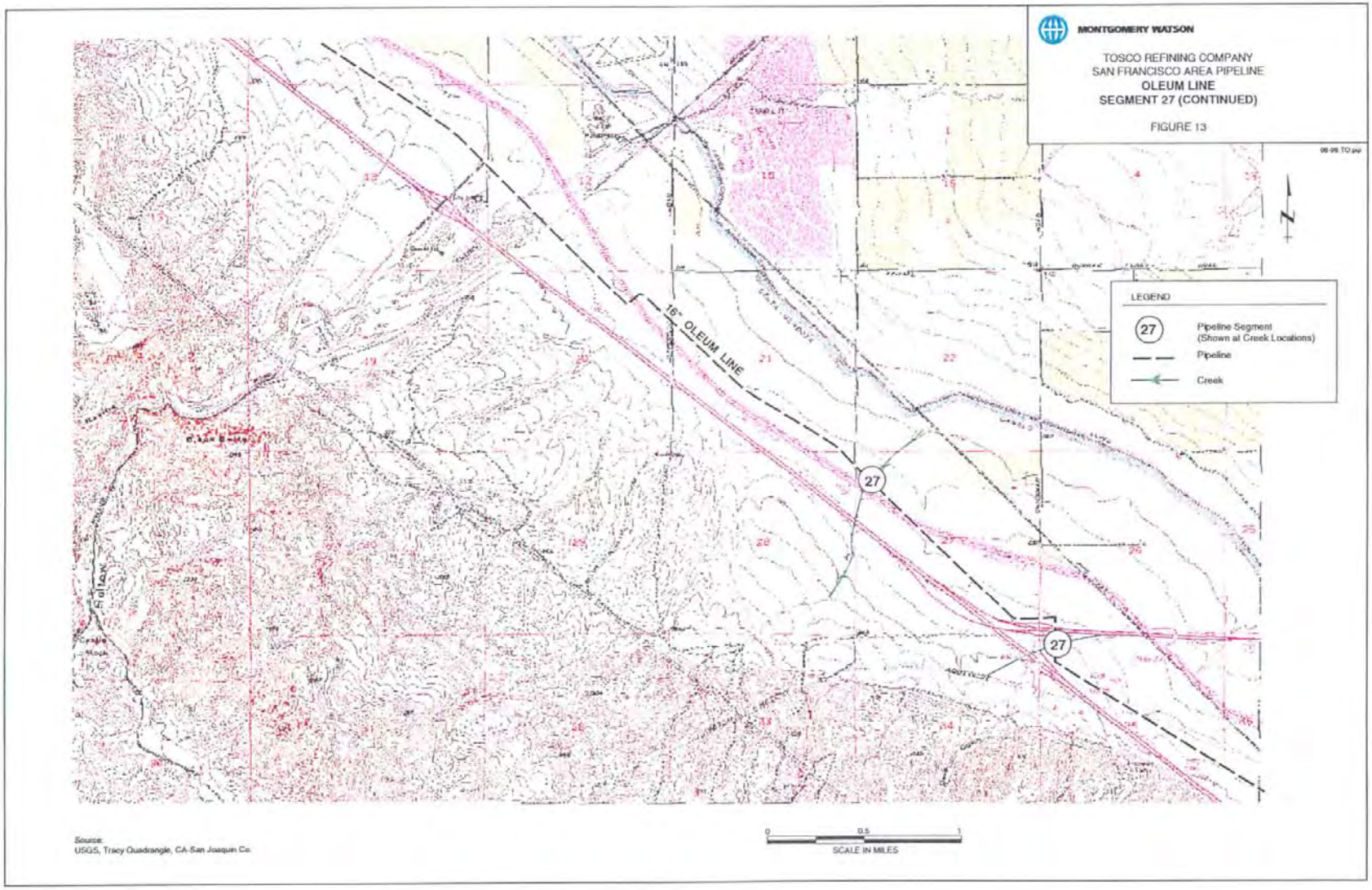
Oleum Line Segments 26, 27



Oleum Line Segment 27



Oleum Line Segment 27 – Continued



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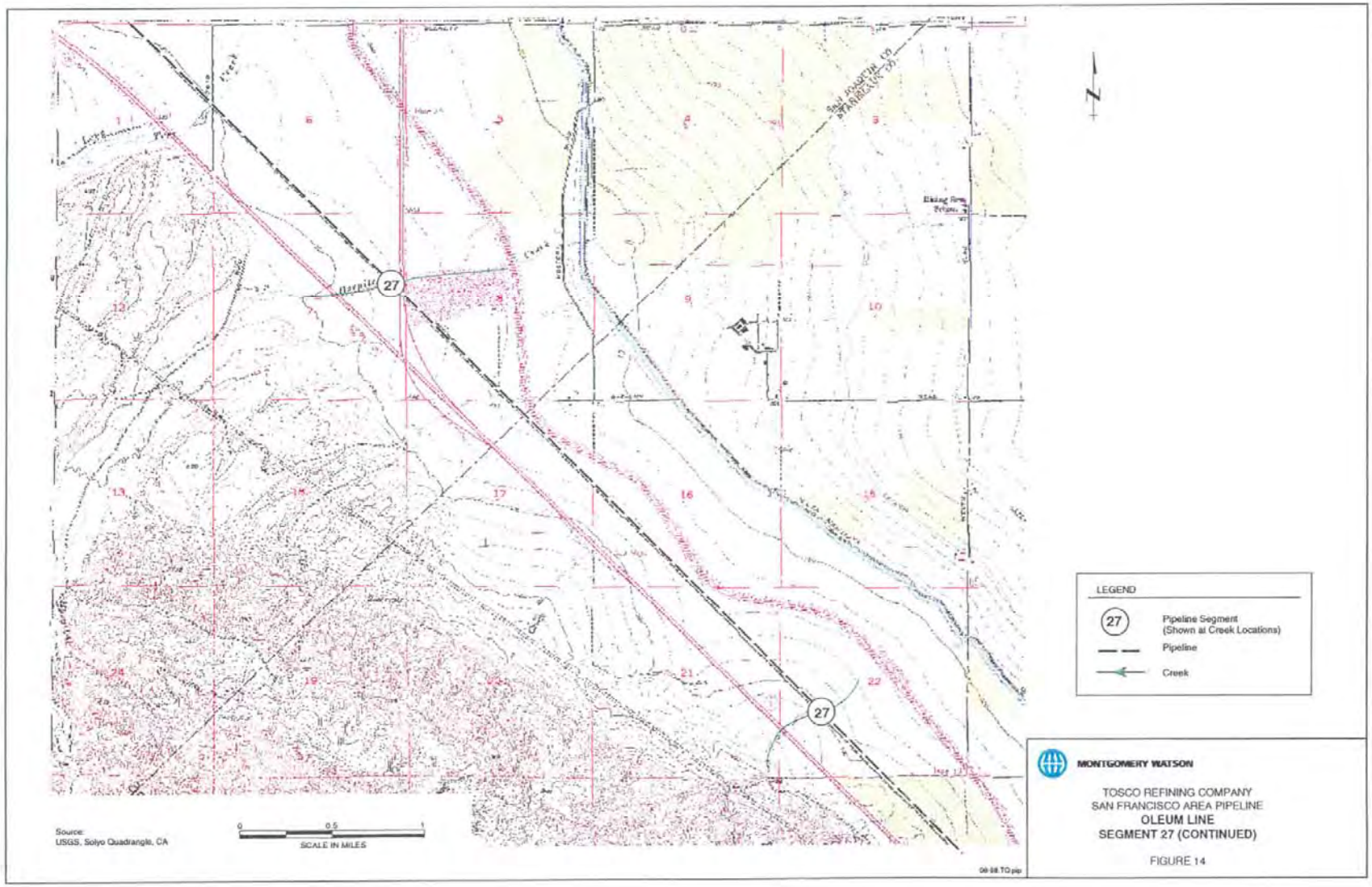
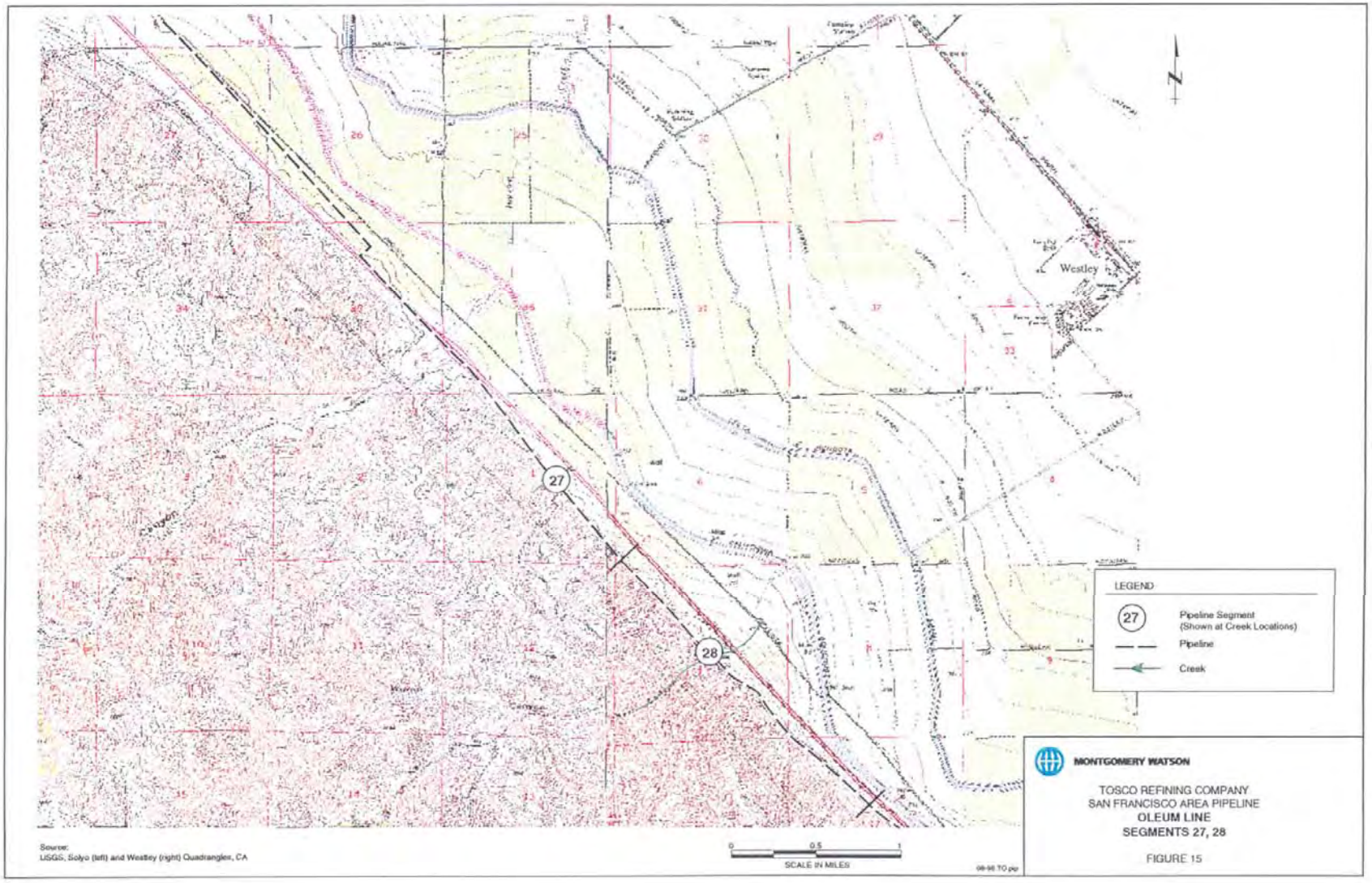
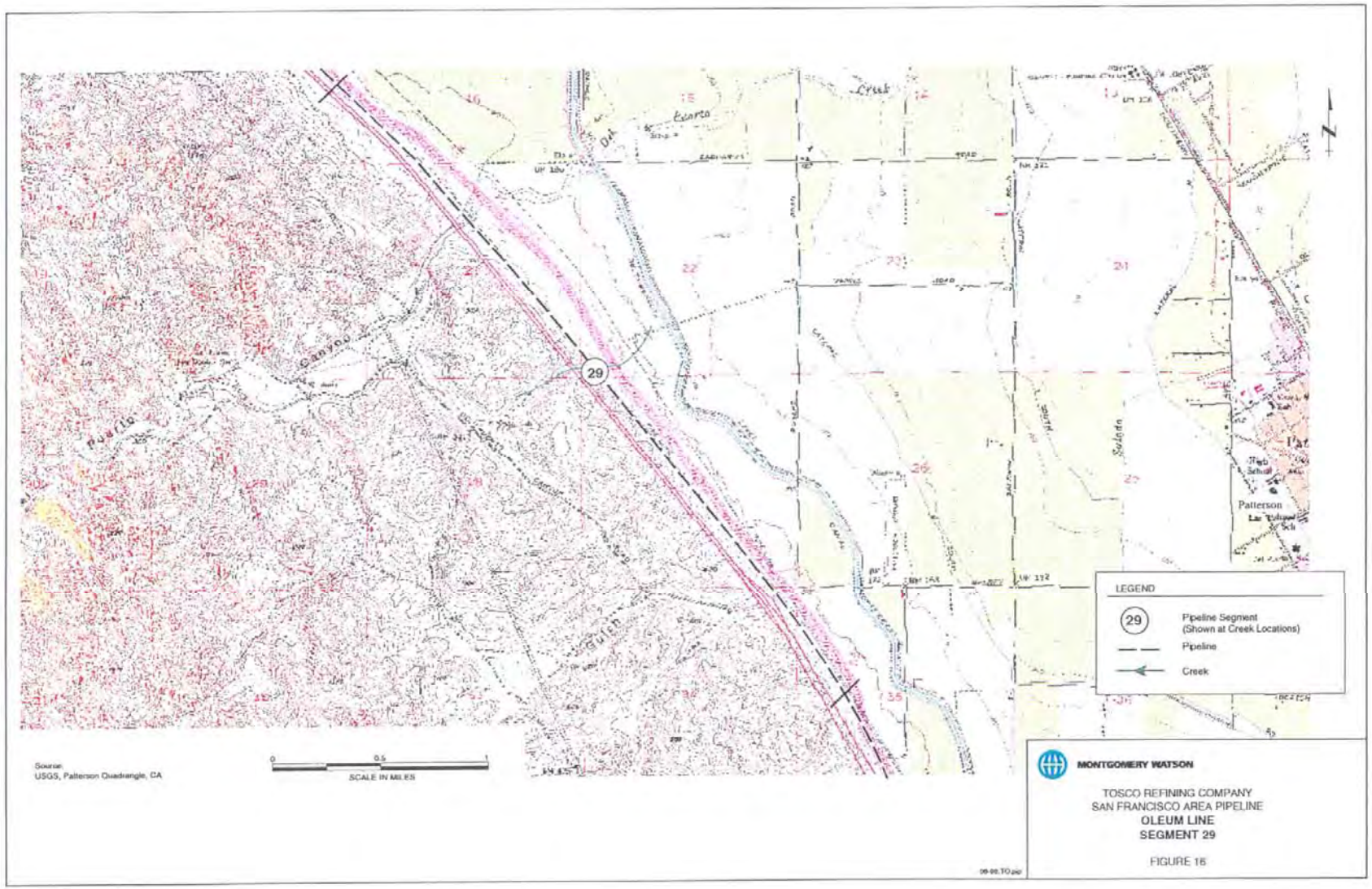


Oleum Line Segments 27, 28



Oleum Line Segment 29



THOMAS GUIDE MAPS

The following pages contain Thomas Guide maps with the pipeline segments superimposed.


YAHOO!
Sacramento River
Fisherman's Cut
Martin Severns
160
Sherman Lake
San Joaquin River
Franks Tract State Recreation Area
Antioch Brg
Big Bend
Bethel Island
Wilbur Ave
Atchison, Topeka & Santa Fe
E 18th St
Bridgehead
Oakley
W Cypress Rd
E Cypress Rd
Empire Ave
4
Southern Pacific
Neroly
Old River
Contra Costa Canal
Sellers Ave
Sand Hill
Knightsen
Prewett Family Park
Arbor
Brentwood Blvd
Sand Creek Rd
Byron Hwy
Central Blvd
Brentwood
Balfour Rd
Bloomfield Line
2.0 km
1.5 mi
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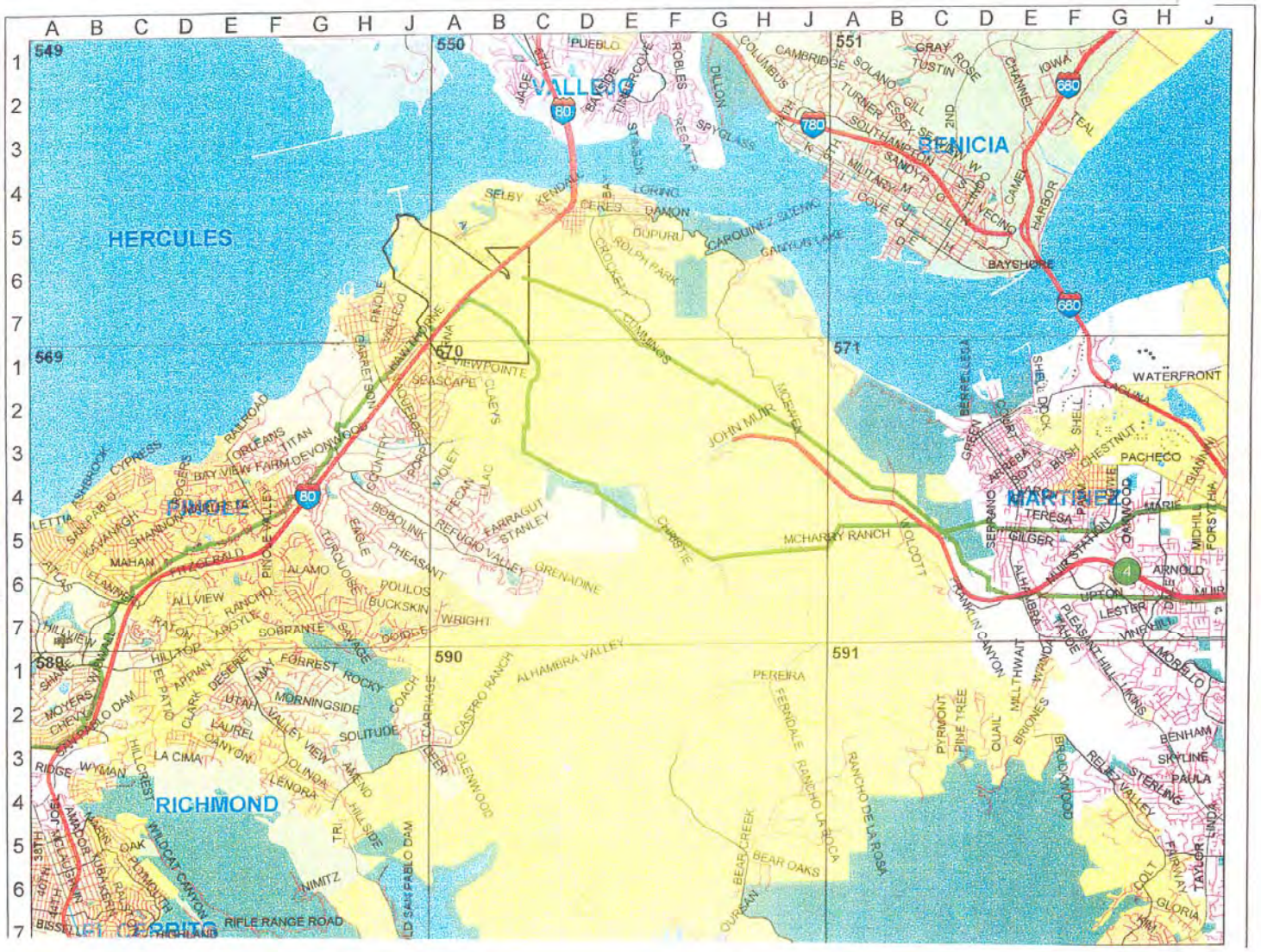
California Delta Hwy
©2005 NAVTEQ


(b) (7)(F), (b) (3)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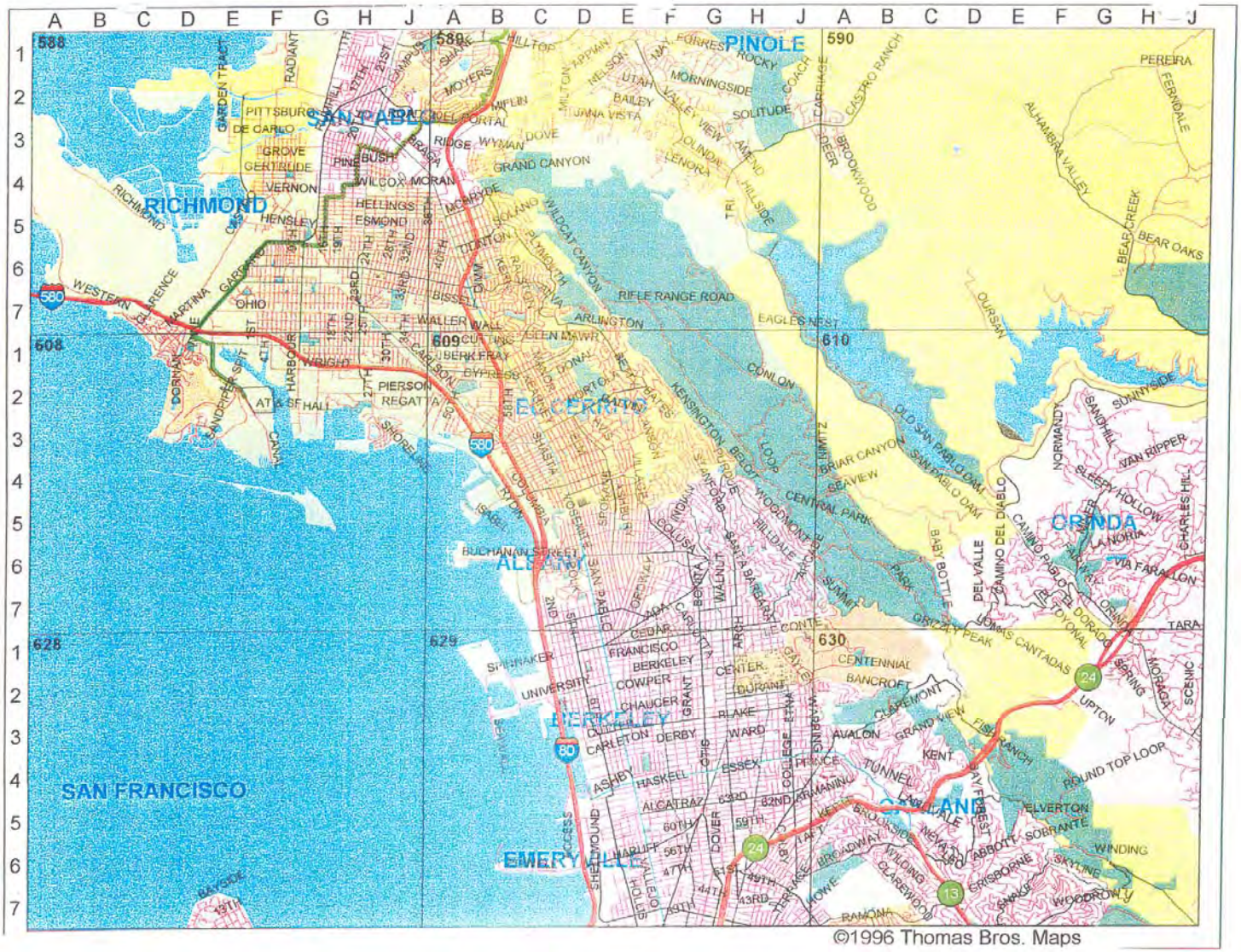
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BERKELEY
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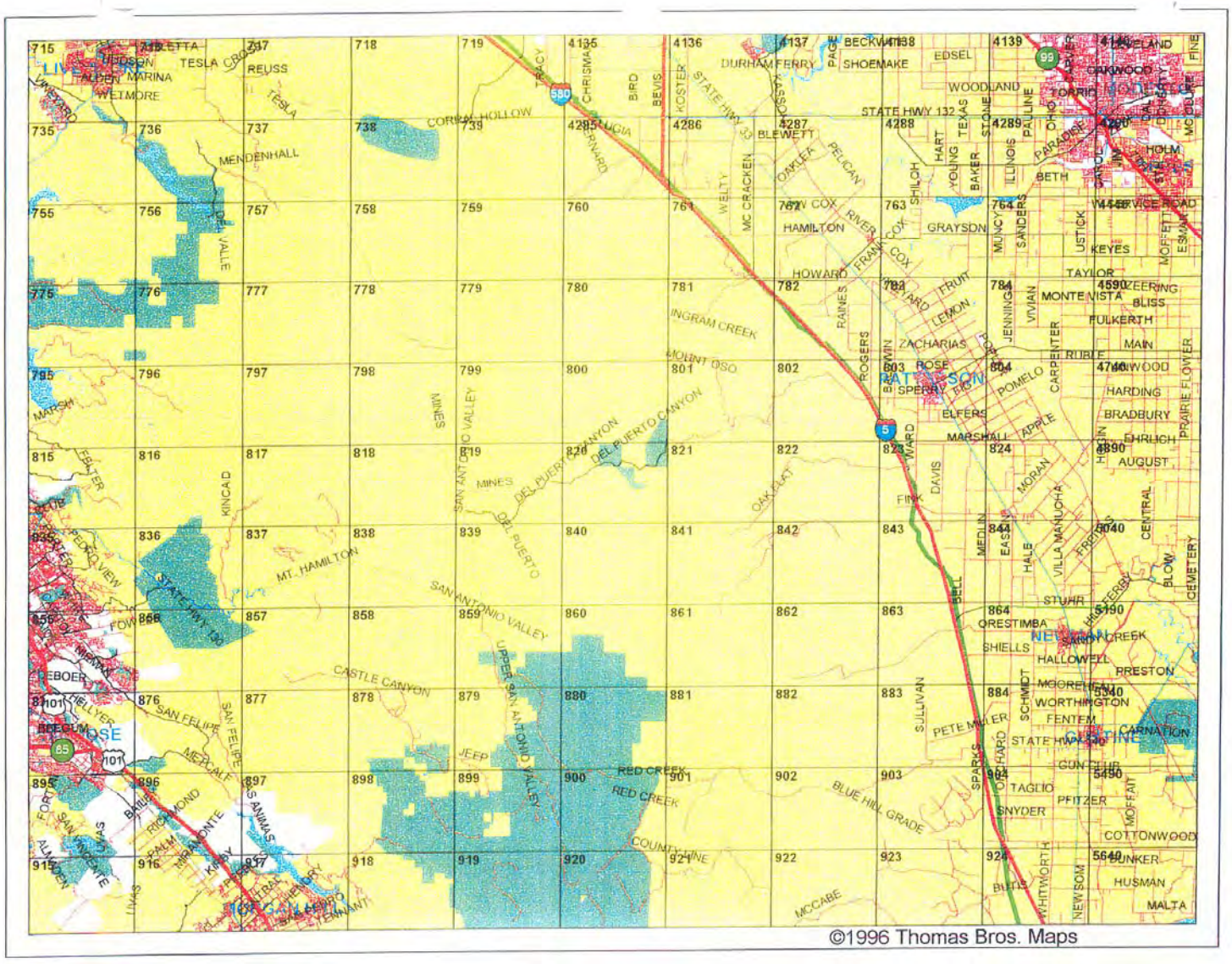
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DEL PUERTO CANYON
MINES
MT. HAMILTON
SAN ANTONIO VALLEY
CASTLE CANYON
UPPER SAN ANTONIO VALLEY
RED CREEK
COUNTY LINE
BLUE HIN GRADE
DURHAM FERRY
SHOEMAKE
EDSEL
WOODLAND
STATE HWY 132
BLEWETT
HAMILTON
GRAYSON
TAYLOR
KEYES
MONTE VISTA
PATTERSON
NEWMAN
CROWS LANDING
ORESTIMBA
SHIELLS
HALLOWELL
PRESTON
WORTHINGTON
FENTEM
CARNATION
GUSTINE
TAGLIO
SNYDER
PFITZER
COTTONWOOD
HUSMAN
MALTA
BECKWITH
OAKWOOD
HOWARD
ZACHARIAS
ROSE
SPERRY
ELFERS
MARSHALL
HARDING
BRADBURY
EHRLICH
AUGUST
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WHITWORTH
NEWSOM
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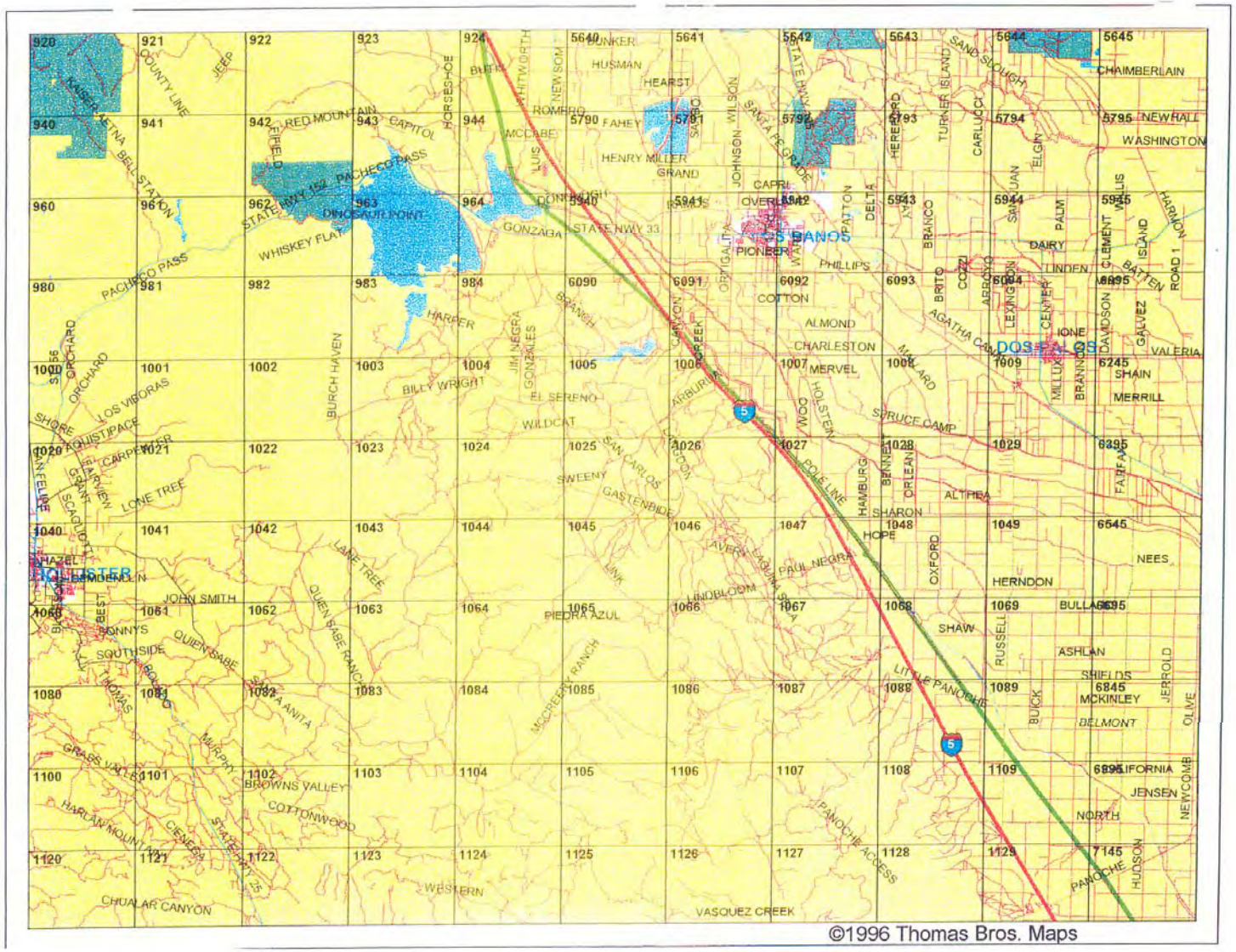
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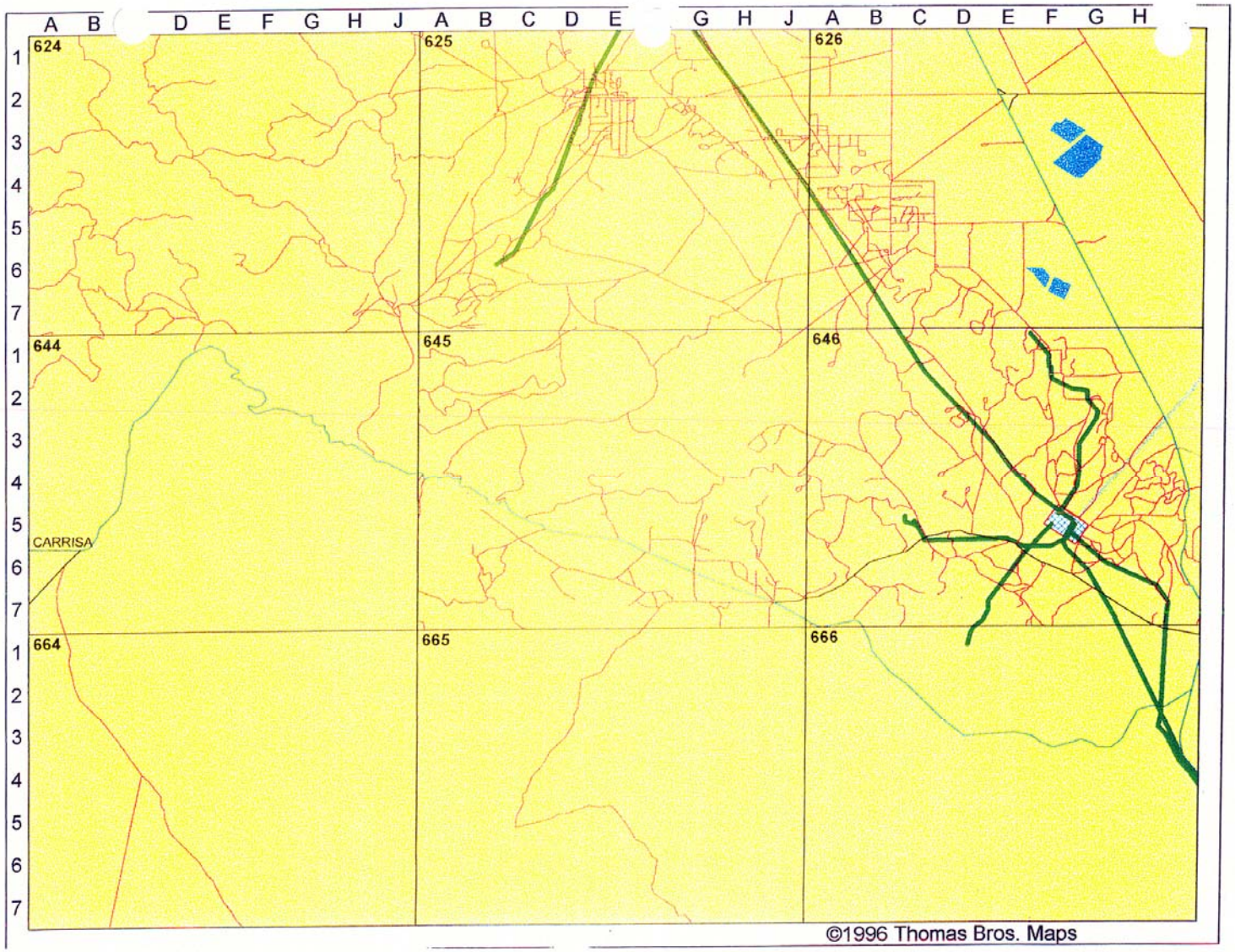
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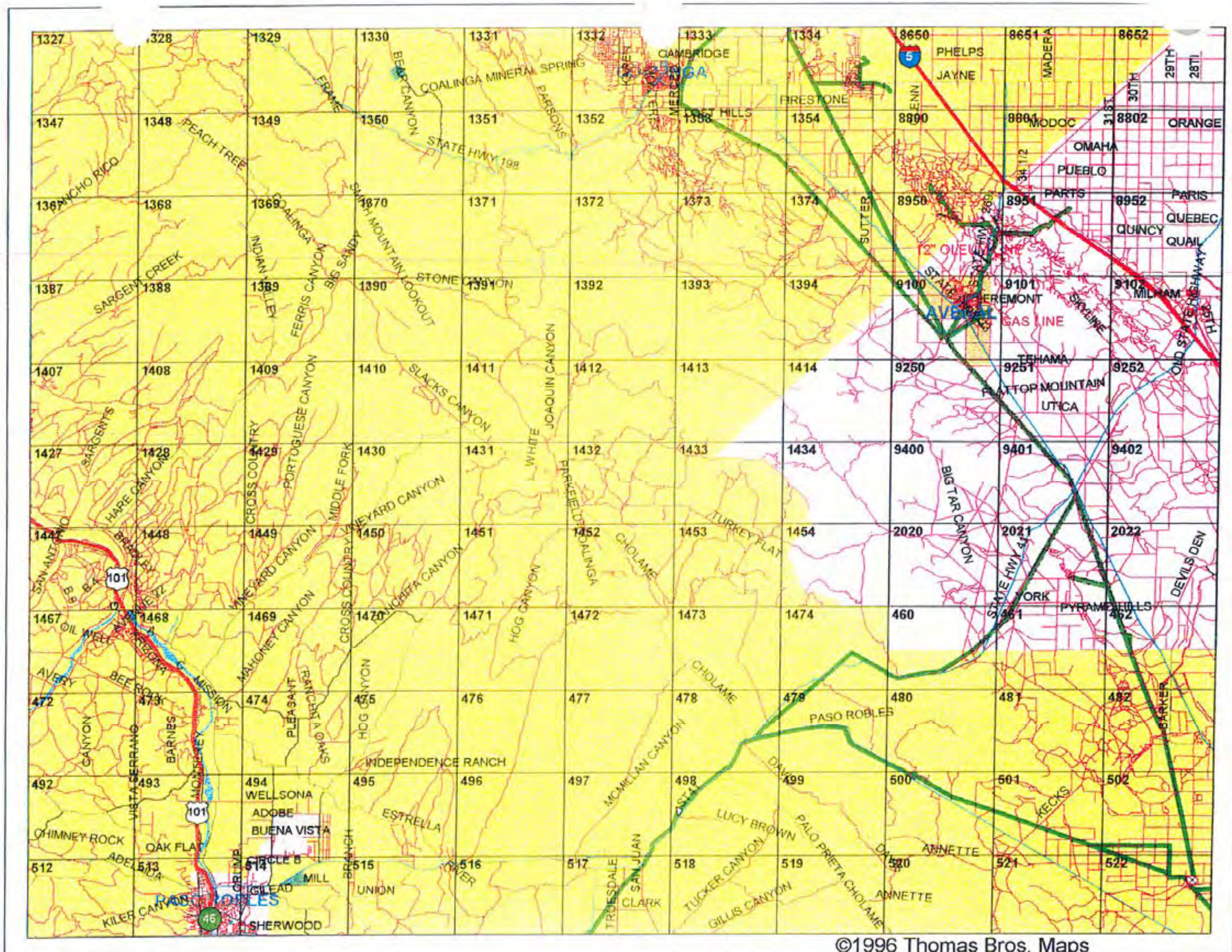
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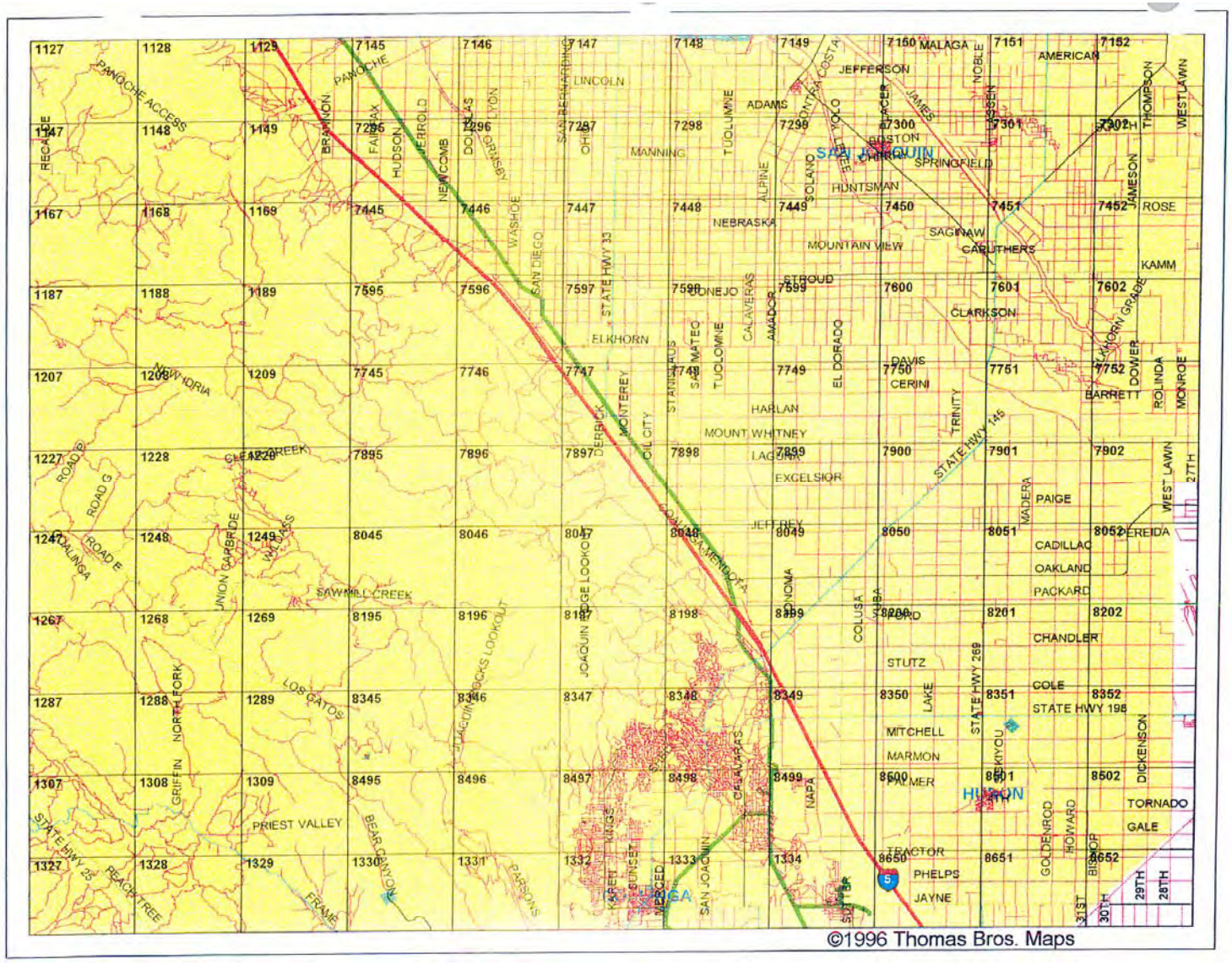
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BOSTON
SPRINGFIELD
HUNTSMAN
NEBRASKA
MOUNTAIN VIEW
SAGINAW
CARUTHERS
KAMM
ROSE
STROUD
CLARKSON
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BARRETT
HARLAN
MOUNT WHITNEY
LAGOON
EXCELSIOR
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CADILLAC
OAKLAND
PACKARD
FORD
CHANDLER
STUTZ
COLE
STATE HWY 198
MITCHELL
MARMON
PALMER
HUNTSMAN
TRACTOR
PHELPS
JAYNE
SAWMILL CREEK
PRIEST VALLEY
LOS GATOS
NEW HORIA
CLEAR CREEK
ROAD B
ROAD G
ROAD E
PANOCHE ACCESS
PANOCHE
BRAMMON
FAIRFAX
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JERROLD
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DOUGLAS
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FRESNO
JAMES
NOBLE
OLIVE
THOMPSON
WESTLAWN
JAMESON
KAMM GRADE
DOWER
ROLINDA
MONROE
WEST LAWN
27TH
29TH
28TH
31ST
30TH
BISHOP
HOWARD
GOLDENROD
DICKENSON
TORNADO
GALE
STATE HWY 145
TRINITY
MADERA
CEREIDA
STATE HWY 269
LAKE
KIYOU
NAPA
COLUSA
YUBA
SONOMA
CALAVERAS
AMADOR
EL DORADO
SAN MATEO
STANISLAUS
MONTEREY
DERRICK
CITY
JOAQUIN
EDGE LOOKOUT
JACQUIN ROCKS LOOKOUT
CHOWCHILLA
MADERA
FRESNO
SUTTER
PARSONS
BEAR CANYON
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STATE HWY 25
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WALKER
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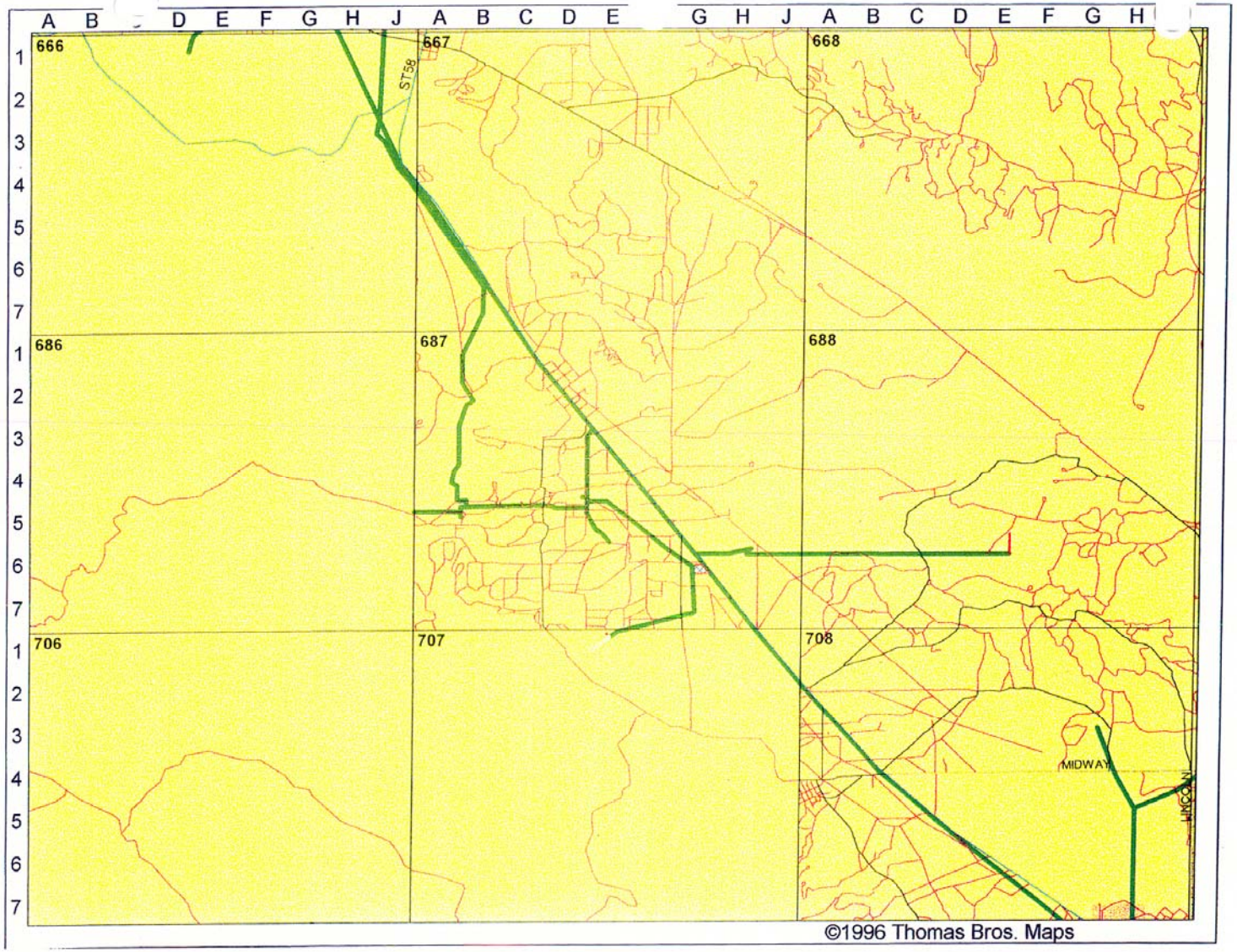
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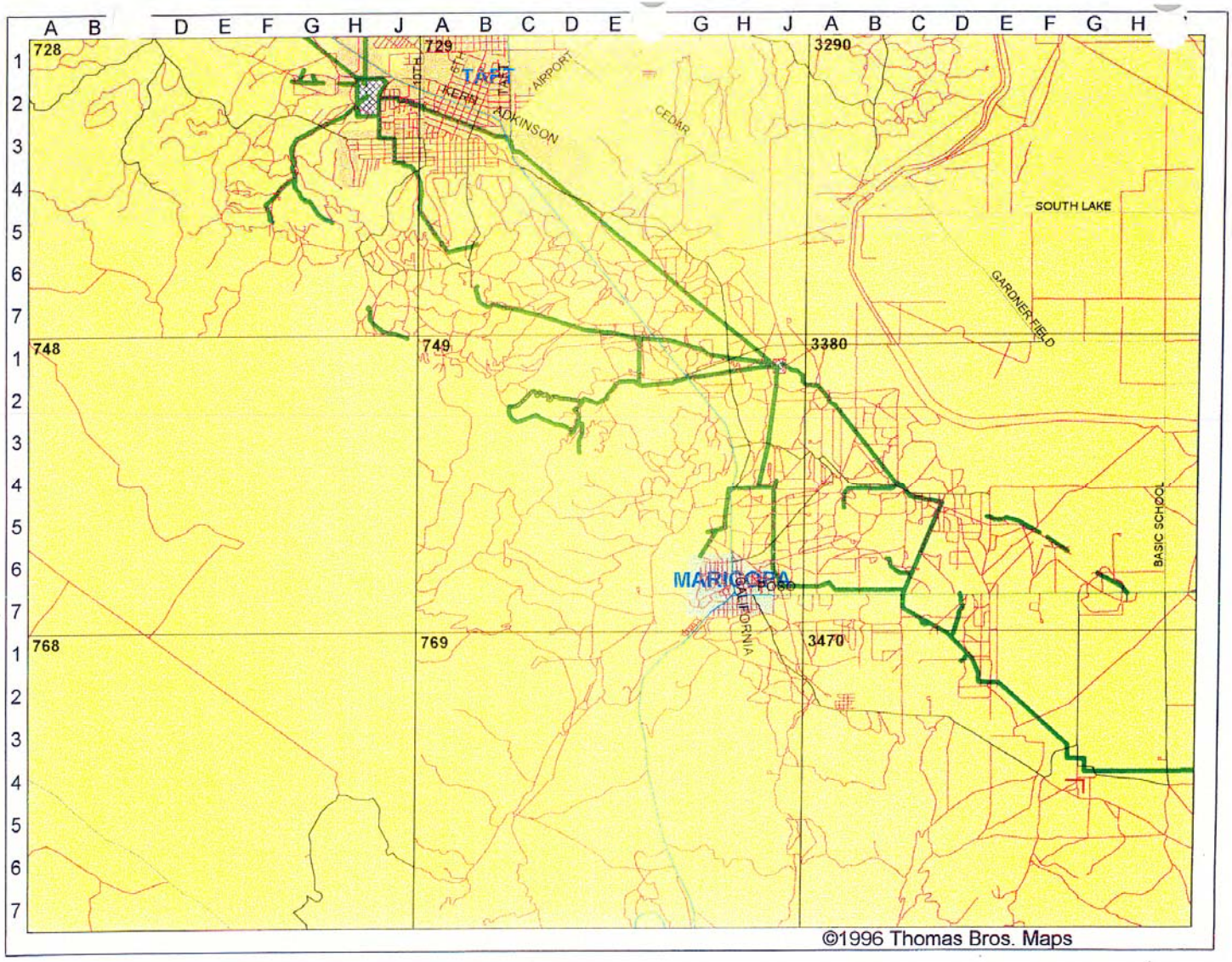
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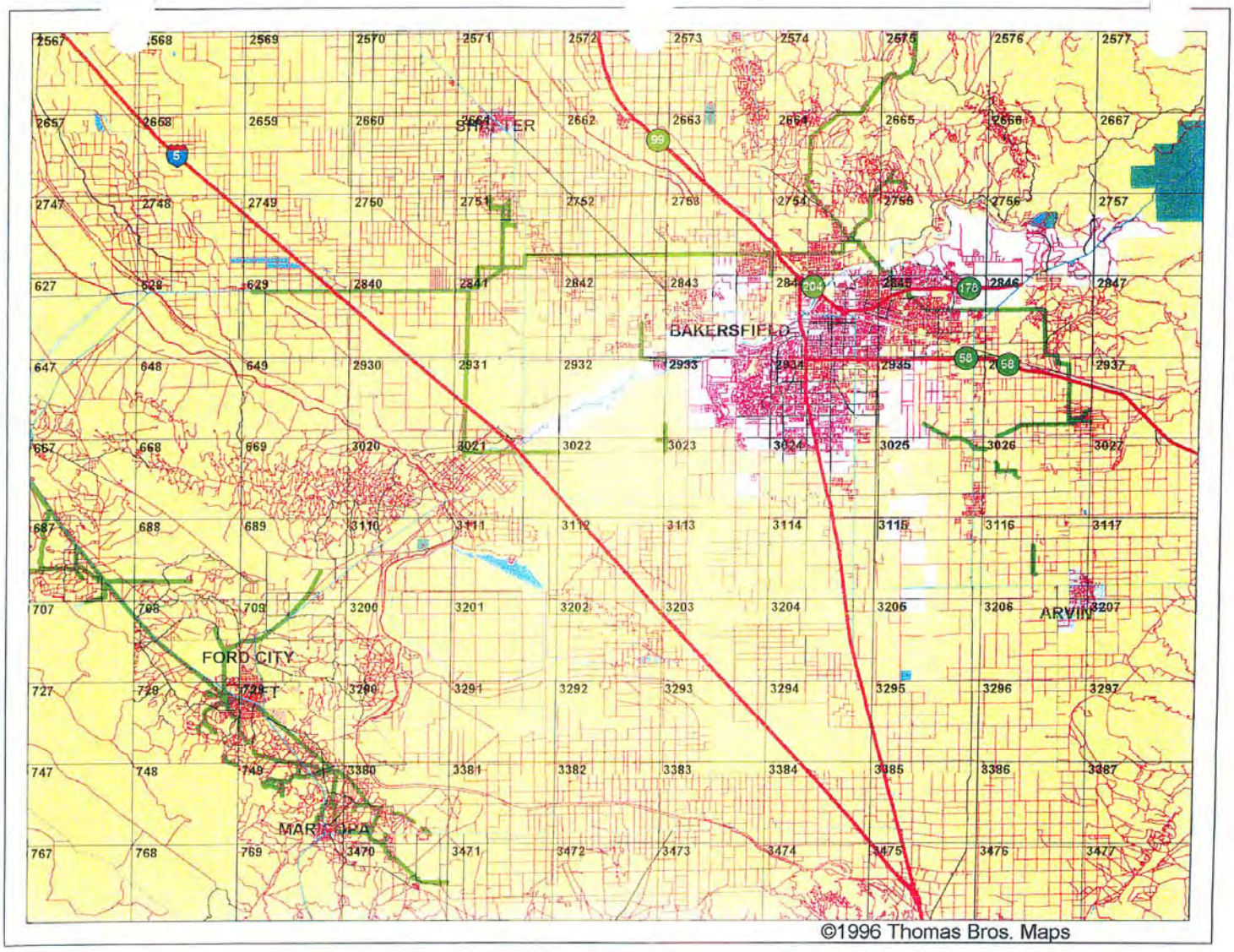
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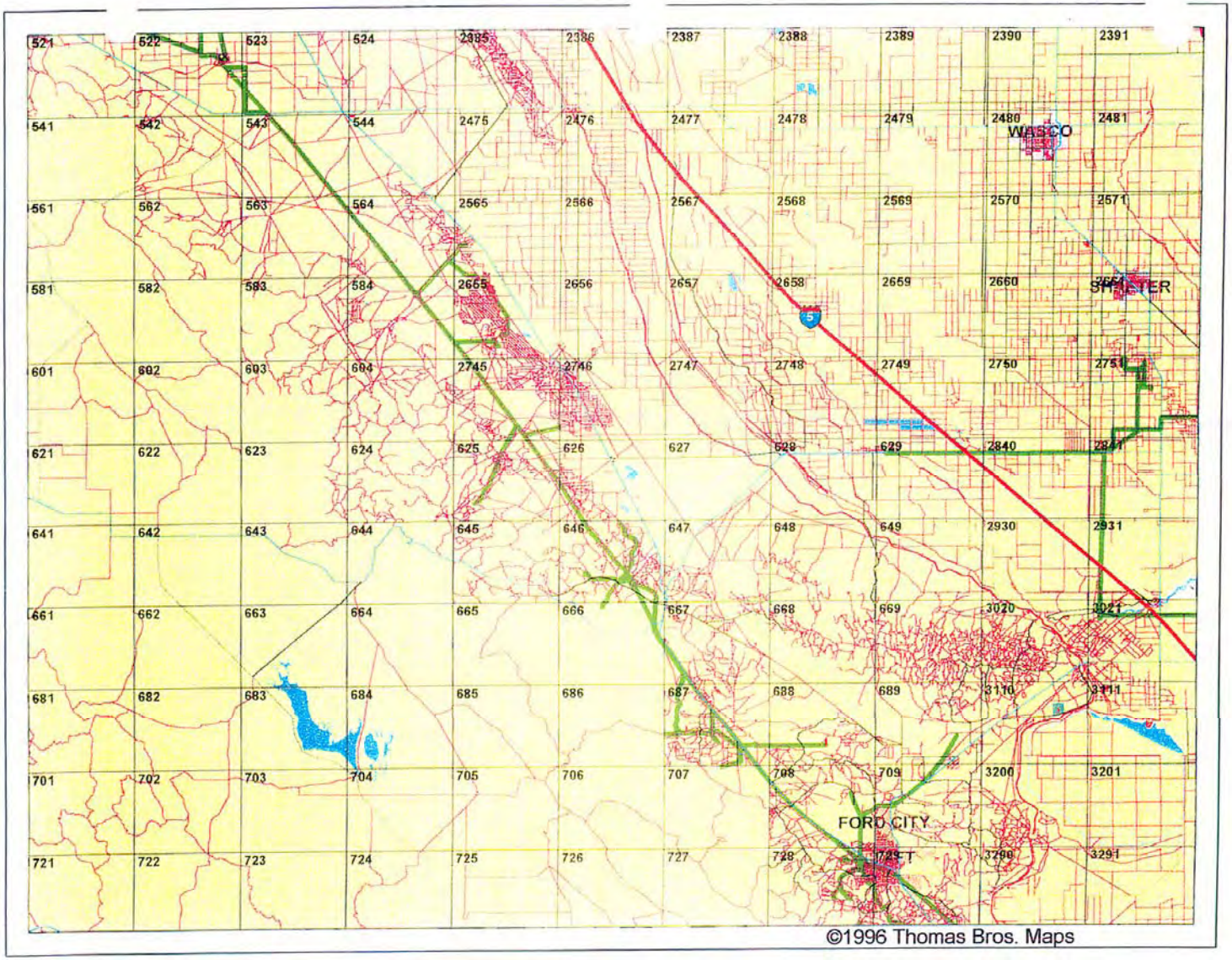
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1.9 Worst Case Discharge – Valley Area

The Company has developed processes and procedures to minimize damage to the environment that may result due to a discharge from this facility. Containment is most effective when conducted near the source of the spill, where the product has not spread over a large area and to allow effective recovery and/or cleanup. Effective implementation of containment and recovery is generally dependent upon the size of the spill, available logistical resources, implementation time, and environmental conditions or nature of the terrain of the spill area.

It is the Company's goal to be as proactive as possible to ensure that any such incident does not occur. However, in the unlikely event that a spill should occur, The Company has ensured that the manpower and equipment necessary to mitigate and cleanup any spill will be made immediately available. In addition to Company resources and manpower, the Company has contracted with Oil Spill Response Organizations (OSROs). These contracted OSROs will ensure our ability to minimize the amount of harm to the environment. They will also ensure our ability to sustain continued operations through 7 days or longer if necessary.

The worst-case discharge volume calculations are based on the guidance provided by the Department of Transportation, Interim Final Rule, 40 CFR Part 194. A worst-case discharge is defined as the largest foreseeable discharge in adverse weather conditions that a pipeline could discharge in a response area. The worst-case discharge is based on the comparison of several factors.

First is the result of the calculation of the flow rate times the maximum time to detect the spill, plus the rate of flow times the time to shut down the pipeline, plus the drainage volume after shutdown of the pipeline.

(Line flow x SCADA response)
+
(gravity flow x manual response)
+
(volume between manual block valves)

SCADA = Supervisory Control and Data Acquisition System

Manual Response = Total time to physically turnoff manual valves nearest spill location

Second, the worst-case discharge could be a foreseeable discharge for a line section based on the maximum historic discharge.

Third, if the line section within the response area contains break out tanks, the worst-case discharge may be the quantity of the largest tanks or tank battery within a single containment dike, adjusting for the capacity of the containment system.

Data compiled for each section of the pipeline system is contained in this Plan. Pipeline sections are delineated in two ways: (1) by the pipeline intervals between block valves for the main oil transportation lines; and (2) by the pipeline intervals between the field origin and the block valves or main line lateral tie-in valves for oil gathering lines.

1.9.1 Spill Volume Calculations

The calculation of the largest foreseeable discharge (LFD) assumes that the pipeline is completely ruptured, and that oil is allowed to escape in an unimpeded fashion. In view of the fact that the main transportation pipelines are buried, and that even the most severe ruptures result in irregular breaks in the pipeline wall that limit the rate of flow out of the pipe, the LFD calculation tends to overstate the estimated spill volumes for planning purposes.

A pipeline rupture characteristically results in a large initial release of oil while the pipeline is under pressure, and until the pumps are shut down. Following a large initial release, after pumps are shut down and block valves are closed, flow out of the ruptured line is typically reduced to a low rate.

Information is presented in this Plan, which is used to determine the LFD for each section of the pipeline. The following data is used in the calculation of LFD:

- Pipeline section number.
- Valve numbers identifying the location of the pipeline section.
- Volume of oil contained in the pipeline section, in barrels.
- Maximum volume of oil that could drain out of the pipeline section, in barrels (computed from pipeline elevation drawings, or estimated from topography in a manner that would tend to overstate the actual volume). In a few cases, the maximum drainage exceeds the line volume due to potential spillover from adjacent lines.

The stated maximum drainage volume does not consider the length of time that would be needed to actually discharge the stated volume through a pipeline rupture. In some cases, it would take many hours to discharge the maximum drainage volume.

To arrive at realistic LFD volumes for long sections of the pipeline, the drainage volume for purposes of calculating the LFD for the pipeline section was assumed to equal the maximum drainage volume. More realistic, but less conservative, limits could be computed assuming that the most oil flowing out of a rupture could be estimated under the conditions of laminar flow under a constant 200 psi hydrostatic head for a ten mile length of pipeline, for a period of one hour. Even these assumptions are believed to overstate the actual drainage volumes. The hydrostatic head would decrease with time and flow rate would drop dramatically; the closed system would impede flow out of the line due to upstream suction as the line evacuates; and the results reflect the operator's observations of pipeline spill behavior in actual incidents.

Maximum pumping loss, in barrels. Main trunk lines are equipped with Supervisory Control and Data Acquisition (SCADA) monitoring systems, and Pipeline Measurement (PLM) systems. This results in early detection of a rupture, and shut down of the pipeline within five minutes of a major accident.

Largest foreseeable discharge (LFD), in barrels, which is the sum of the maximum pumping loss, plus the maximum drainage volume for main transportation pipelines (limited for purposes of the LFD calculation as described above). For gathering lines, the LFD was the sum of the maximum drainage volume, taken to be eighty percent of the pipeline volume, plus the assumed capacity of a lease tank feeding the gathering lines of 1,000 barrels.

The worst case discharge under these criteria is the LFD computed among all of the pipeline sections, (b) (7)(F), (b) (3) [redacted]. This worst case discharge occurs for Pipeline Section 69.

Maximum Historic Discharge

Release History is located in Annex 1.9.3.

Breakout Tank Worst-Case Discharge

The WCD for tanks is calculated on the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

(b) (7)(F), (b) (3) [redacted]

Under *49CFR§194.105*(b)(4) Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures. The percentage (credits) is a maximum of 75%. Under this section, and with the following criteria, the Company is entitled to receive a 70% credit on their WCD volumes.

Prevention measure	Standard	Credit (%)
Secondary containment > 100%	NFPA 30	**50%**
Built/repaired to API standards	API STD 620/650/653	**10%**
Overfill protection standards	API 2350	**5%**
Testing/Cathodic Protection	API STD 650/651/653	**5%**
Tertiary containment/drainage/treatment	NFPA 30	**5%**
Maximum Allowable Credits		75%
Company claimed credits		**70%**

Based on the allowable credits identified (b) (7)(F), (b) (3) [redacted]

The prevention credits for the above tank are based upon the Company meeting or exceeding certain industry standards. The tank is built, inspected, and repaired to *API Standard 650/653*. Overfill protection is in place for all breakout tanks and meets *API RP 2350*. **Cathodic protection** and testing is in place to prevent the **corrosion** of pipelines and breakout tanks and meets *API Standard 651*.

The following table is an overview of the WCD Calculations in barrels for this area.

(b) (7)(F), (b) (3) [redacted]

Planning Volume Calculations

Worst Case Discharge Planning Volume Calculations
(b) (7)(F), (b) (3)

Calculation		Group 1 Oil[1]
Areas Impacted: Inland – River/Canal		
Worst Case Discharge: WCD=100% of in-ground pit volume		(b) (7)(F), (b) (3)
Small Case Discharge (Lesser of 1% of WCD or 50 bbl) (bbl)		
Medium Case Discharge (Lesser of 10% of WCD or 857 bbl) (bbl)		
On-Water Recovery Volume (OWRV=Percent oil on-water x WCD) (bbl)		
On-Shore Recovery Volume (OSRV=Percent oil on-shore x WCD) (bbl)		
Emulsification Factor (EF)		
On-Water Clean-Up Planning Volume (OWPV=OWRV x EF) (bbl/day)		
Shoreline Clean-Up Planning Volume (SPV=OSRV x EF) (bbl/day)		
On-Water Recovery Capacity: (OWRC=OWPV x Resource Mobilization Factor) (bbl/day)	Tier 1	
	Tier 2	
	Tier 3	
On-Water Recovery Response Caps (OWRRC) (bbl/day)	Tier 1	1,875
	Tier 2	3,750
	Tier 3	7,500
Amount needed to be identified, but not contracted for (OWRC – OWRRC) (bbl/day)	Tier 1	N/A
	Tier 2	62
	Tier 3	1,968

1 – Group 1 Oil = Non-Persistent Oils
bbl/day – Barrels per day
bbl – barrels

1.9.2 Vulnerability Analysis

Environmentally sensitive areas that could be potentially affected by a pipeline spill are the aquatic habitats in close proximity to the pipeline route. The location of these habitats is identified in the detailed description of the pipeline sections provided in this annex and Annex 3 of this plan. The types of habitats vulnerable to a pipeline spill are discussed below.

Sensitive aquatic habitats include small, intermittently flowing creeks and rivers containing riparian habitats and marshland. Also, the California Aqueduct traverses the pipeline alignment and other canals more than ten times through the northern part of the Central Valley. Near the San Francisco Refinery, the pipeline crosses Grayson Creek and Walnut Creek, making San Pablo Bay potentially vulnerable to a pipeline spill. Unless a spill is very large and can flow some distance from the spill location (i.e., on the order of the worst case discharge volume), there is little chance that an oil spill will impact sensitive aquatic environments. Creek and Aqueduct crossings would be considered vulnerable to any size spill. The pipeline is located a short distance from O'Neill Forebay at San Luis Reservoir and Bethany Reservoir, making these two aquatic habitats vulnerable to the consequences of a large spill that could spread overland to these bodies of water.

The pipeline traverses a large amount of pasture and agricultural fields, which would not be susceptible to significant environmental damage from a spill.

The pipeline is also located in some moderately populated urban and rural areas, where the public may be vulnerable to a spill incident.

Evacuation plans have been established for protection of the public in the event of an urban spill. Containment and cleanup plans have been developed for a variety of environments, with special emphasis on techniques to be used or avoided in sensitive areas. Also, planning and coordination of spill response activities with agency officials will improve the effectiveness of the actions taken to limit the consequences of an oil spill.

1.9.3 Spill History

8/9/97 – Oily sheen on CA Aqueduct

On August 9, 1997 an oily sheen surfaced on the California Aqueduct near Line 200, North of Santa Nella. The aqueduct had suffered a landslide and the concrete lining had given away, exposing oily soil that originated in a 1984 spill in the area. The pipeline crossing the aqueduct lost its support and required the construction of a new pipeline support. A remediation interceptor trench was installed to contain oil in the soil. Booms were installed within the aqueduct to contain the oily sheen. Clean up crews removed oil sheen from the water. No measurable amount of oil was recovered.

9/9/97 – Crude oil leak from Line 100

On September 9, 1997 a leak developed on Line 100 ¾ mile North of Middlewater Station. Approximately 135 barrels of crude oil was released to soil in a rural field. Leak was due to stress cracking of the pipeline. Pipeline was replaced and site remediation was completed.

11/16/97 – Crude oil leak from M&L Gathering Line

On November 16, 1997 the M&L Gathering Line developed a leak of approximately 35 barrels of crude oil. The leak site was approximately 3.6 miles West of Lost Hills Road. Cause of the release was external corrosion. Pipeline was repaired and remediation of the site was completed.

10/9/98 – Crude oil leak from Out of Service line due to corrosion

On October 9, 1998 a leak was discovered on the out of service Dudley 8" Line in the vault at the Franklin tie-in. Cause of the leak was external corrosion and approximately 25 gallons of crude oil was recovered. All lines were purged of product and disconnected from any sources.

12/23/98 – Crude oil leak on Taft Gathering Line due to corrosion

On December 23, 1998 Taft Gathering Line #155 developed a leak of approximately 100 barrels of crude oil. External corrosion was the cause of the leak. Approximately 21' of pipeline was replaced and the site was remediated completely.

3/18/99 – Crude oil leak on Coalinga Gathering "Star 24" lease line

On March 18, 1999 a leak developed on a Coalinga Gathering "Star 24" Lease line that was being operated by Texaco. Approximately 350 barrels of crude oil was released to soil and eventually recovered. External corrosion was the cause of the leak and also led to the decision to shut down operation of the line. Site remediation was completed.

9/27/99 – Oily water release from Gibson Gathering Line

On September 27, 1999 the Gibson Gathering Line #164 developed a leak during a hydrostatic pressure test Approximately 3 barrels of oily water was released and eventually recovered. Site remediation was completed along with repairing the damaged pipeline.

10/3/99 – Oily water release due to hydrostatic pressure test

On October 3, 1999 the Bell Pipeline Line #352 developed a leak during a hydrostatic pressure test. Approximately 50 barrels of oily water was released. Site remediation was completed and the pipeline segment was replaced as well.

12/15/99 – Crude oil release from Cal Star Gathering Line

On December 15, 1999 the Cal Star Gathering Line #156 developed a leak. Approximately 5 barrels of crude oil was released. External corrosion was the cause of the leak. Site remediation was completed and pipeline segment was replaced as well.

3/27/00 – Crude oil release to soil

On March 27, 2000 the E&M Gathering Line #157 developed a leak. Approximately 2 barrels of crude oil was released to soil. External corrosion was the cause of the leak. Site remediation was completed and the pipeline segment was replaced away from an adjacent waste water line that contributed to the external corrosion.

12/14/00 – Crude oil release due to misaligned piping system

On December 14, 2000 the Taft Sunset and Midway Stations were aligned to deliver SJVHC to Mobil. Mobil misaligned their piping system and approved alignment and start up. Sunset station started up against Mobil's closed valve and overpressured our line, causing Sunset's relief valve to open and release approximately 21.8 barrels of crude oil into a drain system unable to handle the volume, and eventually onto soil. Site remediation completed as well as improvements to a "closed" drain system capable of handling the relief system.

2/15/01 – Crude oil release at McKittrick Station

On February 15, 2001 a leak developed at McKittrick Station. Approximately 18 barrels of crude oil was released onto the ground and contained in the pump basin. Cause of the leak was attributed to a defective bellows under a pressure gauge. Repairs were made as well as site remediation being completed.

10/15/02 – Leak at Taft District Line #161

On October 15, 2002 Taft District Line #161 developed a leak. Approximately ½ barrel was released to soil. The pipeline was repaired, returned to service and the site remediation completed.

11/13/02 – Oily water release during hydrostatic pressure test

On November 13, 2002 the 6" Hopkins line developed a leak during a hydrostatic pressure test. Approximately 20 barrels of oily water was released. Pipeline was repaired and site remediation completed.

01/22/03 – Crude oil release due to broken fitting

On January 22, 2003 the Midway Station shipping pump piping developed a leak. Approximately 50 barrels of crude oil was released when a stainless steel fitting on the pump discharge line broke. Crude oil was contained in the pump basin and site remediation was completed. Repairs were made and pumping operations resumed.

8/27/11 – Struck Line NC-21 with Backhoe causing leak

3rd party digging over line NC-21 approximately 3 miles downstream from Byron Pump Station just west of Vasco Road struck our line causing a release of approximately 56 barrels of Rodeo refinery coker mix. The control center shut the line down on low pressure alarm for PLM. The Tracy office personnel responded. This incident has been considered by the Sherriff's department.

10/13/11 – Flange Gasket Failure During Hydro Test

No injuries. October 13, 1150 PST - while conducting a planned hydro test on the Bremer gathering line (Line 100), a flange gasket failed, releasing approximately 10 barrels of hydro test water. The buried flange set was located approximately 4000 feet downstream of the Bremer lease. All internal/external notifications were completed. The flange set was removed and replaced with a welded pup.

11/7/11 – Line 200 Leak in Concord, CA

On Monday, 11/8, CPPL personnel were notified of a crude oil leak on Line 200 in Concord, CA. Personnel were dispatched and the line was immediately shut down. There are 2 other 3rd party lines in the same ROW. Following excavation of the area, it was determined Line 200 had a small external corrosion hole. Required notifications were made and the line was repaired and returned to service.

11/8/11 – Pipe Failure during Hydro Test

No injuries. November 8, 1500 PST - while conducting a planned hydro test on the Berry Moco segment of the Gravity Gathering Line (Line 154), a section of pipe failed, releasing approximately 10 barrels of hydro test water. The failed section of pipe was located approximately 1200 feet from the Berry Moco Lease Operator's connection. All internal/external notifications were completed. The 20' section of pipe was removed and replaced with new pipe.

9/24/12 - Line 100, Gamble gathering systems. Small release with no injuries.

Line 100, Gamble gathering systems. Small release with no injuries. On Monday morning, 9/24 a 3rd party producer notified Line 100 personnel of a crude oil release in proximity to the P66 Wellport gathering line near McKittrick, CA. Personnel arrived at the site and confirmed a release. The gathering system was shut in and required notifications were completed. The oil was contained and was estimated at 10 gallons. After drain up and excavation, personnel were able to confirm a small pinhole in the 6" line. Temporary repairs and clean up was completed and the line restarted at 8:45 PM (PST) Monday evening. There was no LPO associated with this incident

1.9.4 Offsite Consequence Analysis

Trajectory Analysis

An offsite consequence analysis is required by OSPR regulations to address a "Reasonable Worst Case Oil Spill" as discussed in this annex. A trajectory analysis was prepared for the Clean Bay Regional Resource Manual (http://www.cleanseas.com/equipment.htm) based on a 10,740 barrel spill immediately west of Carquinez Strait in East San Pablo Bay at Company San Francisco Refinery docks. This is significantly larger than the required Reasonable Worst Case Oil Spill of [redacted] barrels. The trajectory map and description are reproduced in this Section.

The trajectory analysis resulted in a calculated spill trajectory envelope that represents the - outer perimeter of shoreside areas that could receive oil in the event of a spill. The envelope is based on extremes of climate, tide, current and wind and assumes pessimistic dispersion and other adverse weather conditions. It represents a composite of potential impact from all conditions rather than the impact of a single spill.

The trajectory analysis indicates potential shoreline impacts throughout most of the Bay Area. The Clean Bay Regional Resource Manual provides a strategy for sensitive area protection, including sensitive area maps. These maps, which are reproduced in Section 2.4, indicate areas of special significance and areas that should be given special priority in the event of a spill.

The San Francisco Bay/Delta Area Contingency Plan (2012) provides potential protection strategies for sensitive shoreline areas. The Incident Commander will determine the best approach for protection of sensitive areas based on prevailing conditions. The actual approach used in the event of a spill mayor may not be the same as indicated in the Area Contingency Plan.

For purposes of addressing OSPR regulations, the Reasonable Worst Case Spill is limited to those spills that could impact marine waters. Pipeline sections listed in this Plan that could directly impact marine waters include Sections 44 to 48 (portion of 16" Coalinga to Patterson), Sections 49 through 63 (16" Patterson to SFR), and Sections 72 through 82 (6" Richmond Products Line). Based on these sections, the Reasonable Worst Case Spill would be [redacted] at Section 48.

Site:	Union Oil Docks Company Refinery Wickland Oil (Crockett) Pacific Refinery (Rodeo)	Latitude: Longitude:	(b) (7) (b) (7)(F),
Hazard:	Facility		
Volume:	(b) (7)(F),		
Duration:	3 days		

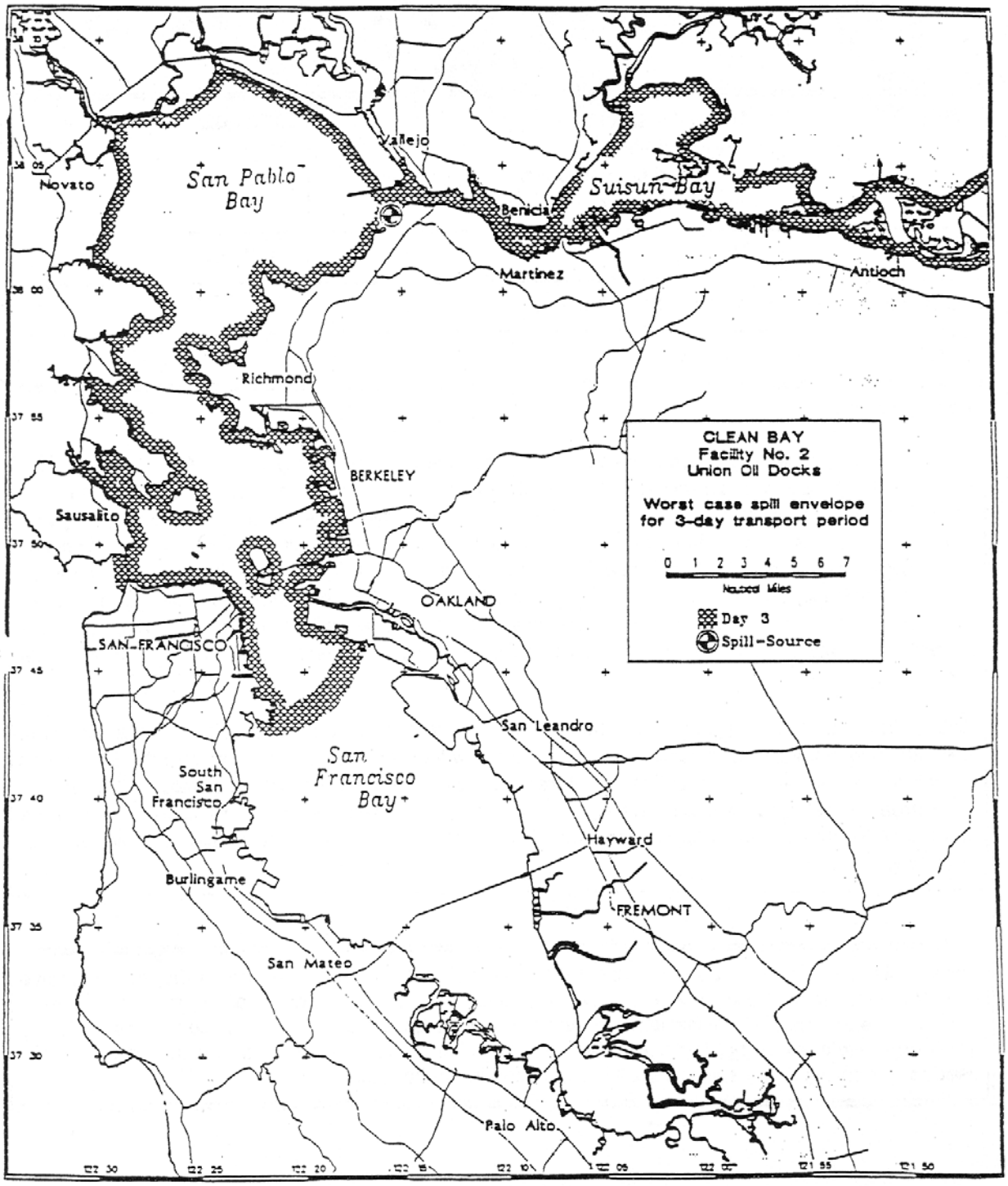
Trajectory:

A spill trajectory envelope was calculated for facilities located immediately west of Carquinez Strait in East San Pablo Bay. Each facility is located on the southern shore near the strait. The analysis considered oil transport by the wind, tidal currents, and river flow, and spreading by physical processes such as gravity, surface tension, and tidal dispersion. Spill transport on the flood tide would move the oil through Carquinez Strait into Suisun Bay. A spill during the ebb tide would be expected to transport the oil westward into San Pablo Bay to approximately Point San Pablo. Physical spreading would cause the (b) (7)(F), (b) (3) to spread laterally approximately 3 miles across either Suisun Bay or San Pablo Bay.

Wind-induced surface currents could cause additional transport of oil depending on the direction, strength and persistence of local winds. Northerly winds could transport the oil into South San Francisco Bay as far as Hunter Point. Oil transported south could spread westward to the Golden Gate area. Westerly and southwesterly winds could transport the oil across Suisun Bay to the mouths of the San Joaquin and Sacramento. Transport up these rivers would be limited by seasonal river flow.

These spill trajectory envelopes represent the outer perimeter of shoreside areas that could receive oil in the event of any spill. The envelopes are based on regional extremes of climate, tide, current and wind and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of anyone spill. A full discussion of the details used for preparing these spill envelopes is provided in this Annex.

Worst Case Spill Envelope for 3-Day Transport Period



1.9.5 Spill Prevention

The Company conducts discharge prevention training sessions which are in addition of any other training employees may receive. Training for the prevention of oil spills focuses primarily on reducing the risk of an oil spill during operations. At least once a year personnel attend spill prevention training. Operational reviews are conducted and discussions on cause and circumstances are reiterated.

Maintenance and Inspection Records

Maintenance and inspection records of pipeline equipment will be made available to the OSPR Administrator upon request.

Required Prevention Measures

Federal requirements for pipeline construction and maintenance are described by PHMSA in 49 CFR 195, Subpart F. The California Pipeline Safety Act (CPSA) prescribes state regulations. These measures include those described in this annex.

The pipeline is protected from surges with full flow relief at each group pump station. The full flow relief consists of a pressure relief valve that relieves to a breakout tank. The relief system was examined in the risk and hazard analysis and found to be adequate.

Other required prevention measures include:

- cathodic protection for all lines
- coating for all lines
- hydrostatic testing of lines every 5 years (10 years initially for new line) or approved internal inspection tools (“smart pigs”) in lieu of hydrostatic testing
- valve inspections twice per year
- aerial inspections of pipeline routes

(b) (7)(F), (b) (3)

[redacted]

1.9.6 Secondary Containment

Secondary containment systems exist for all breakout tanks associated with pumping stations in the Valley Area of operations. All breakout tanks in the Valley Area are surrounded by secondary containment dikes, which are designed to contain 110 percent of the capacity of the breakout tank at its high level alarm filling height

The tank table in Annex 1.8.2 lists information related to the breakout tanks identified in the Valley Area pipeline system. This information is used to develop oil spill scenarios for response planning, as required by DOT regulations (49 CFR) Part 194). The information shown in the following tables includes:

- Station name
- Breakout tank number
- Maximum filling volume, monitored by high-level alarms incorporated in the SCADA system (in barrels)
- Secondary containment volume (in barrels) - in some cases, this volume may be the result of two interconnected basins that form a secondary containment system for any individual breakout tank
- Largest foreseeable discharge (LFD) (in barrels) - calculated as the tank maximum filling volume, minus half the capacity of the secondary containment where the secondary containment volume used is limited to no more than the capacity of the tank

All stations have Spill Prevention Control and Countermeasure (SPCC) plans for tank berms. All berm drain valves are locked closed except during draining of storm water. All storm water is inspected and logged before draining. For a description of facility drainage and secondary containment, please see facility SPCC Plan.

Diagrams of Stations with Secondary Containment

The Valley Area stations with breakout tanks and secondary containment systems are illustrated in the following figures.

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

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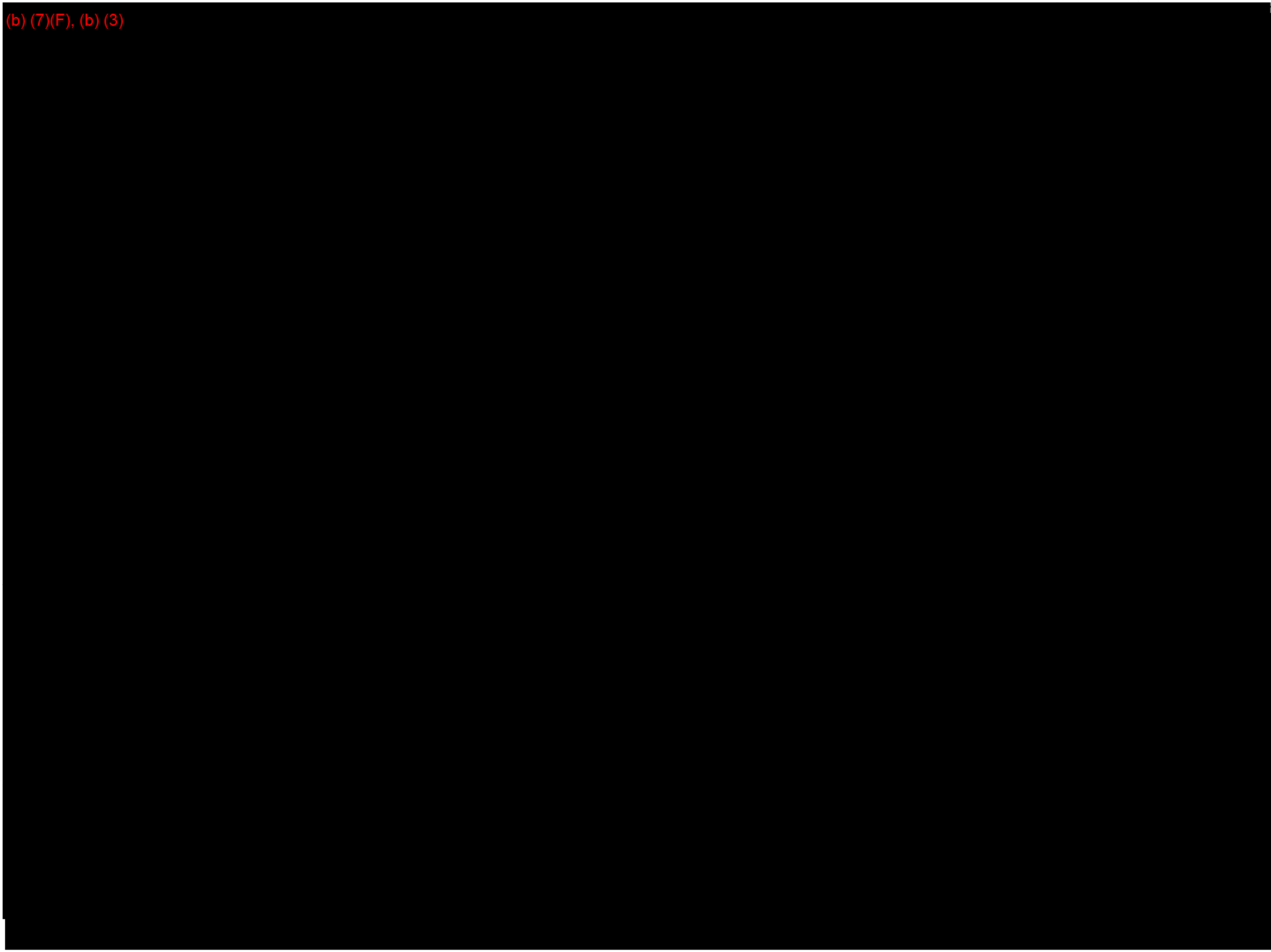


(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

1.9.7 Discharge Detection and Mitigation

Leak detection is performed to provide a means of ensuring the safety of employees and the public, and protection of private property and the environment through the activation of an emergency response program. It is also performed to provide the Company with a means of preventing product loss and to meet regulatory requirements of federal, state and county agencies and permit conditions.

The Area pipeline system utilizes the following leak prevention and detection systems:

- Right-of-way ambient monitoring
- Supervisory Control and Data Acquisition (SCADA) system
- Pressure and flow monitoring system
- Routine inspection of facilities by field personnel
- Participation in the Underground Service Alert (U.S.A.) pipeline locator service
- Procedures for minimizing post-shutdown residual drain-out from pipes

Right-of-Way Ambient Monitoring

Right-of-Way ambient monitoring is performed at least once every two weeks to meet California Pipeline Safety Act (CPSA 51012.3) regulations. Company procedure is to conduct an aerial survey of the pipeline twice a week.

The aerial surveyor is alert for signs of leakage, construction or excavation activities, or any other situation that could affect the safe operation of the pipeline system. In the event that any unusual or threatening conditions are observed, the aerial surveyor will immediately notify the Pipeline Area Supervisor using the Company radio frequency.

Supervisory Control and Data Acquisition System

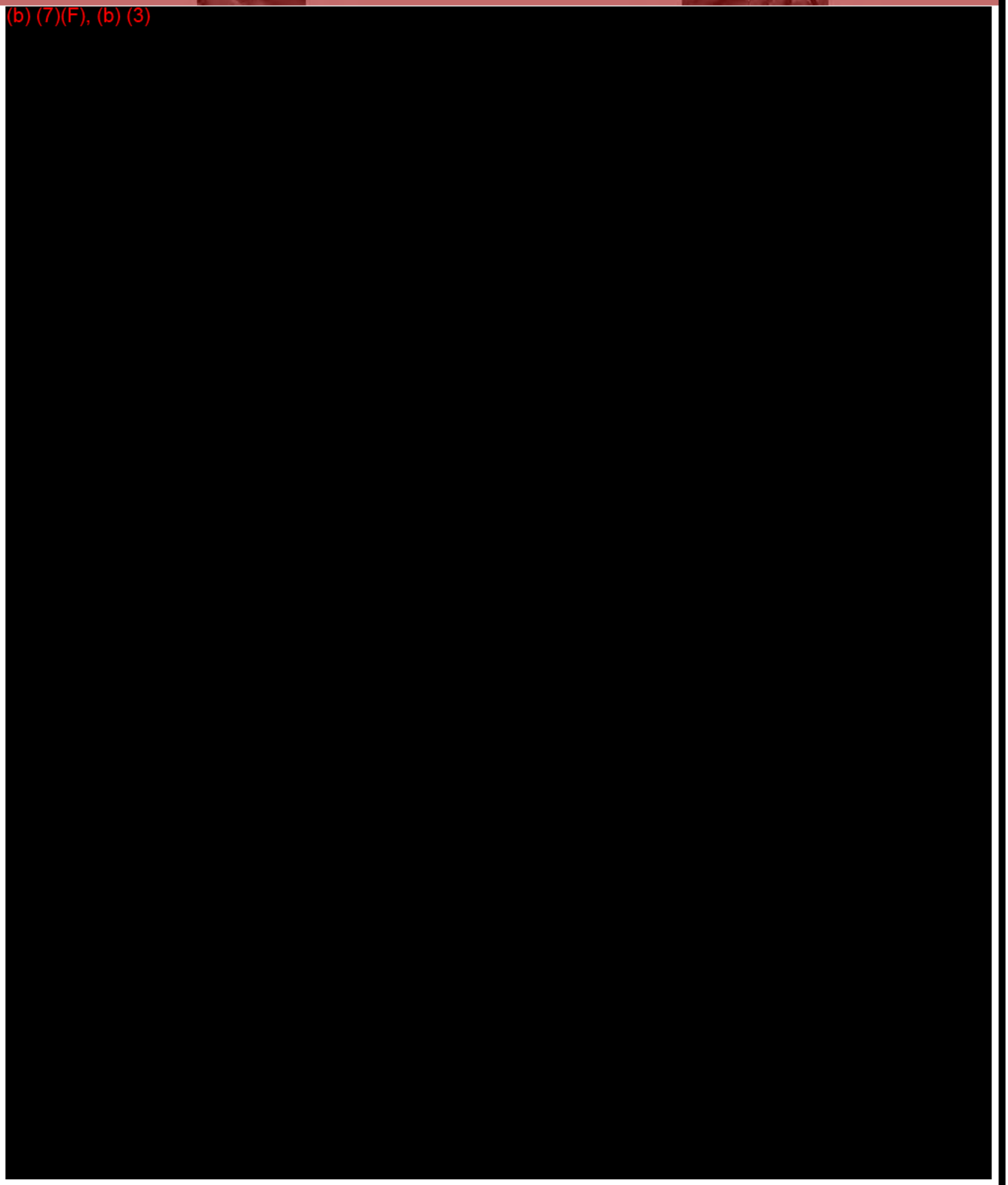
(b) (7)(F), (b) (3)

[redacted]

Pressure and Flow Monitoring System

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)



1.9.8 Response Analysis

Introduction

The potential consequences of a worst case discharge depend on the location of the incident and the mitigation measures implemented to contain and clean up the oil. Sensitive environmental resources include the public, wildlife, vegetation and aquatic environments, including domestic water supply and navigable waters.

Sensitive plant and animal resources are listed in this Annex 3 of this plan. Along the pipeline right-of-way, few sensitive or endangered species would be impacted by a terrestrial oil spill. Some portions of the pipeline system are located in rural and moderately populated urban areas, where a spill could pose a danger to humans. In areas where a spill could reach aquatic habitats, there is a higher possibility of impacting sensitive plant and animal species.

Evacuation plans are described in this annex for alerting the public, and keeping people away from the area of a spill. Crude oil and semi-refined products pose a danger of ignition that would be the primary concern for responders in a populated area.

The California Department of Fish and Wildlife will be notified in the event of a reportable spill, and would provide input to the qualified individual on special precautions to be taken during spill containment and cleanup activities to preserve sensitive and endangered species along the pipeline route.

In the event of an oil spill, including a worst case discharge, PHMSA and OSPR require that adequate and timely response resources are available to limit the potential environmental consequences. Sensitive aquatic areas that may be impacted by an oil spill are listed in the analysis of the largest foreseeable discharge (LFD) planning volumes in this annex. These areas include small drainages, creeks, rivers, the California Aqueduct, other Central Valley canals, O'Neill Forebay at San Luis Reservoir, Bethany Reservoir, and the creeks draining into marshland at the edge of San Pablo Bay.

PHMSA Response Analysis

Terrestrial Spill Scenario

In the case of a terrestrial spill, cleanup contractors identified in this Annex 2 of this plan would be mobilized, along with adequate Company personnel and equipment. These response resources are fully capable of containment and cleanup of the worst case discharge along the pipeline system. For a worst case discharge on land, PHMSA does not indicate any timing requirements for the arrival of containment and cleanup resources at the scene. The response resources required for a worst case terrestrial spill include earth moving equipment, vacuum trucks, temporary oil storage containers, hazardous waste disposal contractors, and an adequate number of workers. The following describes the resources that the Company can bring to bear to respond to a 92,199 bbl spill.

Company personnel would most likely be the first responders to the release. The Company maintains spill response equipment at pump stations. This equipment is listed in this Plan and includes equipment such as sorbent pads, plastic sheeting, hand tools, portable pumps, generators, trucks, radios, response clothing and boots and gas detectors. Much of the equipment is contained in response trailers that can be brought to the site. The Company can also call in the IMAT team, consisting of trained management personnel.

It is anticipated that much of the oil would be contained onsite by the dike system, however this analysis assumes the entire amount escapes. For a spill of this scope, the Company would immediately call in contractor support to assist in the containment and cleanup effort. The Company has two primary full service response companies under contract. These two companies have an extensive inventory of response equipment. In addition, there are numerous other local contractors that can supply needed equipment.

Manning – The Company has a contract in place with an OSRO that has been classified by the U.S. Coast Guard and approved by the State of California to meet the requirements for spill response. The OSRO can and will provide HAZWOPER trained personnel appropriate and necessary for a response. A copy of the contract and contact information for the OSRO is included in Annex 2 of this plan.

Recovery Equipment – Recovery equipment would be required to recover the oil and contaminated soil and debris. Pooled oil would most likely be sucked up by vacuum trucks or pumped into tank trucks. The Company has portable pumps and generators stored at their tank farms that can be used for pumping oil. In addition, portable tanks can be brought in to store recovered oil if required. The contracted OSRO will provide additional required equipment necessary for the response.

Storage/Disposition of Recovered Oil – The Company has several options for the storage and disposal of the recovered oil. First, the oil can be taken to the nearest pump station that has storage capacity. In addition, the recovered oil could be taken to the Avila Station, which has over 15 storage tanks, or to the Santa Maria Refinery. It is envisioned that the recovered oil would eventually be taken to one of the Company's refineries for reprocessing. Contaminated material could be taken to one of the pump stations for temporary storage and possible cleanup, or to an approved landfill.

Heavy Equipment – Heavy equipment would be required to construct berms to contain the oil and to recover contaminated soil and debris. Heavy equipment requirements include bulldozers, backhoes and graders. Annex 2 includes local contractors that can supply various types of equipment.

Inland Water Spill

The pump stations are located such that it would be difficult for a worst case spill to reach an inland waterway. However, it is possible for a pipeline release to reach an inland waterway. In this case, the Company would respond with both their personnel and their full service spill contractor. The paragraphs below discuss responses to spills that reach navigable waters.

Navigable Water Scenario

Line 200 crosses Mt. Diablo Creek in pipeline section 57 (pipeline segment 12). A release into these creeks could impact Suisun Bay within 4 hours. The OSPR reasonable worst case spill for marine waters was calculated to be (b) (7)(F), of crude oil or semi-refined product from this section. Since the PHMSA worst case discharge is from a breakout tank well away from navigable waters, the OSPR worst case spill has been used to determine offshore and shoreline response resource requirements. The OSPR worst case spill is from a pipeline.

Response resource requirements and timing are provided in the OSPR regulations (14 CCR 817.02) but are unavailable in the applicable DOT regulations for on-shore pipelines (49 CFR 194.115). However, the approach discussed in the U.S. Coast Guard regulations (33 CFR 154) for planning response resources for a worst case discharge can be used as a guideline to plan an effective oil spill response under these circumstances. Under the USCG approach, the following planning volumes would be used for heavy crudes and fuels (persistent, Group 4 oils) in a near-shore environment:

- Ten percent of the (b) (7)(F), (b) (3) .
- Resources must be available to recover up to fifty percent of the worst case discharge as floating oil off-shore, or (b) (7)(F), (b) .
- Resources must be available to recover up to seventy percent of the worst case discharge as on-shore oil or (b) (7)(F), (b)

Lesser volumes would be associated with oil groups 1 through 3.

In order to calculate a Response Planning Volume for on water recovery, the Reasonable Worst Case Spill (OSPR), or the worst case discharge capable of impacting navigable waters (PHMSA) is multiplied by a persistence factor and then by an emulsification factor, both of which are oil group dependent. Where uncertainty in the oil group is present, the worst case planning volume is the one with the highest multiplicative product of persistence and emulsification factors. The highest on water product is 1.0 for Group 3 - Medium Crude, and the highest shoreline product is 1.0 for Group 3 or Group 4 - Heavy Crude. Factors are shown in the following table.

Oil Group	Description	On Water Persistence Factor	On Shore Persistence Factor	Emulsification Factor
1	Non-persistent (e.g., gasoline)	0.2	0.1	1.0
2	Light Crude	0.5	0.3	1.8
3	Medium Crude	0.5	0.5	2.0
4	Heavy Crude	0.5	0.7	1.4

These factors are applicable for both OSPR and USCG regulations. Although most of the crude oils transported in the subject pipelines are Group 4, there is potential for some Groups 1-3 oil to be transported. Because of the multiplicative product of persistence and emulsification factors is highest for Group 3, Group 3 has been assumed for purposes of calculating worst case planning volumes.

The DOT/PHMSA worst case spill would translate to an on water planning volume of 6,002 barrels. Increasing on water recovery capacity must be mobilized within specified time periods, according to the USCG regulations, as follows:

- Within 6 hours, daily on-water recovery capacity must be at least 15 percent of the Response Planning Volume, or 900 barrels per day (Tier 1 USCG planning requirement).
- Within 30 hours, on-water recovery capacity must be at least 25 percent of the Response Planning Volume, or 1,501 barrels per day (Tier 2 USCG planning requirement).
- Within 54 hours, on-water recovery capacity must be at least 40 percent of the Response Planning Volume, or 2,401 barrels per day (Tier 3 USCG planning requirement).

(b) (7)(F), (b) (3) [redacted]

1.9.9 OSPR Response Planning Volume

The OSPR Reasonable Worst Case Spill of (b) (7)(F), (b) (3) [redacted] arrels would translate to an on water planning volume of the same amount after multiplying by the Group 3 persistence and emulsification factors, as shown below:

(b) (7)(F), (b) (3) [redacted]

Under OSPR regulations, the total amount of on water containment and recovery equipment and services required is an amount necessary to address (b) (7)(F), (b) (3) [redacted], i.e., the planning volume. The OSPR on shore planning volume would also be (b) (7)(F), (b) [redacted], as shown below:

(b) (7)(F), (b) (3) [redacted]

The Company is a member of the Clean Bay oil spill cooperative, and will call upon Clean Bay to be the primary on-water spill contractor in the event of an oil spill into navigable water. Clean Bay response resources are listed in the Notifications Section for this Area.

The "de-rated" response capacity (using the USCG criteria for taking only twenty percent of the manufacturer's rated equipment capacity) of the Clean Bay response capability is 16,452 barrels per day for tier one planning requirements, with 10,000 barrels of storage capacity on call. Thus, the worst case on-water planning volume of (b) (7)(F), (b) [redacted] and the required daily recovery rates would be well within the capabilities of the Clean Bay oil spill response resources.

More than twenty percent of Clean Bay response capacity can operate in shallow water (less than six feet), which could be significant near the San Pablo Bay shoreline. A large number of vessels of opportunity are available for response activities such as boom towing, logistics and wildlife rescue.

Onshore cleanup contractors would be brought in to mitigate an oil spill at the shoreline. The Company has identified spill contractors with the ability to clean up a (b) (7)(F), (b) [redacted] spill on the shoreline as a result of a worst case discharge. These contractors are listed in Annex 2 of this plan. All OSROs have been classified by the USCG and approved by OSPR.

The timeframes for equipment delivery and deployment do not take into account the time required to conduct a health and safety assessment of the site as required by the California Occupational Safety and Health Administration. In addition, these timeframes do not account for delays that may occur due to weather or sea state. The actual time necessary to deliver and deploy equipment will be assessed at the time of an incident or a drill and will take into account the prevailing conditions of weather and sea state, as well as the site assessment requirements.

1.9.10 Onshore Trajectory Analysis

The Richmond Products Pipeline and Line 200 crude oil pipeline travel across many small creeks throughout the Valley Area. Many of these are seasonal and have no gauging stations. The required information to conduct a thorough trajectory analysis for each creek is simply not available.

However, an attempt was made to perform a trajectory analysis in order to help release respondents understand where a release might travel after entering creeks and the fastest times expected for a release to enter marine waters.

The pipeline routes were mapped on USGS Quad Maps. The routes were divided into segments according to drainage basins. The shortest time required for a release within a particular drainage basin to reach marine waters was sought. This shortest time would be from a product release directly into a creek with the shortest distance to marine waters within the drainage basin. Releases elsewhere within the drainage basin would first need to travel overland and then enter the creek.

As per 40 CFR Part 112 Attachment C guidelines, the Chezy-Manning equation was used to calculate stream and thus released product velocities:

$v = (1.5/n) * r(2/3) * s(1/2)$

Where:
n = roughness coefficient
r = hydraulic radius (approximately 0.667 * the channel depth)
s = channel slope

As little specific information is available for the small, often seasonal creeks crossed by the pipelines, certain general assumptions were made. Creeks crossed by the pipeline tend to be winding, minor streams. Therefore, as per 40 CFR Part 112 Attachment C guidelines, a value of n, the roughness coefficient, was chosen as 0.04.

The depths of the creeks vary seasonally and throughout the lengths of the creeks. A channel depth of 2.5 feet was chosen to represent average flood depths for -all of the creeks and a channel depth of 10 feet was chosen for the rivers.

The channel slope was taken from the USGS Quad Maps. In order to maximize the channel slope, the location where the creek with the shortest distance to marine waters within a drainage basin was crossed or adjacent to the pipeline was chosen. The difference between the elevation of this location and that of creek's final destination was noted. For a stream proceeding uninterrupted to marine waters, the final destination would be at sea level. However, many creeks flow into reservoirs where further flow would be inhibited. Therefore, the elevation of the reservoir was taken as the elevation of the final destination. The distance of the creek crossing to the final destination was measured using a ruler. Because the channels often wind heavily, this distance was multiplied by 1.5 to obtain a final channel length. The slope of the channel was obtained by dividing the elevation change by the channel length.

The table showing resources required for shoreline protection and clean up provides the identification of the creeks and rivers, the final destinations of releases, the elevation changes, channel lengths and velocities calculated for this study and the times required for releases to reach their final destinations. 14 CCR Division 1, Subdivision 4, Chapter 3.3 Section 817.02 requires that a trajectory analysis be performed for releases with the potential to reach marine waters within 72 hours. Trajectory analyses were only performed for these releases.

Trajectory Analysis

Segment	Creek Name	Via	Final Destination	Elevation (ft)	Distance (ft)	Distance * 1.5	Velocity	Distance to Marine Waters	Distance * 1.5	Time to Reach Marine Waters (hours)
Oleum Line										
1	Canada del Cierbo	Rodeo Refinery	San Pablo Bay	150	8000	12000	5.89	8000	12000	0.57
2	Rodeo Creek	Rodeo	San Pablo Bay	400	25500	38250	5.39	25500	38250	1.97
3	Little Bull Valley	East of Port Costa	Carquinez Strait	700	8000	12000	12.73	8000	12000	0.26
4	Franklin Creek Tributaries	Arroyo Del Hambre	Carquinez Strait west of Martinez Airport	100	1300	1950	11.94	1300	1950	0.05
5	Unnamed Creek	Martinez	Carquinez Strait	225	12000	18000	5.89	12000	18000	0.85
6	Pacheco Creek	west of Avon	Suisun Bay	125	18000	27000	3.59	18000	27000	2.09
7	Contra Costa Canal		Martinez Reservoir	25	15000	22500	1.76	15000	22500	3.56
8	Grayson Creek	Pacheco Creek	Suisun Bay west of Avon	10	16000	24000	1.08	16000	24000	6.20
9	Walnut Creek	Pacheco Creek	Suisun Bay west of Avon	20	14000	21000	1.63	14000	21000	3.59
10	Contra Costa Canal									?
11	Clayton Canal									?
12	Mount Diablo Creek Tributaries	marsh east of Avon	Suisun Bay	200	30000	45000	3.51	30000	45000	3.56
13	Marsh Creek Tributaries		Marsh Creek Reservoir	585	51000	76500	4.61	51000	76500	4.61
14	Long Canyon		Marsh Creek Reservoir	265	39280	58920	3.54	39280	58920	4.63
15	Sycamore Creek		Marsh Creek Reservoir	265	39280	58920	3.54	39280	58920	4.63
16	Round Valley Tributary		Small Reservoir or Dam							Instant
16a	Round Valley Tributaries		Marsh Creek Reservoir	305	32008	48012	4.20	32008	48012	3.17
16b	Tributary		Marsh Creek Reservoir	785	35008	52512	6.45	35008	52512	2.26
17	Kellogg Creek Tributaries		Discovery Bay	280	83360	125040	2.49	83360	125040	13.92
17a	Kellogg Creek Tributary		Res/Dam							Instant
17b	Kellogg Creek Tributary		Res/Dam							Instant
18	Creek		Res/Dam							Instant
19	Creek		Res/Dam							Instant
20	Brushy Creek Tributary		Res/Dam							Instant
21	Brushy Creek		Reservoir	360	22000	33000	5.51	22000	33000	1.66
22	Brushy Creek Tributary		Res/Dam							Instant
23	Creek		Res/Dam							Instant
24	Creek		Southern Pacific Railroad Tracks	460	21000	31500	6.37	21000	31500	1.37
24a	Res/Dam									Instant
25	Creeks		Indian Slough	125	18000	27000	3.59	18000	27000	2.09
26	Mountain House Creek		Dam							Instant
27	Creeks		Dead End							
28	Kern Creek		Delta Mendota Canal	120	28000	42000	2.82	28000	42000	4.14
29	Del Puerto Creek	San Joaquin River	Port of Stockton	200	234432	351648	1.26	234432	351648	77.70
Richmond Products Line										
1	Rodeo Creek	Rodeo	San Pablo Bay	40	6000	9000	3.51	6000	9000	0.71
2	Refugio Creek	Hercules	San Pablo Bay	40	6000	9000	3.51	6000	9000	0.71
3	Pinole Creek	Pinole	San Pablo Bay	40	6000	9000	3.51	6000	9000	0.71
4	Garrity Creek		San Pablo Bay	175	8000	12000	6.37	8000	12000	0.52
5	San Pablo Creek		San Pablo Bay	40	16000	24000	2.15	16000	24000	3.10
6	Wildcat Creek		San Pablo Bay	60	12000	18000	3.04	12000	18000	1.64
7	Richmond Streets		Richmond Harbor							Instant

1.9.11 Dispersant Use Plan

Spill incidents from onshore pipelines are generally poor candidates for chemical dispersant treatment. The shallow waters near the coastline, where a spill might occur in relatively small volumes, would preclude the use of dispersant chemicals under most circumstances. Although the use of chemical dispersants is gaining wider acceptance, it remains tightly regulated. The Clean Seas Regional Resource Manual (http://www.cleanseas.com/equipment.htm) contains a detailed discussion of dispersant use including regulatory requirements, information on potential impacts and application techniques. A discussion of dispersant usage is also contained in the Area Contingency Plan (ACP).

1.9.12 Range of Communications Systems

The following table shows the Frequency and Ranges of radio communications in use for the Northern Lines Valley Area.

Mode	Frequency	Range	Comment
2-Way Radio	49.38 MHz Transmit 48.74 MHz Receive	Portions of the Central Valley and San Francisco Bay Area, coverage except in remote isolated canyons	Company repeater on Mt. Vaca
	48.38 MHz Transmit 48.74 MHz Receive	Portions of the Central Valley and San Francisco Bay Area, coverage except in remote isolated canyons	Company repeater on Joaquin Ridge
	48.90 MHz	Line of sight	Local communications
	459.00 MHz Transmit 454.00 MHz Receive	Entire Bay area including Carquinez Strait, and Lower Delta, marine coverage	Clean Bay repeater on Mt. Diablo FCC frequencies assigned for oil spill response
	454.00 MHz	Line of sight, marine use	Local communications
	459.00 MHz Receive 454.00 Transmit	Portable repeater: Range will be site dependent, marine coverage	Clean Bay portable repeater FCC frequencies assigned for oil spill response
	Marine Channel 16	Line of sight, marine coverage	Coast Guard monitored
Cell Phone	Various	Coverage except in remote isolated canyons	Public System

1.9.13 Sensitive Area Information

The sensitive area information for this geographical area of this plan can be found in Annex 3. In defining this section the ACP was heavily relied upon.

1.9.14 Spill Response Equipment List & Location

Equipment Location:	Line 200 Area Office (Tracy); 7551 Carmelo Avenue; Tracy, CA 95304					
Inspection Date:		**Inspector:**				
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
**Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
EMERGENCY RESPONSE TRAILER #1						
1. Tires		Each	2			
2. Trailer		Each	1			
RESPONSE EQUIPMENT						
3. Absorbent Boom	Type 270	4/Bag	7			
4. Absorbent Boom, 4" x 20'	Type 420	2/Bag	11			
5. Absorbent Pads, 17" x 19"		100/Bag	7			
6. Absorbent Rice Hull, 50 lb.		Bag	1			
7. Fire Extinguisher, 30#	Dry Chemical	Each	1			
8. Hazmat Response Kit, Brass		Each	1			
9. Post, Tee		Each	18			
PERSONAL PROTECTIVE EQUIPMENT						
10. Dräger CMS		Each	1			w/ chips for Benzene & Petroleum hydrocarbon
11. Face Shield		Each	3			
12. Face Shield Headgear		Each	3			
13. Fire Blanket		Each	1			
14. SCBA		Each	3			
15. Shin Guards, Snake		Pair	2			
DECON EQUIPMENT						
16. Brush, Long Handled	Scrub	Each	4			
17. Hose, 50' Garden		Each	1			
18. Hose, Water Wand		Each	1			
19. Pail, 2-Gallon Plastic		Each	6			
20. Polyethylene Sheeting	6-mil	200 sq/ft	3			
21. Sprayer, 3-Gallon		Each	1			
22. Tub, 50-Gallon		Each	3			
HAND TOOLS						
23. Jack, Floor	2 Ton	Each	1			
24. Post Driver, Tee		Each	1			
ADDITIONAL COMMENTS:						

Equipment Location: Spill Trailer 1 (Lic# 1VM3710) Coalinga Office; 256 E. Polk St., Coalinga, CA 93210				
Inspection Date:		**Inspector:**		
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Comments****
**Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)				
Decontamination				
Pressure Sprayers	2.5	gal	4	
Scrub Brushes	Various		6	
Plastic Buckets	2	gal	1	
Plastic Tubs	10	gal	3	
Sheep Troughs			3	
Hand Tools				
Fire Axe			1	
Tool Box		Large	1	
Tool Box		Small	1	
Scrapers		Various	2	
Hay Hooks			2	
Shovels		Coal	2	
Shovels		Square	6	
Shovels		Round	2	
Pitch Fork			2	
Garden Rake			6	
Misceallaneous				
Trash Containers	33	gal	4	
Electrical Cord	100	ft	2	
Electrical Cord	80	ft	3	
Halogen Lights	Various		7	
Harness			1	
Tarps	10 x 12	ft	4	
Ladder	10	ft	1	
Orange Fencing		Roll	3	
Fence Post			15	
Lathe		Bundle	1	
Reflector (Blue)	3	ft	10	
Plastic Sheeting	20' x 100'	ft	2 Rolls	
Blower, Fresh Air w/hose			1	
Shade House	10x10x7	ft	1	
PPE				
Chemical Goggles			6	
Scott Air Packs			4	
Life Vest (working)			12	

Response				
Traffic Control Signs	Hand held		3	
DO NOT ENTER	Red	Roll	12	
OPEN TRENCH	Yellow	Roll	2	
CAUTION	Yellow	Roll	9	
SAFETY HAZARD	Yellow	Roll	8	
Road Barricades			3	
Traffic Cones			90	
Fire Extinguisher	30	lb	1	
Portable Shower			1	
Sorbent Boom	4	in	40 Feet	

Equipment Location:
Spill Trailer 2 (Lic# 4AZ6941) Coalinga Office; 256 E. Polk St., Coalinga, CA 93210

Inspection Date:		**Inspector:**		
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Comments****

**Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)

esponse				
Boom – Absorbent	6” x10’		20	
Boom – Floating	200	Ff		
Bridger Line Gun			1	

1.10 Southern Lines Area

1.10.1 Pipeline Description

LA Basin Area

The LA Basin Area includes crude oil and petroleum product pipelines in Los Angeles County that have the potential of spilling petroleum products into the Los Angeles River and the Dominguez and Cerritos Channels.

The Area is in the West Coast Pipelines Division. The pipeline system consists of gathering lines, trunk lines and product lines ranging from 6 to 42-inches in diameter.

1.10.2 Tank Table

Location	Equipment	Tank or Vessel	Product	Capacity (bbls)	Diameter	Height or Length	Year Built	Type
Torrance	Tk-Large (>29' dia)	100518	Crude Oil	(b) (7)(F), (b) (3)			1924	EFR
Torrance	Tk-Large (>29' dia)	100534	Gasoline				1924	Dome/ EFR
Torrance	Tk-Large (>29' dia)	100528	Gasoline				1924	EFR/Dome
Torrance	Tk-Large (>29' dia)	100530	Gasoline				1924	EFR
Torrance	Tk-Large (>29' dia)	100510	Gasoline				1924	EFR
Torrance	Tk-Large (>29' dia)	100512	Gasoline				1924	Dome/ EFR
Torrance	Tk-Large (>29' dia)	100524	Diesel				1924	External floater
Torrance	Tk-Large (>29' dia)	100514	Gasoline				1924	Dome/ EFR
Torrance	Tk-Large (>29' dia)	100520	Diesel				1924	EFR
Torrance	Tk-Large (>29' dia)	100516	Crude				1924	EFR
Torrance	Tk-Large (>29' dia)	100536	Gasoline				1924	Dome/ EFR
Torrance	Tk-Large (>29' dia)	100506	Diesel				1924	EFR
Torrance	Tk-Large (>29' dia)	100522	Turbine Fuel - KTF				1924	EFR
Torrance	Tk-Large (>29' dia)	100502	Crude Oil				1924	EFR
Torrance	Tk-Large (>29' dia)	100538	Gasoline				1924	EFR/Dome
Torrance	Tk-Large (>29' dia)	100540	Gasoline				1924	EFR/Dome
Torrance	Tk-Large (>29' dia)	100542	Gasoline				1924	EFR/Dome
Torrance	Tk-Large (>29' dia)	100532	Gasoline				1924	EFR
Torrance	Tk-Large (>29' dia)	100504	Crude Oil				1924	EFR
Torrance	Tk-Large (>29' dia)	100526	Gasoline				1924	EFR
Torrance	Tk-Large (>29' dia)	100508	Turbine Fuel - KTF				1924	EFR

1.11 Worst Case Discharge – Southern Lines Area

The Company has developed processes and procedures to minimize damage to the environment that may result due to a discharge from this facility. Containment is most effective when conducted near the source of the spill, where the product has not spread over a large area and to allow effective recovery and/or cleanup. Effective implementation of containment and recover is generally dependent upon the size of the spill, available logistical resources, implementation time, and environmental conditions or nature of the terrain of the spill area.

It is the Company's goal to be as proactive as possible to ensure that any such incident does not occur. However, in the unlikely event that a spill should occur, The Company has ensured that the manpower and equipment necessary to mitigate and cleanup any spill will be made immediately available. In addition to Company resources and manpower, the Company has contracted with Oil Spill Response Organizations (OSROs). These contracted OSROs will ensure our ability to minimize the amount of harm to the environment. They will also ensure our ability to sustain continued operations through 7 days or longer if necessary.

The worst-case discharge volume calculations are based on the guidance provided by the Department of Transportation, Interim Final Rule, 40 CFR Part 194. A worst-case discharge is defined as the largest foreseeable discharge in adverse weather conditions that a pipeline could discharge in a response area. The worst-case discharge is based on the comparison of several factors.

First is the result of the calculation of the flow rate times the maximum time to detect the spill, plus the rate of flow times the time to shut down the pipeline, plus the drainage volume after shutdown of the pipeline.

(Line flow x SCADA response)
+
(gravity flow x manual response)
+
(volume between manual block valves)

SCADA = Supervisory Control and Data Acquisition System

Manual Response = Total time to physically turnoff manual valves nearest spill location

Second, the worst-case discharge could be a foreseeable discharge for a line section based on the maximum historic discharge.

Third, if the line section within the response area contains break out tanks, the worst-case discharge may be the quantity of the largest tanks or tank battery within a single containment dike, adjusting for the capacity of the containment system.

1.11.1 Valve Identification:

The following locations have been identified as having potential to reach marine waters and cause significant and substantial harm if a discharge of oil were to occur. The Facility Information Section of this annex discusses worst case discharge scenarios.

Location	Worst Case Discharge Bbls
42" Pier "T" Trunkline @ Cerritos Channel crossing Valves S-4 to S-7	(b) (7) (F) (b)

Santa Monica Bay Area

Showing: Pipeline Route, Valve Numbers, Thomas Brothers Atlas Page Numbers and Pipeline Detail Map Numbers

Map Number	Name	Revision
SD-EM-036	Turbine Fuel Line	12-99

LA Basin Area

Location	Valve Identification
42" Pier "T" Trunkline @ Dominguez Channel Crossing	(b) (7)(F), (b) (3)
42" Pier "T" Trunkline @ Cerritos Channel Crossing	
Torrance Tank Farm	

1.11.2 Worse Case Discharge Calculations

Spill Volume Calculations

Case 1 - Dominguez Channel Pipeline Crossing (LA Basin Area)

Calculation of Worst Case Discharges LA Basin Area - San Pedro Bay Region

(b) (7)(F), (b) (3)

[redacted]

Planning Volume Calculations (On-Water)

Oil Group	Light Crude (Group 2)	Medium Crude (Group 3)	Heavy Crude (Group 4)
Persistent Factor	0.50	0.50	0.50
Emulsification	1.8	2.0	1.4

Planning Volumes for On-Water Recovery

Group II:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group II oils.

Group III:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group III oils.

Group IV:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group IV oils.

Planning Volume Calculations (On-Shore)

Oil Group	Light Crude (Group 2)	Medium Crude (Group 3)	Heavy Crude (Group 4)
Cleanup Volume	0.30	0.50	0.70
Emulsification	1.8	2.0	1.4

Planning Volumes for On-Shore Recovery

Group II:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group II oils.

Group III:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group III oils.

Group IV:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group IV oils.

Case 2 - Cerritos Channel Pipeline Crossing (L. A. Basin Area)

Calculation of Worst Case Discharges LA Basin Area

(b) (7)(F), (b) (3)

[redacted]

Planning Volume Calculations (On-Water)

Oil Group	Light Crude (Group 2)	Medium Crude (Group 3)	Heavy Crude (Group 4)
Persistent Factor	0.50	0.50	0.50
Emulsification	1.8	2.0	1.4

Planning Volumes for On-Water Recovery

Group II:

(b) (7)(F), (b) (3)

[redacted]

Conclusion: Response equipment and services are available for the response planning volume for Group II oils.

Group III:

(b) (7)(F), (b) (3)

[redacted]

Conclusion: Response equipment and services are available for the response planning volume for Group III oils.

Group IV:

(b) (7)(F), (b) (3)

[redacted]

Conclusion: Response equipment and services are available for the response planning volume for Group IV oils.

Planning Volume Calculations (On-Shore)

Oil Group	Light Crude (Group 2)	Medium Crude (Group 3)	Heavy Crude (Group 4)
Cleanup Volume	0.30	0.50	0.70
Emulsification	1.8	2.0	1.4

Planning Volumes for On-Shore Recovery

Group II:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group II oils.

Group III:

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group III oils.

Group IV

(b) (7)(F), (b) (3)

Conclusion: Response equipment and services are available for the response planning volume for Group IV oils.

Case 3 – Torrance Tank Farm

Breakout Tank Worst-Case Discharge

The WCD for tanks is calculated on the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

(b) (7)(F), (b) (3) [redacted]

Under *49CFR§194.105*(b)(4) Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures. The percentage (credits) is a maximum of 75%. Under this section, and with the following criteria, the Company is entitled to receive a 70% credit on their WCD volumes.

Prevention measure	Standard	Credit (%)
Secondary containment > 100%	NFPA 30	**50%**
Built/repaired to API standards	API STD 620/650/653	**10%**
Overfill protection standards	API 2350	**5%**
Testing/Cathodic Protection	API STD 650/651/653	**5%**
Tertiary containment/drainage/treatment	NFPA 30	**5%**
Maximum Allowable Credits		75%
Company claimed credits		**70%**

Based on the allowable credits identified above, the WCD volume from a breakout tank for the Northern Valley Area is (b) (7)(F), (b) [redacted]

The prevention credits for the above tank are based upon the Company meeting or exceeding certain industry standards. The tank is built, inspected, and repaired to *API Standard 650/653*. Overfill protection is in place for all breakout tanks and meets *API RP 2350*. **Cathodic protection** and testing is in place to prevent the **corrosion** of pipelines and breakout tanks and meets *API Standard 651*.

The following table is an overview of the WCD Calculations in barrels for this area.

(b) (7)(F), (b) (3) [redacted]

Planning Volume Calculations

Worst Case Discharge Planning Volume Calculations

(b) (7)(F), (b) (3)

Calculation		1
Areas Impacted: Inland – River/Canal		(b) (7)(F), (b) (3)
Worst Case Discharge: WCD=100% of in-ground pit volume		
Small Case Discharge (Lesser of 1% of WCD or 50 bbl) (bbl)		
Medium Case Discharge (Lesser of 10% of WCD or 857 bbl) (bbl)		
On-Water Recovery Volume (OWRV=Percent oil on-water x WCD) (bbl)		
On-Shore Recovery Volume (OSRV=Percent oil on-shore x WCD) (bbl)		
Emulsification Factor (EF)		
On-Water Clean-Up Planning Volume (OWPV=OWRV x EF) (bbl/day)		
Shoreline Clean-Up Planning Volume (SPV=OSRV x EF) (bbl/day)		
On-Water Recovery Capacity: (OWRC=OWPV x Resource Mobilization Factor) (bbl/day)	Tier 1	
	Tier 2	
	Tier 3	
On-Water Recovery Response Caps (OWRRC) (bbl/day)	Tier 1	1,875
	Tier 2	3,750
	Tier 3	7,500
Amount needed to be identified, but not contracted for (OWRC – OWRRC) (bbl/day)	Tier 1	N/A
	Tier 2	856
	Tier 3	3,160

1 – Group 1 Oil = Non-Persistent Oils
bbl/day – Barrels per day
bbl – barrels

1.11.3 Spill History

01/1994 – Crude oil release due to earthquake

In January 1994 the 12" Torrey developed a leak North of Valve #269, due to a substantial earthquake and line movement. Approximately 2 barrels of crude oil was released. Pipeline was repaired and site remediation was completed.

In January 1994 the same earthquake damaged the 4" San Martinez Gathering line, releasing approximately 1 barrel of crude oil. The pipeline was repaired and site remediation was completed.

10/1994 – Crude oil release due to external corrosion

In October 1994 the 4" West Mountain Gathering line developed a leak. Approximately 3 barrels of crude oil was released. The cause of the leak was external corrosion. The pipeline was repaired and site remediation was completed.

The Stewart-Norwalk 10" Pipeline (CSFM #0581-0447) experienced one significant and two minor spills within the last 10 years while operated by the previous owner, Unocal Corporation. The CSFM placed this line into their "Higher Risk" category on May 10, 1999. The line was removed from the "higher risk" list on September 3, 2002.

2/20/94 – Crude oil release due to pipeline strike

On February 20, 1994, a contractor constructing a new Metrolink Train Station in Norwalk hit the Stewart-Norwalk 10" Pipeline with a front-end loader puncturing the pipeline. An estimated 1,090 barrels of medium crude oil was released. In the process of diking the spill, the contractor covered a storm drain inlet at the request of the county fire department. The presence of the inlet was not revealed to the Unocal responders and approximately 100 barrels of oil entered the storm drain.

The oil in the storm drain ran underground for four miles to an outfall at Coyote Creek and southward into the San Gabriel River. It reached the unchanneled section of the river below the 405 freeway in Long Beach before being contained.

A large cleanup involving at one time over 500 Unocal, contractor and agency personnel under the Unified Command of California Fish & Game, Metrolink, and Unocal. The cleanup was completed in eleven calendar days to the satisfaction of Fish & Game and the Los Angeles County Flood Control District.

12/6/1996 – Crude oil leak due to a pin hole leak

On December 6, 1996 a minor crude oil leak surfaced along the curb face on Central and Victoria, near the Dominguez 6" pipeline. This gathering line connects to the Norwalk Trunk Line at 223rd Street and Wilmington Avenue and is considered to be a part of the Norwalk Trunk Line. The pinhole leak was discovered inside a 10" casing that had filled with water. The end seals that normally keep water out of the casing failed and contributed to the external corrosion of the 6" line.

9/3/97 – Minor leak due to external corrosion

On September 3, 1997 the Norwalk Trunk Line developed a minor leak in the City of Cerritos, at the Ironwood Golf Course parking lot. This leak was attributed to external corrosion, caused by a touching metal object left in place during a demolition project of underground facilities at the adjacent Los Coyotes Water Reclamation Plant.

4/4/98 – Crude oil release due to pipeline strike

On April 4, 1998 a contractor struck and damaged the U-1 Line at Kinder Morgan's facility, releasing less than 25 gallons of crude oil. Repairs were made and the site remediation completed.

5/2/98 – Crude oil release due to internal corrosion

On May 2, 1998 the Dominguez 6" Gathering line developed a leak of approximately 60 gallons of crude oil. Internal corrosion inside a pipeline casing was the cause of the leak. Pipeline was replaced and site remediation completed.

10/20/01 – Crude oil release from out of service pipeline

On October 20, 2001 a leak developed at the Stewart Tank Farm construction project. Approximately 40 barrels of crude oil leaked from an out of service line that was exposed during the construction project. Oil was contained in a pipeline trench and was recovered. Remediation of the contaminated soil was completed and the out of service line was completely purged of product and removed during the demolition phase of the project.

9/28/02 – Oily water release from out of service line

On September 28, 2002 the Norwalk 8" 2B "out of service" line on Wilmington Ave. developed a minor leak. Oily/water surfaced along the curb line and was determined to be less than 25 gallons released. This leak was attributed to external corrosion and thermal pressure in the idle line. The line was further evacuated of product, repaired with a line clamp and soil removed for testing.

11/27/02 – Crude oil release in residential neighborhood

On November 27, 2002 LA Basin Gathering Hole Lease Line developed a leak, releasing approximately 50 barrels of crude oil in a residential neighborhood in the City of Brea. The pipeline was undergoing a dewaxing operation (injecting hot oil into the pipeline) and oil surfaced along a curb face and sidewalk. All oil was recovered and contaminated soil was removed. Excavation revealed a longitudinal seam of lap welded pipe had split due to higher than normal operating pressure. The entire section of pipe was replaced, the area was restored to prior condition and the pipeline system is currently not in service.

TORRANCE/L.A. BASIN PIPELINE SPILL HISTORY
January 1, 2005 – September 16, 2009

1/19/05 @ 2:00 p.m. – Gas release from sump-faulty check valve

While making rounds, the Torrance Operator B noticed gasoline flowing out onto the ground from the Kinder Morgan booster #7 pump sump. The released product appeared to be isolated within the secondary containment area for the pump. A check valve on the discharge line from the pump was found to be faulty, which was allowing product from the relief line to flow back into the sump. A gate valve adjacent to the check valve was closed, and the flow into the sump immediately stopped.

3/17/05 @ 9:00 a.m. – Ethanol line release

At approximately 7:30 a.m., a city worker discovered ethanol spilled from a Phillips 66 Company pipeline in Lomita, CA at east side of Walnut Street next to curb. Based on preliminary estimates, approximately two barrels of ethanol were released.

5/4/05 @ 11:30 a.m. – Hydrotest release

Phillips 66 was conducting a pressure test on an underground pipeline that carries ethanol from the company's Los Angeles refinery/Torrance tank farm to its Los Angeles distribution terminal. During the hydrotest, where the line is filled with water at pressures that exceed normal operating limits, a leak occurred. Given the pressure of water in the line, some asphalt near the intersection of Figueroa and Griffith Street in Carson, CA was displaced and damaged some parked vehicles nearby.

2/9/06 @ 10:00 a.m. – TTF gasoline weeping from tank 100538

During sampling and inspection, the Torrance Operator observed a small amount of gasoline on the roof tank at the ladder support on the floating roof. Sorbent was used to capture all of the material, and sorbent rolls were placed around the weep.

2/16/06 @ 9:10 a.m. – TTF B-9 pump seal failure-Jet A release

While shipping turbine fuel from Torrance Tank Farm to Kinder Morgan's Watson Station, the carbon stationary face on the mechanical seal to booster pump 9 cracked. Approximately 35 gallons of turbine jet-A fuel was released to the ground. A mechanic working in the area noticed the pump leak and notified Torrance Operations to shut down the shipment to KM immediately.

2/27/06 @ 9:30 a.m. – TTF Tank 100510 EFR diesel leak

While conducting month end tank sampling, the Torrance Operator B observed a stained area on the roof membrane adjacent to the center pontoon on tank 100510's floating roof. Upon further inspection, it was determined that the roof membrane was weeping. A utility crew was gathered to clean off the roof and inspect the area. During the inspection and clean up, a 1/16 inch hole was detected with diesel product beginning to weep out in its early stages.

5/11/06 @ 6:30 p.m. – TTF Tank 542 release after return to service

After returning tank 542 to service on May 11, 2006 following tank inspection, repairs, and modifications for doming, a small leak described as a weep was reported on the seam between the first and second course of plates at the east side of the tank. This was reported to the project engineering and construction management group who planned on inspecting and making any necessary repairs. Before repairs could be made, Operations reported observing a more active leak occurring on Sunday evening, 5/21/06. The Operations and Maintenance Supervisors were notified and responded on site to inspect the leak, make an assessment, and attempt to make temporary repairs.

11/3/06 @ 6:30 a.m. – TTF Tank 508 weeping from floating roof

Tank 508 was weeping turbine fuel product from the floating roof top just at the bottom of the roof ladder. Until repairs are made, the Operator B was to inspect the area once each shift to keep any free standing product off of the tank and to make sure that the weeping did not get any worse. At that point the situation was completely manageable as the area impacted was only damp. The area weeping had had previous temporary repairs made to it.

11/14/06 @ 3:00 p.m. – TTF Tank 530 internal roof drain leak

The internal roof drain (hose/piping) on tank 100530 appears to have developed a leak. This resulted in the roof drain filling with product and approximately 5 gallons of diesel was released onto the floating roof.

6/3/07 @ 4:00 p.m. – TTF Tank 100504 roof crude oil leak

The Torrance Fire Dept. received a nuisance odor complaint at approximately 4 p.m. They arrived at the tank farm and searched with an operator the pipeline and manifold areas. When nothing was discovered, and no additional odors were noticed, the Fire Dept. left the property. Later on that evening, while collecting product samples in the eastern part of the tank farm, the operator noticed some crude oil odors. Upon searching the tanks in that area, crude oil was discovered to be pooled on the top of tank 100504.

6/20/07 @ 2:53 a.m. – TTF Diesel lubricity additive injection release

Immediately following shift change between the night time and daylight shift Torrance Operators, the Operator B conducted his security rounds in the north tank farm. During his rounds, he discovered a significant leak at the lubricity injection skid that was supplying the required chemical additive to the diesel delivery taking place to the Los Angeles Terminal. Upon discovery at 0253 PST, the Operator B notified the Operator A of the situation, and the pipeline was immediately shutdown 2,875 barrels short of the intended amount on the order. After calculating recent reported inventories of diesel additive from the tank, six additional runs since the last inventory report, and the current level in the tank, it was determined that 169 gallons of additive were released into the secondary concrete containment.

6/7/08 @ 11:20 a.m. – Receiving meter 101 A-Line

A sample pot over flow occurred at LARC due to the sample rate adjustment being set incorrectly for the delivery. Approximately 2 gallons were released to secondary containment. A refinery employee discovered the release and notified the Bartlesville Control Center.

6/12/08 @ 9:00 a.m. – Diesel leaked into TTF LOTO'd tank

While preparing to perform hot work on Tank 100506, product was found leaking into the tank from the 12" inlet. The valve was blinded on the pipeline side. It appears that the small amount of diesel bled from the body of the valve back into the line and into the tank.

7/31/08 @ 1:00 p.m. – Turbine fuel release near LAX (not CPPL's release)

The PCCC was notified by the LA County Fire Department Hazardous Material Division that they had jet fuel in various storm drain laterals in and around LAX. The pipeline was immediately shut down. The Controller stated that they saw no indications from SCADA that there was a problem. Line riders were dispatched to the area along with 3 LA Basin Supervisors. The P/L ROW was patrolled and all block valve vaults were inspected for released product. There was no indication of a release throughout the pipeline. Tony Villa Verde with LAX fuels contacted COP Operations to notify us that they had what appears to be an unknown system relief enter their oil water separator which may have overwhelmed the system causing it to enter the storm water drain system out of the airport.

10/30/08 @ 1:30 p.m. – Small release during refilling operations

On 10/30/08 at 1:15 pm after the completion of major repairs, tank 506 was in the process of being refilled. At 1:30 pm, the 12" fill valve started leaking product from the topside of the flange into the valve vault. The 12" tank valve and the 12" vault valve were closed, vacuum truck recovered product from vault, vault was pressure washed, studs were tightened, refill resumed, no further leaks were found and notifications were made by operations at approximately 1:45 pm.

1/12/09 @ 1:00 p.m. – TTF Crude leak from pipeline

There was a pin-hole leak on the 8" station line at the 7 o'clock orientation. The leak was caused by internal corrosion approximately 1/8 inch in size. Released approximately 3 barrels of crude oil to the environment. All oil was recovered along with some soil.

4/22/09 @ 12:30 p.m. – TTF Tank 100524 EFR pontoon leak

During a routine inspection of Torrance Tank 100524, operations personnel discovered approximately 6 inches of turbine fuel inside the center pontoon of the external floating roof. The product is contained within the pontoon compartment. 7-8-09: Estimated volume 25 bbls (1,300 Gal's). Appropriate notifications were made and the Environmental Coordinator is reviewing the operating permit to determine if notification is required to the regulatory agency (SCAQMD). Tank 100524 is a "non ruled" distillate tank. The area supervisor is working with all affected stake holders to schedule and, if necessary, remove the tank from service for repairs.

6/28/09 @ 2:00 p.m. – TTF tank 100524 emergency roof drain malfunction

At approximately 14:00 hrs, Sunday June 28, during a roof inspection for Tank 524 (jet fuel), the Torrance Station Operator B observed that a small area of product had accumulated on the floating roof membrane. This tank was recently re-commissioned following a roof pontoon repair. All product was contained within the roof drain vent area and was estimated at less than 1 barrel. It was determined by Operations personnel that the emergency roof drain water jacket level was low, allowing product to accumulate through the drain.

7/23/09 @ 3:00 a.m. – TTF Tank 100502 basin crude leak

A Torrance station operator discovered a small crude oil leak within a tank containment area. All incoming / outgoing lines were immediately shut down as a preventive measure. It was determined that 1 of 2 buried lines (4" truck rack & 10" station receipt/delivery) within the tank containment area had developed a small leak. After isolation of both lines, the remaining lines were restarted and recovery/clean up operations commenced. It is estimated that 2-3 bbls of crude were spilled, all of which was recovered. Crews have identified that the 10" receipt/delivery line had developed a small leak, and repairs are underway.

10/14/10 @ 2:30 p.m. – TTF Truck Rack release from drain system

During the start up of a crude truck transport unloading operation, the driver noticed oil backing up from the drain system that services the strainer to the pump located on the concrete containment area. The driver immediately shut off the pump, closed the discharge valve to his truck and notified personnel. 2 gallons of crude were released onto the concrete containment area. No crude escaped past the containment area. The crude was washed back into the drain system trough located on the truck unloading pad. The truck and trailer were off loaded without further incident. An investigation and inspection of all components on the unloading system that could feed the drain system are being made to determine the cause of the incident.

We believe that the air eliminator on either the LACT unit or the pump was temporarily stuck in the open position. No evidence could be found during the investigation when both units were inspected and cleaned. This allowed the crude oil being discharged from the tanker to go straight to the drain system which over loaded the capacity of the drain system causing the 2 gallon backup. The drain system was found to be less than adequate. Maintenance steamed and snaked the line to the sump there by increasing the capacity of the drain system. Routine work order was created in SAP to clean the drain lines.

1/16/12 – Small Pipeline Leak

On Monday, January 16, a Shell Pipeline line rider contacted CPPL personnel that there was a patch of crude oil on the ground near the Line 95 receiver trap at the Kinder Morgan rail terminal. The pipeline was immediately shut down and the line was isolated. Following excavation of the scrapper trap manifold, a small pin hole leak was discovered. The oil was contained and clean up was completed. Required agency notifications were made by BP personnel (operator of the pipeline). A repair plan has been developed and execution of the plan is underway.

11/15/12 – Secondary Seal Failure

During semiannual tank seal inspections, Torrance personnel observed a section of tank 532 external seal was damaged. The seal section was removed and replaced within the 72 hour SCAQMD repair criteria without incident. An investigation has been initiated to determine the cause of the damage.

1.11.4 Response Analysis

Regulations and Resources

The OSPR regulations require that oil spill contingency plans describe the on-water containment and recovery resources that are available to respond to potential spills involving a facility. This section discusses the standards set forth by these regulations and describes the equipment and personnel available to meet these requirements. The table below lists the regulatory requirements for daily recovery rates (caps) for facilities.

	6 hrs	12 hrs	24 hrs	36 hrs	48 hrs	60 hrs	72 hrs
High-volume port	**15,000**	**--**	**20,000**	**30,000**	**--**	**50,000**	**--**
Federal USCG/OPA 90 regulations are less than or equal to these daily recovery rates for all caps except for facility response time for high volume ports after 60 hours. In this case, 40.000 bbl of response capacity must be provided within 54 hours.							

In addition to these daily recovery rates, high-volume ports and facility transfer pints must have access to 2,500 bbl per day (bpd) recovery capacity that can be on scene within 2 hours. If containment operations can be initiated within the 2-hour timeframe, the 2,500 bpd recovery capacity can be on scene within 3 hours.

These daily recovery rates represent the amount of on-water recovery equipment that must be under contract for deployment and operation within the timeframes specified above.

These timeframes are for planning purposes only and are not meant to be performance standards. Prior to initiating spill containment and recovery activities, a site characterization and assessment would be conducted or the spill site. The timeframes identified above do not necessarily account for the time required to conduct such an assessment. In addition, delays may also occur as a result of weather and sea conditions. As such, the actual time required to deliver and deploy equipment will be made on a case-by-case basis, taking into account the variables discussed above.

The Company can provide the required response capacities to meet all the minimum standards for all their facilities. Response requirements for the first 24 hours would be met by using one or more of the response boats identified in this Plan. In addition, by 60 hours equipment from both cooperatives and other response contractors could be mobilized and on scene to meet the 50,000 bpd recovery cap.

1.11.5 Spill Prevention

The Company conducts discharge prevention training sessions which are in addition of any other training employees may receive. Training for the prevention of oil spills focuses primarily on reducing the risk of an oil spill during operations. At least once a year personnel attend spill prevention training. Operational reviews are conducted and discussions on cause and circumstances are reiterated.

Maintenance and Inspection Records

Maintenance and inspection records of pipeline equipment will be made available to the OSPR Administrator upon request.

Required Prevention Measures

Federal requirements for pipeline construction and maintenance are described by PHMSA in 49 CFR 195, Subpart F. The California Pipeline Safety Act (CPSA) prescribes state regulations. These measures include those described in this annex.

The pipeline is protected from surges with full flow relief at each group pump station. The full flow relief consists of a pressure relief valve that relieves to a breakout tank. The relief system was examined in the risk and hazard analysis and found to be adequate.

Other required prevention measures include:

- cathodic protection for all lines
- coating for all lines
- hydrostatic testing of lines every 5 years (10 years initially for new line) or approved internal inspection tools ("smart pigs") in lieu of hydrostatic testing
- valve inspections twice per year
- aerial inspections of pipeline routes

Valve Closure

Key valves in the pipeline system can be operated manually at the valve site or remotely from the Control Center. It takes approximately 60 seconds for a valve to be closed remotely.

1.11.6 Discharge Detection and Mitigation

Leak detection is performed to provide a means of ensuring the safety of employees and the public, and protection of private property and the environment through the activation of an emergency response program. It is also performed to provide the Company with a means of preventing product loss and to meet regulatory requirements of federal, state and county agencies and permit conditions.

The pipeline system with the California Response Zone utilizes the following leak prevention and detection systems:

- Right-of-way ambient monitoring
- Supervisory Control and Data Acquisition (SCADA) system
- Pressure and flow monitoring system
- Routine inspection of facilities by field personnel
- Participation in the Underground Service Alert (U.S.A.) pipeline locator service
- Procedures for minimizing post-shutdown residual drain-out from pipes

Right-of-Way Ambient Monitoring

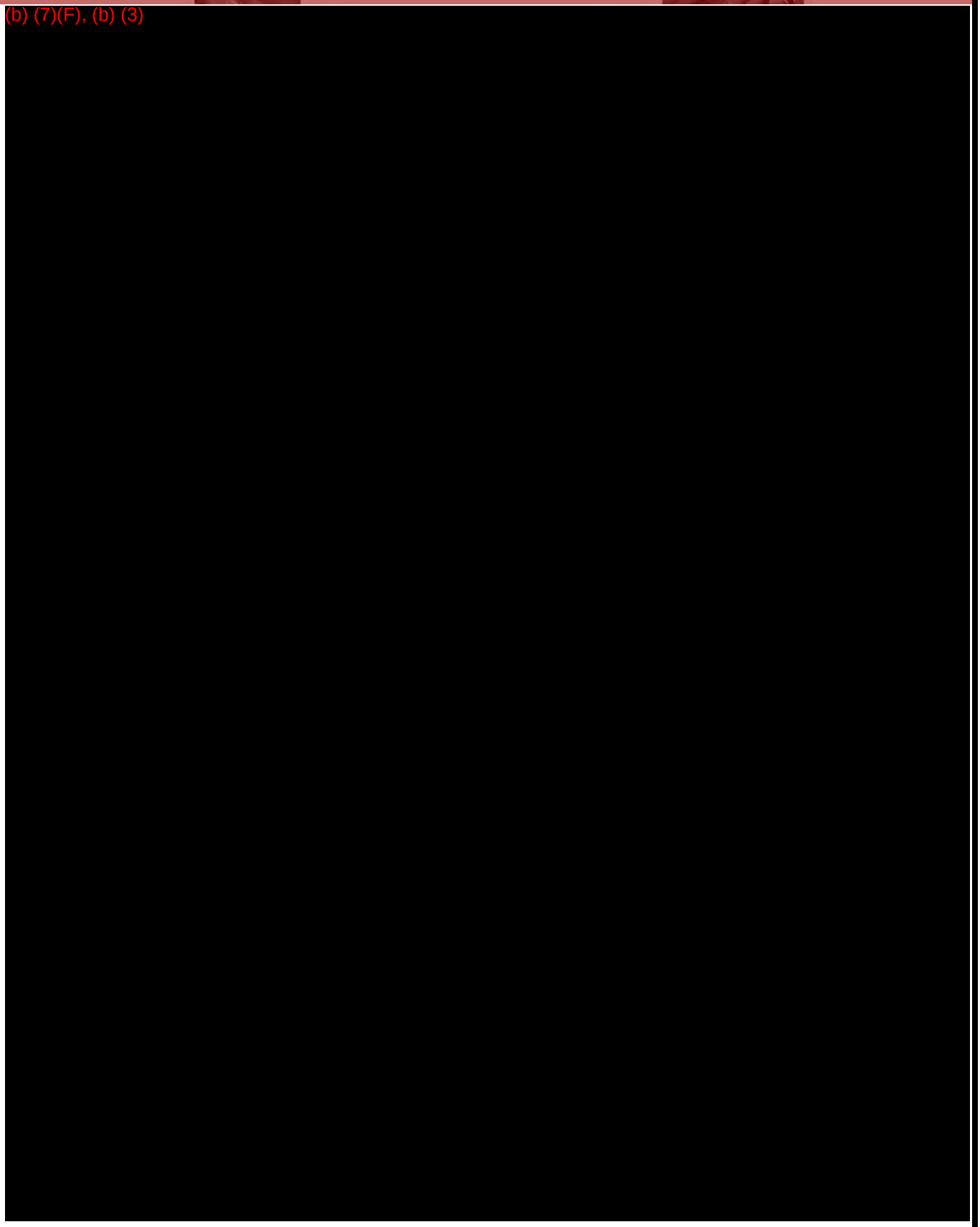
Right-of-Way ambient monitoring is performed at least once every two weeks to meet California Pipeline Safety Act (CPSA 51012.3) regulations. Company procedure is to conduct an aerial survey of the pipeline twice a week.

The aerial surveyor is alert for signs of leakage, construction or excavation activities, or any other situation that could affect the safe operation of the pipeline system. In the event that any unusual or threatening conditions are observed, the aerial surveyor will immediately notify the Pipeline Area Supervisor using the Company radio frequency.

Supervisory Control and Data Acquisition System

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)



Procedures for Minimizing Post-Shutdown Residual Drain-Out from Pipes

(b) (7)(F), (b) (3)

[redacted]

1.11.7 Spill Response Equipment

Location:	Hazmat Trailer – Torrance, CA
Release, Containment & Recovery	**Qty**
Two Oil Absorbent Booms, 6"/Foot	120 ea.
Oil Absorbent (Safe Step)/ Bags	24
Oil Absorbent Pads/ Bundles	12
Personal Protective	**Qty**
Gloves, Fire/Pair	13
Boots, Fire/Pair	4
Turnouts, Fire/Pair	8
Helmets, Fire/Each	8
S.C.B.A./Each	3
S.C.B.A., Spare Bottles/Each	5
Air Respirator, Disposable/Each	24


(b) (7)(F), (b) (3)

1.12 Risk and Hazard Analysis

Introduction

The risk and hazard analyses were designed to address the potential risks and hazards from the pipelines. The equipment and controls at facilities, such as pump stations and tanks, were examined to the extent that they could cause or contribute to a pipeline risk or could mitigate a potential pipeline risk. For example, meters located at facilities on both ends of a pipeline segment which are used to measure the flow rate and volume of oil into and out of the pipeline were examined to the extent that they contribute to line integrity monitoring and leak detection.

The commodities transported and stored by the pipeline system are crude oil, gas oil and semi-refined petroleum products. The properties of these hazardous materials are given in Material Safety Data Sheets (MSDS) located on the Company's web site.

1.12.1 Coast Area – Pipeline Nodes for Hazard Analysis

No.	Node	Product	Diameter (inches)	Length (miles)
1	Summit to Santa Maria Refinery	crude oil	10	4.3
2	Summit to Avila Terminal	crude oil	12	16.1
3	Miossi to Avila Terminal	crude oil	8	4.4
4	Santa Maria Refinery to San Luis Obispo Crossover	pressure distillate, gasoil	8 / 12	15.2 / 6.2
5	Santa Maria Refinery to Summit	gasoil	8	4.5
6	Summit to Avila Terminal	gasoil, crude oil	8	15.8
7	Avila Terminal to Santa Margarita (No. 1 and No. 2)	gasoil, crude oil, pressure distillate	8 / 12	39.2 / 2.1
8	Santa Margarita to Shandon (No. 1 and No. 2)	gasoil, crude oil, pressure distillate	8	55.0
9	Lompoc to Orcutt	crude oil	12	10.4
10	Orcutt to Summit	crude oil	8	17.0
11	Santa Maria Station to Summit	crude oil	10	4.3
12	Sisquoc to Santa Maria Station	crude oil	12	10.0
13	Santa Maria, Zenon Way to Santa Maria Refinery	natural gas	6	4.0

1.12.2 Valley Area – Pipeline Nodes for Hazard Analysis

No.	Node	Product	Diameter (inches)	Length (miles)
1	Coalinga to Patterson	Gasoil, Crude Oil, Pressure Distillate	16	96
2	Patterson to San Francisco	Gasoil, Crude Oil, Pressure Distillate	16	85
3	San Francisco Refinery to Richmond	Finished Products	6	16

The quantity of oil stored and transported in the pipeline system is documented by pipeline section and for breakout tanks in this annex. In summary, the Valley Area pipeline system transports from less than 5,000 up to 80,000 barrels of oil per day through 500 miles of pipelines, with a maximum oil storage capacity of (b) (7)(F), (b) (3) in the single largest breakout tank.

1.12.3 Hazard Analysis Discussion

Human contact with crude oil can result in health hazards such as eye and skin irritation, symptoms of nervous system depression, and aggravation of pre-existing respiratory disorders. Components of crude oil, such as benzene, are known carcinogens.

Crude oil and petroleum products that are released to the environment can be fatal to many animal species that come into contact with the material. Oil can be an acute hazard to shallow aquatic habitats.

Crude oil and petroleum products are also highly flammable, and present a potential radiant heat hazard if a spill is ignited. A 1,000-barrel oil spill could pool on the ground over a one-acre area and could be ignited, resulting in a radiant heat hazard 400 feet from the edge of the fire. At the radiant heat hazard distance, burning liquids could cause second degree burns to exposed persons within about 30 seconds, and third-degree burns for continued exposure.

Inventory of Hazards Identified

Potential hazards to the pipelines that could cause releases were identified during the risk and hazard analysis. These causes are summarized below:

- corrosion (internal and external)
- third party damage
- seismic event
- landslide/ground movement
- material failure
- operation

The most likely spill sizes from the causes examined above were less than the maximum sizes presented in the worst case scenarios. It is noted here that it is impossible to completely eliminate the risk of a spill. The following section discusses the findings of the risk and hazard analysis for each of the potential hazards identified.

Corrosion

According to the California State Fire Marshal Hazardous Liquid Pipeline Risk Assessment (April 1993; http://osfm.fire.ca.gov/pipeline/pdf/publication/pipelineriskassessment.pdf), external corrosion accounts for approximately 59 percent of pipeline releases and internal corrosion for approximately 3 percent. The database for this study included all regulated California hazardous liquid pipelines including some without cathodic protection. The study found that unprotected pipelines had an external corrosion leak incident rate over five times higher than protected lines.

All of the Company buried pipelines examined are coated and equipped with cathodic protection. All of the lines transporting products that may be heated that could damage the pipeline coating are equipped with temperature alarms. The Company monitors the cathodic protection system at least annually and the rectifier at least monthly during line patrol. The aboveground sections of the pipeline are painted.

None of the products transported through the pipeline are corrosive and thus no internal corrosion problems are expected, nor have they occurred in the past. In addition to the cathodic protection on the pipelines, the risk of a release due to corrosion is partially mitigated by performing hydrostatic tests on the pipelines. The hydrostatic test is a preventive measure with respect to a release, since potentially weak pipe sections may be disclosed while testing the pipe above normal operating pressure with water. The Company hydrostatically tests all the pipelines at least every five years after they are ten years old. In addition, the program presently being implemented by the Company to make most lines piggable and to smart pig most lines on a periodic basis should further reduce the probability of a corrosion-induced release.

The risk and hazard analysis concluded that this potential risk is adequately mitigated.

Third Party Damage

According to the California State Fire Marshal Hazardous Liquid Pipeline Risk Assessment (April 1993; http://osfm.fire.ca.gov/pipeline/pdf/publication/pipelineriskassessment.pdf), approximately 20 percent of pipeline incidents are caused by third party damage. The Company mitigates these type accidents by patrolling the pipelines by air twice per week. The Company also belongs to Underground Service Alert (USA) and has provided USA with the location of all of their pipelines.

The risk and hazard analysis concluded that this potential risk is mitigated to the maximum extent feasible, but also recognizes that it is still possible for a third party to damage one of the pipelines. To rapidly detect leaks, the Company has automated line integrity monitoring on all the pipelines included in this study.

Seismic Event

According to the California State Fire Marshal Hazardous Liquid Pipeline Risk Assessment (April 1993; http://osfm.fire.ca.gov/pipeline/pdf/publication/pipelineriskassessment.pdf), only three of the roughly 500 leak incidents on California's regulated hazardous pipelines were judged to be caused directly by earthquake effects. This is approximately 0.6 percent. The Company has installed seismic sensors that will automatically shut down pumps at locations near potentially significant active faults. In addition, the Company has a policy of shutting down pipelines near a significant earthquake. Before re starting the lines, the facilities and exposed pipelines will be inspected for damage, and the lines will be re pressured incrementally following the State Fire Marshal's recommendations.

The study concluded that the Company's use of strategically placed seismic sensors and their policy of shutting in pipelines in the event of a major earthquake adequately mitigates this event, however, it recognizes that a pipeline could be damaged with a resulting leak.

Landslide/Ground Movement

The California State Fire Marshal Hazardous Liquid Pipeline Risk Assessment (April 1993; http://osfm.fire.ca.gov/pipeline/pdf/publication/pipelineriskassessment.pdf), did not identify incidents caused by landslide or ground movement except those as a result of an earthquake. Thus, it is assumed that this potential cause is remote.

The Company has identified several areas subject to landslides or ground movement. These areas are monitored with slope inclinometers as appropriate. These sensors, together with the Company's policy of patrolling the pipeline, adequately mitigate the potential for damage due to landslides or other ground movement causes.

Material Failure

According to the California State Fire Marshal Hazardous Liquid Pipeline Risk Assessment (April 1993; http://osfm.fire.ca.gov/pipeline/pdf/publication/pipelineriskassessment.pdf), nine percent of pipeline incidents are caused by weld failures or equipment malfunction. All of the Company’s pipelines have been hydrostatically tested in accordance with regulations. The section of pipe that had the weld failure in 1985 has been replaced. Thus, weld or pipe failures are unlikely. The risk and hazard analysis also reviewed the Company's preventative maintenance program and determined that it, in conjunction with ongoing hydrostatic tests and electronic pigging, adequately addresses component inspection and testing.

Operation

According to the California State Fire Marshal Hazardous Liquid Pipeline Risk Assessment (April 1993; http://osfm.fire.ca.gov/pipeline/pdf/publication/pipelineriskassessment.pdf), 1.6 percent of pipeline incidents are caused by operator error. Releases due to operator error may be mitigated, or eliminated, with an accurate on line monitoring system. The risk and hazard analysis reviewed the Company's method of operation and monitoring of the pipelines including instrumentation and communication. The analysis concluded that all of the Company's pipelines are adequately monitored using computer-aided techniques which monitor flow rates, volumes, and pressures that are sent to a central Control Room. This control center monitors the lines at all times.

The risk and hazard analysis determined that it would be possible to pump oil back into the Lompoc to Orcutt pipeline from the reverse direction until the pipeline is packed. While this does not increase the potential for a spill, it would make the leak detection system inaccurate until the line is packed.

Mitigation Plan

The potential for pumping oil into the Lompoc to Orcutt pipeline from the reverse direction can be mitigated by the installation of a check valve at Orcutt. This measure has been implemented. No other potential hazards requiring mitigation were identified.

Remaining Risk

Even though the one potential hazard identified can be easily mitigated, the potential for a spill from the pipelines still exists. This Section discusses the potential causes of pipeline spills in general and the measures employed by the Company to mitigate potential spills. The greatest remaining risk to Company pipelines is from third party damage. The Company belongs to Underground Service Alert and patrols the pipeline corridors on a frequent basis, however, it is still possible that a third party could damage a pipeline that results in a leak.

Documentation

The documentation and materials (drawings, diagrams, plot plans, etc.) used in the risk and hazard analysis are maintained at our office in Long Beach, CA and Houston, TX.

1.12.4 Health and Environmental Impacts

Toxicity of Oil

Once contaminated by oil, physiologic and metabolic changes occur that can adversely affect an animal's chances for survival and reproductive success. Effects to wildlife can be generally grouped into two categories:

- Physical effects - adverse effects directly attributable to the physical effects of oil on the feathers or fur of exposed animals
- Systemic effects - resulting from ingestion of oil or petroleum hydrocarbons through preening behavior or consumption of oiled food items

Unless excessive, oil exposure is generally not immediately incapacitating to wildlife. This fact, however, can complicate capture and rehabilitation efforts by increasing the potential for both post-exposure stresses and secondary exposure to developing eggs, nestlings, predators and scavengers.

Physical Effects

An immediate effect of external oil exposure on wildlife is the disruption of fur and feather structure. This can lead to a dramatic decrease in the ability of oiled wildlife to withstand temperature extremes, a loss of buoyancy and stress-induced increases in disease susceptibility. Physical oiling can also result in starvation of exposed wildlife if oiling is sufficient to hamper foraging efforts by limiting the animal's ability to fly or swim.

Systemic Effects

Systemic effects of oil exposure can result from direct (e.g. preening behavior) or indirect (e.g. as a dietary contaminant) consumption of oil. The type and degree of possible systemic effects vary depending on the type of oil, weathering state of the oil, species susceptibility, and, most importantly, the quantity of oil and the time period over which the oil was consumed. Although toxicity varies greatly with the type of oil spilled, some general patterns of toxic responses have been reported, including liver and kidney changes, gastrointestinal irritation, and pulmonary and hematological changes.

Reproductive effects have been observed with avian species exposed to oil in laboratory studies. These effects include delays in egg laying, decreases in the numbers of eggs laid, and reduced egg fitness (decreased eggshell thickness and strength). Small (microliter) quantities of a variety of oils have been shown to be extremely toxic when applied to the shell of developing embryos. Available data suggests that toxicity of oils to developing embryos decreases with the extent of weathering.

Persistence

In general, the longer the oil is expected to persist on a shoreline the higher the priority for protection. Long-term oil persistence can present chronic toxicity effects as well as affecting the natural sediment erosion and deposition processes. The potential persistence or residence time of stranded oil on a shoreline is primarily dependent on the:

- Degree of impact
- Type of shoreline sediments
- Level of exposure to the elements

In general, higher degrees of impact, coarser, well sorted sediments, and lower levels of exposure to wind, waves, currents, and tidal flushing will increase the residence time of the oil on the shoreline. Coarser grain sediments usually permit the oil to penetrate deeper into the shoreline but can also allow for greater tidal flushing and natural degradation. Finer grained sediments typically inhibit penetration but if oil does become incorporated into the sediments, residence time will increase.

Lower levels of exposure, such as in protected inlets or bays, will increase the residence time due to the decreased natural abrasion caused by sediment movements and flushing action by wind, waves, and tides. Protected areas may also be shaded and calm, which could inhibit evaporation and photo-oxidation. General guidelines on the potential persistence of oil on a variety of shoreline types are provided in the Clean Seas Regional Resource Manual.

Prioritization

In the event of an oil spill to marine waters, it may be necessary to protect nearby sensitive areas if it appears that local containment and recovery efforts will not be sufficient to control the entire spill. A critical initial step in protecting sensitive resources is identifying the presence and types of resources in the likely path of the oil. Once these resources have been identified, decisions need to be made as to the implementation of preplanned protection techniques for each locale and the priority for application of resources to each sensitive site. Sensitive resources are identified in this Plan.

There are a number of key factors that will be considered when prioritizing areas that will be protected and developing protection strategies. These factors include type of resource present, degree of sensitivity to those resources of oil, probable protection measure effectiveness, potential for long-term impacts, and ease of cleaning. In general, protection strategies will focus on areas that are highly sensitive, have the potential for long-term oil persistence, are difficult to clean and are easy to protect.

The degree of sensitivity for a particular area is the key determining factor in establishing priorities. In general, the higher the degree of sensitivity, the higher the priority for protection. The relative degree of sensitivity for each sensitive area or resource is shown on the sensitive area maps in this Plan.

For shoreline areas that are not associated with a particular sensitivity, a general sensitivity ranking system known as the ESI has been adopted by NOAA and can be used for prioritization. The ESI system ranks various shoreline types in order of their increasing potential for long-term oil persistence and biological damage (i.e. an ESI ranking of 2 has a higher overall sensitivity than a ranking of 1). A summary of the shoreline types and associated rankings is provided in the Clean Seas Regional Resource Manual (http://www.cleanseas.com/equipment.htm). Additional guidance on the potential persistence of stranded oil is also provided in the Clean Seas Regional Resource Manual.

Annex 2 – Table of Contents

2.0 Notifications Overview

Immediate actions are required at the onset of an emergency response to limit the extent of a release, minimize the potential hazard to human health and the environment, and implement an effective response. It is also important to act decisively to create a professional working atmosphere among Company and regulatory authority personnel and public officials. This section is intended to provide guidance for determining the appropriate initial response and notification actions that should be carried out in the event of a release or other emergency incident.

This Section II of the Core Plan outlines general guidelines on the procedures and sequence for making the various internal and external notifications following discovery of a pipeline release or other emergency incident.

Company will coordinate with local and state police to establish protected land routes that minimize traffic congestion during the movement of personnel and equipment. The Coast Guard can issue Notice to Mariners and establish safety zones that prohibit boaters within those boundaries, if necessary. The Coast Guard can also coordinate maritime assets to avoid any interference. The Federal Aviation Administration (FAA) can authorize no fly zones to restrict airspace thus allowing any aerial assets full range.

The internal notification procedures are essentially the same for all emergency incidents although the external notifications will vary depending on the type of incident, type and quantity of material released, and the consequences (injuries, deaths, and property damage).

Company personnel have the authority and obligation to terminate any operation in response to an abnormal, threatening, or hazardous situation

2.1 Incident Reporting

Incident Reporting Guidance can be located on the Company web site. Utilize the following Incident Report Form to log all pertinent information relative to California response zone incident response. When filling out this form, try to complete as much (if not all) information as possible.

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP – COMPANY INCIDENT REPORT FORM

Company, Agency and environmental notifications must be made quickly. **Do NOT wait for all incident information before calling the National Response Center at 800-424-8802.** Use this form to record as much incident information as possible. **Communicate within 30 to 60 minutes of discovery time**. Use the Emergency Notifications Log to document all communication, any additional information and distribution.

I. INCIDENT TYPE

A. Check all that apply: ☐ **Release** ☐ **Security** ☐ **Fire** ☐ **Other (Specify)** _____

B. REPORTING PARTY		**C. SUSPECTED RESPONSIBLE PARTY**	
Name/Title:		Name/Title:	
Company:		Company:	
Address:		Address:	
City, State Zip:		City, State Zip:	
Call Back #:		Call Back #:	

D. **Calling for the Responsible Party?** ☐ Yes ☐ No

II. INCIDENT LOCATION INFORMATION

Incident Location: ☐ Terminal ☐ Pump Station ☐ Vessel ☐ Pipeline ☐ Truck ☐ Rail

Owner Name:		Operator Name:	
Address:	3010 Briarpark Dr; PWC 07-7330-34	Address:	
City, State, Zip:	Houston, TX 77042	City, State, Zip:	
County/Parish:		Hwy or River Mile Marker:	
Section-Township-Range:		Latitude	Longitude
Dist./Dir. to Nearest City:		Facility Storage Capacity:	(bbls)
Container Type (☐ AST/ ☐ UST)		Container Capacity	(bbls)
Site Supervisor/Contact:		Call Back #:	

III. INCIDENT DESCRIPTION & IMPACTS

Date/Time Discovered:		Discovered by:	
Material Released:		Quantity Released:	(bbls/lbs)
Duration of the Release:		Weather Conditions:	
Quantity to Surface Water:		Temperature: °F	Humidity:
Off Company Property? ☐ Yes ☐ No		Wind Speed:	Direction:
Evacuations: ☐ Yes ☐ No	# Evacuated:	Name of Surface Water	
Fire: ☐ Yes ☐ No	# Hospitalized:	Distance to Water:	(ft/mi)
Explosion: ☐ Yes ☐ No	# of Injuries:	# of Fatalities	Media coverage expected? ☐Yes ☐ No

If Operator error, has Drug and Alcohol program been initiated? ☐Yes ☐ No **DOT jurisdiction event?** ☐Yes ☐ No

If DOT event, list those completing Drug and Alcohol testing? _____

Incident description (Including Source and or Cause of the Incident) _____

Impacted area description _____

Damage description and estimate ($, days down, etc.) _____

Actions taken to correct, control or mitigate (Change in Security Level, FSP and/or ERP Implemented, etc.) _____

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
IV. EMERGENCY NOTIFICATIONS - LOG							
Duty Officer/		800-231-2551					Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

V. ADDITIONAL INFORMATION

** Alternate NRC contact information: Fax: 202-267-2165, TDD: 202-267-4477, or e-mail: lst-nrcinfo@comdt.uscg.mil

VI. PREPARED BY AND DISTRIBUTION

Prepared by: _____ **Date:** _____ **IMPACT Entry Complete:** ☐ Yes ☐ No

* Notify the appropriate Company DOT Coordinator to complete the *PHMSA FORM F 7000-1*, as applicable.

2.2 Emergency Notification Responsibilities

All Personnel	
The most important thing is individual personal safety	
•	Always think before responding.
•	Never rush into the scene of an incident.
•	Always assess the situation first and know the hazards.
•	Never perform any actions that may put your safety at risk

Initial Response Checklist	
The first employee who responds to the scene of an emergency should take the following actions	
•	*For emergencies reported to or observed.* Notify the California Response Zone Area Supervisor
•	Upon initial discovery, employees should notify local emergency services as needed. If anyone is seriously injured, or the emergency is beyond the Response Zone's abilities, dial 911 immediately. Be sure to give your name, phone number, nature of emergency, exact location, and the number of injuries.
•	If safe, take prompt action to eliminate any dangers.
•	If necessary, evacuate everyone from the danger area to a safe location.
•	Contact a spill response contractor if product has been released or discharged.
•	Promptly decide: • Whether or not the emergency situation can be readily brought under control and if immediate action can be taken. **Always use the correct PPE**. • If there is a spill, deploy necessary local equipment and absorbent material and begin mitigation procedures.
•	Direct the initial phase of control, containment, and response until a supervisor arrives.
•	Area supervisor (or designee) notifies the following: • Initial company response personnel • Response resources (if not already done so) • Applicable regulatory agencies

NORTHERN LINES-COAST (SANTA MARGARITA/L-400)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Mark A. Mitchell, Area Supervisor	(805) 438-6201	(b) (6)	(805) 391-3713	1 hr
Office: 18781 El Camino Real, Atascadero, CA 93422		**Home:** (b) (6)		
Alt. QI/IC Daniel A. French, Technician	(805) 438-6210	(b) (6)	(805) 391-3811	1 hr
Office: 18781 El Camino Real, Atascadero, CA 93422		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Christensen, Dale - Mechanic	(805) 438-4365	(b) (6)	(805) 391-3721	1 hr
Estrada, Gary - Operator	(805) 438-6204		(805) 391-3809	1 hr
Lindsey, Michael - Utility Person	(805) 438-6208		(805) 391-3719	1 hr
Wilcox, Casey - Mechanic	(805) 438-4365		(805) 391-3715	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Rodgers, Brad A. - Utility A	(805) 438-6213		(805) 391-3719	1 hr
Marquez, Tony - Utility A	(805) 438-6213		(805) 391-3717	1 hr
French, Daniel A. - Technician	(805) 438-6210		(805) 391-3811	1 hr
Floyd, Kenneth H. - Technician	(805) 438-6203		(805) 391-3212	1 hr
Gorman, Clovus B. - Utility A	(805) 438-6213		(805) 391-3073	1 hr
Medvedoff, Brian D. - Utility A	(805) 438-6213		(805) 391-3477	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>
Kennedy, Ronny - Utility Person	(805) 438-6201		(805) 440-3979	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	4 hrs
Patriot Environmental Services	(800) 624-9136		2 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	6 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
CA Dept. of Forestry, Park Hill Station	911	(805) 438-5426
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA EMA, Region 1 (San Luis Obispo County)	(805) 445-1166	
CA EMA, Region 1 (Santa Barbara County)	(805) 560-1081	
CA EMA, Southern District (Santa Barbara County)	(909) 484-0167	
CA EMA-Northern Coast District (San Luis Obispo County)	(707) 944-5588	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA HIghway Patrol	(916) 657-7261	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Fire Marshall, Northern Region	(916) 445-8550	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game, CA Northern Lines	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, Southern Dist./Santa Barbara County, C/	(909) 484-0167	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire Prevention Division	911	(805) 681-5523
Fire: Santa Barbara County	911	(805) 681-5500
Ambualnce: Sierra Vista	911	(805) 546-7600
Medical: Santa Barbara County	911	(805) 681-5500
Sheriff/Police, San Luis Obisp	911	(805) 781-4550
Sheriff: Santa Barbara County	911	(805) 681-5500
County Petroleum Office	(805) 934-6128	
Hospital: Sierra Vista	(805) 546-7600	
Media: KKAL 92.5 FM Radio	(805) 781-2750	
Media: KSBY TV-San Luis Obispo	(805) 541-6666	
County Planning & Develpoment/Energy Div.	(805) 886-7165	
Office of Emergency Services/Santa Barbara County, CA	(805) 560-1081	
Santa Barbara County Energy Division	(805) 568-2507	

NORTHERN LINES-COAST (SANTA MARIA/L-300)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Butch Lemos, Jr., Area Supervisor, Santa Maria	(805) 925-5795	(b) (6)	(805) 331-6965	1 hr
Office: 1580 E. Battles Rd, Santa Maria, CA 93454		**Home:** (b) (6)		
Alt. QI/IC Jeremy Wilson, Maintenance Coordinator	(805) 349-7628	(b) (6)	(805) 331-6967	1 hr
Office: 1580 E. Battles Rd, Santa Maria, CA 93454		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Deschamp, Terry J. - Mechanic	(805) 925-1468	(b) (6)	(805) 331-9963	1 hr
Gaona, Mike A. - Mechanic	(805) 925-1468		(805) 331-6973	1 hr
Garner, John - Station Operator A	(805) 925-1468		(805) 391-3768	1 hr
Hernandez, Trinidad - Operator	(805) 349-7628		(805) 391-3717	1 hr
Menchaca, Jesse - Station Operator A	(___) ___-____		(805) 331-6971	1 hr
Perez, Wayne - Gauger	(805) 925-1468		(805) 331-9961	1 hr
Wilson, Jeremy - Maintenance Coordinator	(805) 349-7628		(805) 331-6967	1 hr
Colclasure, Stephen - Station Operator A	(805) 925-1468		(805) 331-6975	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Hicks, Chris - Technician	(805) 614-3808		(805) 325-6275	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	4 hrs
Patriot Environmental Services	(800) 624-9136		2 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	4 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
CA Dept. of Forestry, Park Hill Station	911	(805) 438-5426
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA EMA, Region 1 (San Luis Obispo County)	(805) 445-1166	
CA EMA, Region 1 (Santa Barbara County)	(805) 560-1081	
CA EMA, Southern District (Santa Barbara County)	(909) 484-0167	
CA EMA-Northern Coast District (San Luis Obispo County)	(707) 944-5588	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA Highway Patrol	(916) 657-7261	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Fire Marshall, Northern Region	(916) 445-8550	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game, CA Northern Lines	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, Southern Dist./Santa Barbara County, C/	(909) 484-0167	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire Prevention Division	911	(805) 681-5523
Fire: Santa Barbara County	911	(805) 681-5500
Ambulance: Sierra Vista	911	(805) 546-7600
Medical: Santa Barbara County	911	(805) 681-5500
Sheriff/Police:San Luis Obispo	911	(805) 781-4550
Sheriff: Santa Barbara County	911	(805) 681-5500
County Petroleum Office	(805) 934-6128	
Hospital: Sierra Vista	(805) 546-7600	
Media: KKAL 92.5 FM Radio	(805) 781-2750	
Media: KSBY TV San Luis Obispo	(805) 541-6666	
County Planning & Develpoment/Energy Div.	(805) 886-7165	
Office of Emergency Services/Santa Barbara County, CA	(805) 560-1081	
Santa Barbara County Energy Division	(805) 568-2507	

NL-VALLEY (TRACY/L-200/COALINGA/JUNCTION)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Kenneth Willey, Area Supervisor, Tracy	(209) 836-1873	(b) (6)	(209) 321-4229	1 hr
Office: 7551 Carmelo Ave, Tracy, CA 95304		**Home:** (b) (6)		
Alt. QI/IC Jerry Keeney, Facility Supervisor	(559) 935-0388	(___) ___-____	(559) 513-3552	<Unknown>
Office: 256 East Polk St, Coalinga, CA 93210		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Bravo, Jr., Valentin C. - Utility Person	(559) 935-0388	(b) (6)	(559) 352-9353	1 hr
Christie, Tony - Utility Person	(559) 935-0388		(559) 352-9351	1 hr
Donez, Thomas - Operator	(661) 465-5666		(559) 901-8805	1 hr
Gregorich, Andrew - Mechanic	(559) 935-0388		(559) 352-9349	1 hr
Hedgecock, Lonny - Mechanic	(559) 935-1112		(559) 217-3520	1 hr
Jordan, Richard - Gauger	(559) 935-0563		(559) 967-8389	1 hr
McKusick, Leroy - Operator	(661) 465-5666		(___) ___-____	1 hr
Seed, Andrew H. - Operator	(661) 465-5666		(___) ___-____	1 hr
Witt, Lance - Utility Person	(559) 935-0388		(559) 352-9357	1 hr
Arbogast, Ken - Utility Person	(209) 836-1873		(209) 321-4226	1 hr
Harris, Jeff - Utility Person	(209) 836-1873		(209) 321-2462	1 hr
Summerford, Stephen - Utility Person	(559) 935-0388		(559) 217-8155	<Unknown>
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Jensen, Eric L. - Utility Person	(559) 935-0388		(559) 352-9355	1 hr
Hoffman, Dale A. - Technician	(661) 587-2977		(661) 343-0166	2 hrs
Dahlgren, Derek - I & E Coordinator	(661) 587-2976		(661) 343-0174	2 hrs
Northrop, Jr., Bill E. - I & E Coordinator	(661) 587-2975		(661) 343-0160	2 hrs
Williams, Robert A. - Operator	(661) 465-5666		(559) 862-7804	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>
Smith, Glenn - Mechanic	(661) 465-5666		(559) 513-3175	<Unknown>
McQuown, Bruce - Utility Person	(209) 836-1873		(___) ___-____	<Unknown>
Gonzalez, Alex - Utility Person	(559) 935-0388		(559) 240-3439	<Unknown>
New, Steve - Technician	(559) 318-6119		(559) 318-6119	<Unknown>

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	5 hrs
Patriot Environmental Services	(800) 624-9136		5 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	4 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
State		
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES, Region 2 (Contra Costa & Alameda County)	(925) 646-4461, 24-hr.	
CA OES, Region 4 (San Joaquin & Stanislaus County)	(530) 887-8134	
CA OES, Region 5 (Merced, Fresno, Kings & Kern County)	(209) 966-5460	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (California)	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, CA Central District	(559) 243-4005 x153	
Highway Patrol	(661) 764-5580	
HIghway Patrol-Tracy, CA Offic	(209) 835-8920	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire: City/County Dispatch	911	(661) 324-6551
Fire: Tracy, CA	911	(209) 831-6700
Ambulance: American Med.	(209) 832-8195	
Ambulance: Hall's	911	(800) 924-4882
Police Tracy, CA	911	(209) 831-4533
Sheriff: Kern County, CA	911	(800) 861-3110
Sheriff: San Joaquin County, C	911	(209) 468-4421
Hospital: STCH; Tracy, CA	(209) 835-1500	
Hospital: Westside Urgent Care	(661) 765-1935	
Media: KCRA-TV 3	(209) 523-6727	
Media: KCSO-TV 33	(209) 576-3301	
Media: KOVR-TV 13	(209) 466-1313	

NORTHERN LINES-VALLEY (TAFT AND LINE 100)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Jon Cornell, Area Supervisor, Taft	(661) 765-6092	(___) ___-____	(661) 699-5376	1 hr
Office: 1441 Wade Ave, Taft, CA 93268		**Home:** (b) (6)		
Alt. QI/IC Kenneth Willey, Area Supervisor, Tracy	(209) 836-1873	(b) (6)	(209) 321-4229	1 hr
Office: 7551 Carmelo Ave, Tracy, CA 95304		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	832-865-1693	(b) (6)	281-627-3177
Alt. Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
Alt. DOT Contact	Todd Tullio	832-765-1636		281-685-3646
Alt. Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, HSE	Jeff Mazzoccoli	832-765-1150		281-704-3411
Manager, Engineering & Projects	Dave Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Barnes, Ron - Utility Person	(661) 765-6092	(b) (6)	(661) 978-6997	1 hr
Dargusch, Cary - Utility Person	(661) 765-6092		(661) 978-6995	1 hr
Howard, Gary - Utility Person	(661) 765-6092		(661) 577-2011	1 hr
Howard, Keith T. - Gauger	(661) 765-4552		(661) 978-6994	1 hr
Jenkins, M. Randy - Gauger	(661) 765-4552		(661) 978-6820	1 hr
Kitchens, Mike K. - Operator	(661) 765-6092		(661) 201-7956	1 hr
Mortimer, Richard W. - Gauger	(661) 765-4552		(661) 978-6821	1 hr
Fox, Rickey D. - Mechanic	(661) 765-6092		(661) 978-8833	1 hr
Mace, Cody C. - Utility Person	(661) 765-6092		(661) 978-8827	1 hr
Norris, Jimmy P. - Utility Person	(661) 765-6092		(661) 978-6996	1 hr
Wescott, Jason C. - Mechanic	(661) 765-6092		(661) 978-8831	1 hr
Arguello, David -	(661) 765-6092		(661) 978-8311	1 hr
Flores, Val - Area Supervisor, Taft	(661) 765-6092		(661) 670-9182	1 hr
Cerna, Armando - Utility Person	(661) 765-6092		(661) 978-7709	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	4 hrs
Patriot Environmental Services	(800) 624-9136		4 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	4 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES, Region 2 (Contra Costa & Alameda County)	(925) 646-4461, 24-hr.	
CA OES, Region 4 (San Joaquin & Stanislaus County)	(530) 887-8134	
CA OES, Region 5 (Merced, Fresno, Kings & Kern County)	(209) 966-5460	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (California)	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, CA Central District	(559) 243-4005 x153	
Fire Marshall	(562) 497-9100	
Highway Patrol, CA	(661) 764-5580	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire: City/County Dispatch	911	(661) 324-6551
Ambulance: Hall's	911	(800) 924-4882
Sheriff: Kern County	911	(800) 861-3110
Hospital: Westside Urgent Care	(661) 765-1935	
Media: KBAK CBS/Fox TV-29	(661) 327-7955	
Media: KERO ABC TV-23	(661) 637-2320	
Media: KGET NBC TV-17	(661) 283-1717	

SOUTHERN LINES (LA BASIN AREA)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Dennis Doherty, Area Supervisor	(310) 326-8777	(b) (6)	(310) 420-5311	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		
Alt. QI/IC Harold Dingee, Operations Supervisor	(310) 602-7737	(b) (6)	(310) 466-4831	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478
LA Refinery-PR Contact	Betsy Brien	(310) 952-6038		(310) 487-0487

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Licitra, Charles - Mechanic	(310) 602-7741	(b) (6)	(310) 466-7912	1 hr
Bivens, Craig - Utility Person	(310) 602-7735		(310) 466-6722	1 hr
Hadley, David - Mechanic	(310) 602-7739		(310) 466-7928	1 hr
Stone, Ronald - Utility Person	(310) 602-7751		(562) 843-7011	1 hr
Rallings, Anthony W. - Operator	(310) 326-0612		(310) 345-8269	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Flores, Renée - Utility Person	(310) 602-7752		(310) 466-5129	1 hr
Navarro, José I. - I&E Specialist	(310) 602-7743		(310) 420-6632	1 hr
Tamanaha, Wayne T. - Technician	(310) 602-7746		(562) 254-9420	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>
Lucier, Kris - Mechanic	(310) 602-7756		(310) 466-5631	1 hr
Valle, Rod - Utility Person	(310) 302-7754		(310) 466-6051	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	1 hr
Patriot Environmental Services	(800) 624-9136		1 hr
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	2 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
Air Quality Management, CA Southern Coast District	(800) 288-7664	
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas (Cypress Dist. Office)	(916) 445-0806	(714) 816-6847
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES Division 1 (Ventura & Los Angeles Counties)	(805) 445-1166	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA Regional Water Quality Control Board	(916) 255-3000	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (CA Southern Lines)	(909) 484-0167	(951) 782-4353
Fire Marshall	(562) 497-9100	
Highway Patrol	(323) 906-3400	
Local		
Fire: El Segundo, CA Dept.	(310) 524-2801	
Fire: LA County, CA	911	(323) 890-4317
Fire: Torrance, CA	911	(310) 638-6121
Ambulance: AMR	911	(213) 808-2100
Police Port of Los Angeles, C	(310) 732-3500	
Police Torrance, CA	911	(310) 618-5641
Hospital: Torrance Memorial	(310) 325-9110	
Media: COP PR; LAR Wilmington,	(310) 952-6038	
Air Pollution Control District (Ventura County, CA)	(805) 645-1400	
Environmental Resource Division, Orange County, CA	(714) 567-6360	
Flood Control, Los Angeles District	(800) 303-0003 (24-hr)	(626) 458-4146
Health Dept./HazMat Response, Los Angeles, CA	(323) 890-4317	
Health Dept./HazMat Response, Ventura, CA	(805) 654-5000	
Resource Management Response Team, Ventura, CA	(805) 654-2813	
Utilities: Public Works Dept.; Los Angeles, CA	(626) 458-3538	

SOUTHERN LINES (TORRANCE TANK FARM)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Harold Dingee, Operations Supervisor	(310) 602-7737	(b) (6)	(310) 466-4831	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		
Alt. QI/IC Dennis Doherty, Area Supervisor	(310) 326-8777	(b) (6)	(310) 420-5311	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478
LA Refinery PR Contact	Betsy Brien	(310) 952-6038		(310) 487-0487

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Soles, Bill S. - Operator	(310) 326-0612	(b) (6)	(310) 345-4284	1 hr
Martinez, G. (Willie) - Gauger	(310) 602-7742		(310) 345-4285	1 hr
Kachelmeyer, Jerry - Operator	(310) 326-0612		(310) 345-8269	1 hr
Friichtenicht, Joseph - Operator	(310) 326-0612		(310) 345-8269	1 hr
Roach, Michael - Operator	(310) 326-0612		(310) 345-4284	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Brown, Derrick - Gauger	(310) 602-7738		(310) 466-6522	1 hr
Escobar, Douglas A. - Gauger	(310) 602-7738		(310) 466-8187	1 hr
Flores, Renée - Utility Person	(310) 602-7752		(310) 466-5129	1 hr
Moore, William J. - Operator	(310) 326-0612		(310) 345-8269	1 hr
Orr, Gregory R. - Gauger	(310) 602-7745		(310) 571-7342	1 hr
Root, Richard R. - Operator	(310) 326-0612		(310) 345-4284	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>

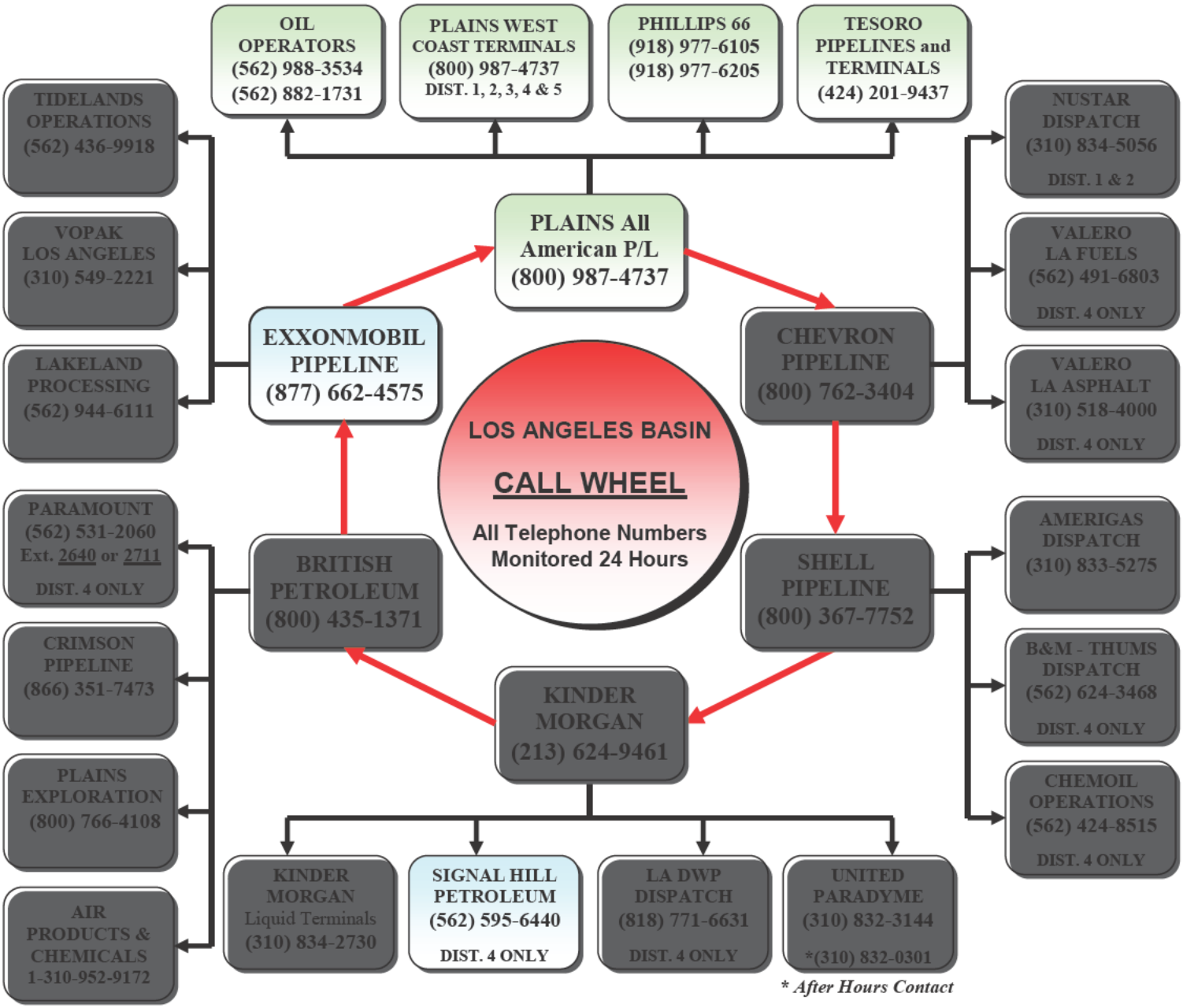
Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	1 hr
Patriot Environmental Services	(800) 624-9136		1 hr
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	2 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
Air Quality Management, CA Southern Coast District	(800) 288-7664	
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES Division 1 (Ventura & Los Angeles Counties)	(805) 445-1166	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA Regional Water Quality Control Board	(916) 255-3000	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (CA Southern Lines)	(909) 484-0167	(951) 782-4353
Fire Marshall	(562) 497-9100	
Highway Patrol	(323) 906-3400	
Local		
Fire: El Segundo, CA Dept.	(310) 524-2801	
Fire: Torrance, CA	911	(310) 638-6121
Ambulance: AMR	911	(213) 808-2100
Police Port of Los Angeles	(310) 732-3500	
Police Torrance, CA	911	(310) 618-5641
Hospital: Torrance Memorial	(310) 325-9110	
Media: COP PR at LAR Wilimgton	(310) 952-6038	
Air Pollution Control District (Ventura County, CA)	(805) 645-1400	
Environmental Resource Division, Orange County, CA	(714) 567-6360	
Flood Control, Los Angeles District	(800) 303-0003 (24-hr)	(626) 458-4146
Health Dept./HazMat Response, Los Angeles, CA	(323) 890-4317	
Health Dept./HazMat Response, Ventura, CA	(805) 654-5000	
Resource Management Response Team, Ventura, CA	(805) 654-2813	
Utilities: Public Works Dept.; Los Angeles, CA	(626) 458-3538	

LOS ANGELES BASIN – EMERGENCY CALL WHEEL



** After Hours Contact*

PURPOSE OF THE CALL WHEEL

The "Call Wheel" is a voluntary and mutually beneficial system serving the industry as well as the local community. The "Call Wheel" is to aid in sharing potential spill or release information and notification to companies on the Call Wheel as well as response information on who may have claimed the leak.

HOW TO USE THE CALL WHEEL

The companies in the inner wheel of the Call Wheel connect using a nationwide pager and a dial-in conference line. Any company within the inner wheel that becomes aware of a leak may be connected simultaneously with the other companies on the inner wheel. (A satellite company that becomes aware of a leak should contact the inner wheel company to initiate the Call Wheel.) Upon initiating the Call Wheel, take roll call and then pass on the leak information. If any company on the inner wheel is absent for roll call, the company immediately prior to the absent party should call the absent company directly. In the event a company on the inner wheel cannot be contacted, the company immediately prior to the absent party should call the satellite (outer wheel) company that the absent party was supposed to contact. In the event that any of the inner wheel companies are unable to contact their satellite companies, this information should be passed back to the inner wheel companies.

IF THE WHEEL COMMUNICATION IS NOT AVAILABLE

In the event the nationwide pager does not work, revert to individual telephone calls as indicated on the Call Wheel. The initiating company should call the next party in the Call Wheel sequence. If any of the companies on the inner wheel cannot be contacted, the party immediately prior to the absent party should notify the next party on the inner wheel in sequence after the absent party. The party immediately prior to the absent party should also be responsible for calling the satellites of the absent party.

In the event of a phone number change, please contact Roseanne Rother at Crimson Pipeline at (562) 577-3490 or (562) 285-4103 OR Mark Jensen at Kinder Morgan at (714) 560-4862 as soon as possible.

REV #16 02/25/2013

CRIMSON PIPELINE – ROSEANNE M. ROTHER
rrother@crimsonpl.com

2.4 Contractors

The company has response agreements with various Oil Spill Response Organizations (OSRO) and contractors. These contractors will be activated on an as-needed basis and typically only if the incident requires resources beyond those available from California Response Zone. The contract service agreements follow:

2.4.1 Marine Spill Response Corporation (MSRC)

MARINE SPILL RESPONSE CORPORATION SERVICE AGREEMENT

STANDARD FORM OF SERVICE AGREEMENT

amended and restated as of September 27, 1996

between

the COMPANY

and

MARINE SPILL RESPONSE CORPORATION

a Tennessee nonprofit corporation

10. 03. **Continued Performance.** Each party will continue to perform its obligations under this Agreement without deduction, set-off, or any other charges of any nature whatsoever and without prejudice to its position in any pending dispute. Each party will retain its rights to terminate or suspend the provision of Resources under this Agreement.

10. 04. Jurisdiction. Any judicial action or proceeding between the **COMPANY** and **MSRC** directly or indirectly connected with and permitted under this Agreement will be brought in the United States District Court for the Southern District of New York if that court has subject matter jurisdiction, and in all other cases in the Supreme Court of the State of New York, County of New York. The **COMPANY** and **MSRC** each consent to process being served in any manner permitted by law.

10. 05. Enforceable Award. Any award in an arbitration may be enforced against the parties to the arbitration or their assets, wherever found. Judgment upon an arbitration award may be entered in the United States District Court for the Southern District of New York.

10. 06. Requirements for All Persons. Indemnification under Section 9.03 is contingent on the Indemnitee abiding by the provisions of this Article X.

ARTICLE XI. TERM AND AMENDMENT OF AGREEMENT

11. 01. Full Termination by MSRC.

11. 01(a). Events of Default. If any of the following events occurs and is continuing, it is an "Event of Default":

(i) Any of the **COMPANY** representations and warranties in Section 8.01 prove to be untrue or incorrect in any material respect;

(ii) Any **COMPANY** Insolvency Event occurs;

(iii) The **COMPANY** fails to satisfy any of this Agreement's payment obligations (including the obligations in Article VII) in an aggregate amount in excess of $100,000, fails to pay any disputed **MSRC** invoices in an aggregate amount **MSRC** reasonably considers to be a problem for the funding of **MSRC**'s operations or readiness, or fails to provide security for payment in accordance with Section 7.01;

(iv) The **COMPANY** or a Covered Entity engages in a pervasive pattern of illegal or knowingly unsafe practices in directing Response Activities performed or provided under this Agreement; or

(v) The **COMPANY** breaches its material obligations under this Agreement, other than the obligations under (i), (iii), and (iv) above, and that breach is not cured within thirty (30) days after written notice from **MSRC** specifying that breach.

11. 01(b) MSRC Termination of Resources. Upon an Event of Default **MSRC** may terminate Resources to the Covered Entity with at least twenty-four (24) hours (or 48 hours if the Event of Default is a failure to pay under Section 11.01(a)(iii)) prior notice to the Covered Entity and, if applicable, the FOSC. **MSRC** may withdraw all Resources from the Spill Event when the notice period expires. **MSRC** also may terminate Resources without any notice if any of the **COMPANY**'s representations or warranties in Section 8.01(e) or (f) prove to be materially untrue or incorrect or if it has an Insolvency Event (Section 11.01(a)(ii)).

The Covered Entity must pay **MSRC** costs incurred after termination only for demobilizing, on a reasonable schedule, **MSRC** Response Personnel, **MSRC** Response Equipment, and any (unassigned) MSRC Subcontractor from the Spill Event, and for any cleaning, repair, or maintenance of MSRC Response Equipment required under Section 7.02.

11. 01(c). Reinstatement Option. **MSRC** may, in its discretion after an Insolvency Event (Section 11.01(a)(ii)) reinstate Resources, upon the Covered Entity's compliance with MSRC's request for payment security under Section 7.01(c).

11. 02. Covered Entity Termination of Resources. The Covered Entity may terminate, in whole or in part at any time, Resources being provided under this Agreement by written notice to **MSRC**.

11. 03. Term of the Agreement.

11. 03(a). Term. This Agreement is effective on or after October 15, 1996, and it will continue until December 31, 1997, or until the earlier termination pursuant to the provisions of Sections 11.03(b) or 11.03(c). This Agreement will continue automatically for successive periods of three (3) years unless either party gives the other party notice of termination at least ninety (90) days before the date of expiration of the term.

11. 03(b). MSRC Termination of Agreement. If any Event of Default occurs and continues **MSRC** may, in addition to its right to terminate Resources pursuant to Section 11.01(b) and any other rights and remedies under this Agreement and at law or in equity, terminate this Agreement in its entirety by providing the **COMPANY** with at least ninety (90) days prior written notice.

MSRC is also entitled to terminate this Agreement upon thirty (30) days notice if

(i) **MSRC** has liquidated assets to pay Claims against **MSRC** and therefore cannot provide the contemplated level of Resources, or

(ii) **MSRC** has not received the required payments at the times required under the Directors and Officers Indemnification Grant and Security Agreement, as amended (dated as of July 16, 1993 by and between **MSRC** and MPA concerning the indemnification of the executive officers and directors of **MSRC**); the **COMPANY** or a **COMPANY** affiliate has not made the payments at the times required under the

MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT

STANDARD FORM OF AGREEMENT

Parties and Background

This is a **SERVICE AGREEMENT** with attached signature pages (the "Agreement") between the **COMPANY** and **MARINE SPILL RESPONSE CORPORATION**, a nonprofit corporation organized under the laws of Tennessee (**"MSRC").**

For convenience and simplicity, as between the **COMPANY** and Covered Entity (if any), references to the party for performance are made to a "Covered Entity," but the **COMPANY** can exercise the rights and will guarantee the performance of a Covered Entity as set forth more fully in this Agreement.

In consideration of the promises and the mutual covenants of this Agreement, **MSRC** and the **COMPANY** agree as follows:

Articles

ARTICLE I CALLOUT

1.01. Call-Out of Resources

1.01(a). Alert. A Covered Entity may alert **MSRC** of the possibility of a call-out under this Agreement. Upon receipt of an alert **MSRC** will review its readiness to respond in the event of a call-out under Section 1.01(b). Such alert does not (i) obligate the Covered Entity to pay **MSRC**'s rates or any costs incurred by **MSRC**, (ii) obligate **MSRC** to Mobilize any Resources, or (iii) give the Covered Entity any rights to obtain any particular Resources, unless and until **MSRC** is called out in accordance with this Agreement.

1.01(b). Call Out Process. An Authorized Representative, or an individual **MSRC** reasonably believes is acting on behalf of a Covered Entity, may obtain and **MSRC** will provide any of the Resources available under this Agreement by calling an **MSRC** response manager through one of the telephone call-out numbers provided by MSRC from time to time by notice to the **COMPANY**. This Initial Callout Notice shall consist of a specific request for desired Resources to be provided from the list on Schedule 3 (or as otherwise made available by **MSRC** at the time of callout), in consultation with one of **MSRC**'s response managers. The Authorized Representative or the Incident Commander of a Covered Entity may add to or discontinue use of any Resources, in consultation with **MSRC**'s response manager, at any time. The Covered Entity and **MSRC** will document the Resources requested and provided. If MSRC Subcontractors are required to provide the requested Resources, **MSRC** will call out and supervise those MSRC Subcontractors, unless and until other arrangements are made as described in Section 3.04. Part II of

MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT

EXECUTION INSTRUMENT

The MSRC SERVICE AGREEMENT attached hereto (together with this execution instrument, the "Agreement"), a standard form of agreement amended and restated as of September 27, 1996, as amended, is hereby entered into by and between

Phillips 66 Company
[Name of COMPANY]

a Delaware Corporation
[Type of entity and place of organization]

with its principal offices located at 600 North Dairy Ashford, Houston, TX 77079 (the "COMPANY"), and MARINE SPILL RESPONSE CORPORATION, a nonprofit corporation organized under the laws of Tennessee ("MSRC"), and shall be identified as

SERVICE AGREEMENT No. 6MPA 329 [This is to be provided by MSRC.]

IN WITNESS WHEREOF, the parties hereto each have caused this Agreement to be duly executed and effective as of April May 1, 2012.

Phillips 66 Company [COMPANY]

By: Frances M Vallejo [signature]

Fran Vallejo [print name]

Title: Vice President & Treasurer

Address: 600 North Dairy Ashford
Houston, Texas 77079

Telephone: 281-293-3227 Fax: 281-293-6067

MARINE SPILL RESPONSE CORPORATION:

By: Judith A. Roos

Judith A. Roos
Vice President
Marketing, Customer Services & Corporate Relations
220 Spring Street, Suite 500
Herndon, VA 20170
(703) 326-5617; Fax: (703) 326-5660

MSRC 24-HOUR EMERGENCY NUMBERS

TELEPHONE:

1-800-OIL SPIL (1-800-645-7745)

1-800-259-6772

1-732-417-0175 (COMMERCIAL)

FACSIMILE:

1-800-635-6772

1-732-417-0097 (COMMERCIAL)

ALTERNATE NUMBER:

1-703-326-5609

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

June 25, 2013

Joe Bowles, Pacific/Northwest Region VP
Marine Spill Response Corporation
1330 Industry Street, Suite 100
Everett, WA 98203-7123

Dear Mr. Bowles:

On May 8, 2013 Marine Spill Response Corporation (MSRC) submitted the following updates to its Primary Response Contractor (PRC) application:

- Appendix E-Planning Standards for Dispersants
- Appendix Y- Planning Standards for Aerial Surveillance
- Appendix Z- Planning Standards for Group 5 Oils

These updates went through a 30 day public review period that ended on June 24, 2013. No public comments were submitted concerning these changes and after review by our office your updates have been incorporated into your approved PRC application. The original expiration date of your PRC application has not changed due to these updates and remains March 12, 2015.

If you have any questions regarding your primary response contractor approval call Conor Keeney at (425) 649-7063 or by email at conor.keeney@ecy.wa.gov.

Sincerely,

Linda Pilkey-Jarvis
Preparedness Section Manager
Spill Prevention, Preparedness, and Response Program

CK:sla

2.4.2 Patriot Environmental Services

411 S Keeler, AB 08-Reposition
Bartlesville, OK 74617

ConocoPhillips

03/19/2012

PATRIOT ENVIRONMENTAL SERVICES
Second Request
or Contracting Management
1900 W ANAHEIM ST
LONG BEACH, CA 90801

Re: ConocoPhillips Company's Spin-off of Refining & Marketing Business

Dear Sir or Madam:

On 14 July 2011, the Board of Directors of ConocoPhillips ("COP") announced that it would pursue the separation of COP's Refining & Marketing business and COP's Exploration & Production into two separate stand alone companies via a tax free spin off of the Refining & Marketing business. Phillips 66 Company ("Phillips 66") will be a global refining and marketing company. COP will be a global exploration and production company that will continue to be headquartered in Houston, Texas. The separation is expected to be completed during the second calendar quarter of 2012.

Since you are a valued contractor, Phillips 66 has indicated its desire to continue to receive goods and/or services under contract 47980.0-MSA-GPS (the "Contract"). Consequently, the Contract are hereby assigned to Phillips 66 as of the date the transfer of the downstream assets of COP to Phillips 66 is finalized (the "Closing Date"). COP will give you notice of the Closing Date, along with updated notice and billing information for the Contract, by posting such notice on COP's public web site. Should you wish to directly receive such notice, you may register at http://vendors.conocophillips.com/EN/Pages/GPSNotify.aspx and an email with the above information will be sent to the email address provided in your registration.

Phillips 66 hereby agrees to accept such assignment and to assume from COP any and all responsibility and liability of COP with regard to the Contract and performance thereunder, whether such responsibility and liability accrues or accrued prior or subsequent to the Closing Date.

Notwithstanding any of the foregoing, in the event the Closing Date has not occurred by 1 September 2012, this assignment letter shall be null and void, the assignment of the Contract shall not occur and the Contract between Contractor and COP shall remain in full force and effect without any modification.

Should you have any questions concerning this matter, please contact Larson, Curtis W. at (918) 661-1441. Thank you in advance for your prompt attention to this matter.

Very truly yours,

CONOCOPHILLIPS COMPANY

PHILLIPS 66 COMPANY

SAN DIEGO OFFICE
3464 Pickett. St.
San Diego, CA 92110
619-449-9014 Fax: 619-296-1774

INLAND EMPIRE OFFICE
1840 East Elm Street
Ontario, CA 91761
909-947-9630 Fax 909-923-1035

BAKERSFIELD OFFICE
7120 Golden State Hwy.
Bakersfield, CA 93308
661-414-9075 Fax 661-393-7367

Patriot Environmental Services
800-624-9136

LONG BEACH
508 East E Street, Unit A
Wilmington, CA 90744
562-436-2614 Fax 562-436-2688
P.O. Box 1091 Long Beach, CA 9080

www.patriotenvironmental.com

SANTA CLARITA OFFICE
26000 Springbrook Ave. Suite 107
Saugus, CA 91350
661-287-3737 Fax 661-287-3998

VENTURA OFFICE
2457 N. Ventura Ave. Bldg. F
Ventura, CA 93001
805-921-1112 Fax 805-652-1540

EMPLOYEE	POSITION	EMAIL*	MOBILE#	HOME#	BASE OFFICE
LONG BEACH					
DORN, WALT	Emergency Response Mgr.	wdorn	562-244-2205	(b) (6)	Long Beach
FUJIWARA, ERIC	Technicial Rescue Services	efujiwara	562-244-2392		Long Beach
FUKUTAKE, LUIS	Operations Manager	lfukutake	562-244-2222		Long Beach
MADRIGAL, FELIX	Project Supervisor	fmadrigal	562-244-2221		Long Beach
STRIETER, DALE	Technical Services Manager	dstrieter	562-244-2204		Long Beach
SANTA CLARITA					
MILLER, MARK	Operations Manager	mmiller	562-244-1929	(b) (6)	Santa Clarita
RUFFNER, MARC	Field Supervisor	mruffner	562-244-2265		Santa Clarita
SAN DIEGO					
RODRIQUEZ, ARNULFO	Driver	arodriquez	619-438-3934		San Diego
TALAMANTEZ, JOE	Field Manager	jtalamantez	619-215-4656		San Diego
VEGA, AURELIO	Project Manager	avega	619-654-6796		San Diego
YORBA, ALFONSO	Operations Manager	ayorba	619-438-3316		San Diego
MIRA LOMA					
CARRILLO, EDWIN	Field Supervisor	ecarrillo	562-244-6114		Mira Loma
FROST, DANIEL	Project Manager	dfrost	909-772-0227		Mira Loma
REED, JASON	Field Supervisor	jreed	562-244-5599		Mira Loma
RIVERA, OSCAR	Field Supervisor	orivera	909-772-0049		Mira Loma
VENTURA					
RAMOS, DAVID	Field Supervisor	dramos	805-755-3300		Ventura
SERVELLON, ROBERT	Technician	rservillon	805-755-3407		Ventura
HERRICK, BRIAN	Field Supervisor	bherrick	562-244-1453		Santa Clarita
BAKERSFIELD					
ELMS, KEVIN	Operations Manager	kelms	661-340-9065		Bakersfield
GONZALES, CHRIS	Project Manager	cgonzalez	661-340-8259		Bakersfield
MOSELY, DAVE	Emergency Response Manager	dmosley	661-340-7177		Bakersfield

* all emails followed by @patriotenvironmental.com

BOOM **819.02 (b) (1) (A)**

Total of 21,400' of 6" x 12" Harbor Boom.

BOOM **819.02 (b) (1) (B-F)**

LENGTH	MAKE/MODEL	FREEBOARD / DRAFT	CONNECTOR TYPE	OPERATING ENVIRONMENT	ANCHORING SYSTEM	LOCATION	STORED
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	W	Trailer
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	W	Trailer
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	W	In Harbor on P1 Barge
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	SD	Trailer
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	SD	Trailer
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	SD	Trailer
1000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	SD	Vessel
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	BF	Trailer
1000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	IE	Trailer
1000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	IE	Trailer
400'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	BF	Trailer
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	V	Trailer
2000'	Kepner / Seacurtain	6" / 12"	ASTM F2438-04	Rivers, Lakes,Harbor	Danforth	V	Trailer

Abbreviations for Chart above: W-Wilmington, SD-San Diego, BF-Bakersfield, IE-Inland Empire, SC-Santa Clarita, V-Ventura

All Boom above is dedicated Patriot OSRO-owned and controlled.

SKIMMERS

19.02 (b) (2) (A-I)

QUANTITY LOCATION	MAKE/MODEL	OPERATING ENVIRONMENT	CURRENT	TYPE	NAMEPLATE CAPACITY PER UNIT	EDRC	SKIMMER STORAGE CAPACITY	SKIMMER EXTERNAL CAPACITY	DRAFT
1 / W	Skim Pak/4300	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3257 B/D	651 B/D	0	1000 + BBL	6.6"
1 / W	Skim Pak/4300	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3257 B/D	651 B/D	0	1000 + BBL	6.6"
1 / W	Elastec/Drum Magnum 100	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3428 B/D	2742 B/D	0	1000 + BBL	20"
1 / W	Elastec/Drum Magnum 100G	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	6867 B/D	5484 B/D	0	1000 + BBL	20"
1 / SD	Elastec/Drum Magnum 100G	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	6867 B/D	5484 B/D	0	1000 + BBL	20"
1 / V	Elastec/Drum Magnum 100G	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	6867 B/D	5484 B/D	0	1000 + BBL	20"
1 / W	Komara/K12 Disc	Rivers, Lakes,Harbor	< .5 KNOTS	ST*	2712 B/D	542 B/D	0	1000 + BBL	16"
1 / W	Desmi/ Terminator	Rivers, Lakes,Harbor	< 2 KNOTS	ST* / AD*	15086 B/D	3017 B/D	0	1000 + BBL	28"
1 / W	Desmi/ Terminator	Rivers, Lakes,Harbor	< 2 KNOTS	ST* / AD*	15086 B/D	3017 B/D	0	1000 + BBL	28"
1 / W	Desmi/ Terminator	Rivers, Lakes,Harbor	< 2 KNOTS	ST* / AD*	15086 B/D	3017 B/D	0	1000 + BBL	28"
1 / W	HSB	Ocean,Rivers, Lakes,Harbor	< 6 KNOTS	ST* / AD*	100000 B/D	70000 B/D	0	1000 + BBL	24"
1 / SD	Skim Pak/4300	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3257 B/D	651 B/D	0	1000 + BBL	6.6"
1 / SD	Skim Pak/4300	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3257 B/D	651 B/D	0	1000 + BBL	6.6"
1 / BF	Elastec/Drum Magnum 100	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3428 B/D	2742 B/D	0	1000 + BBL	20"
1 / BF	Skim Pak/4300	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3257 B/D	651 B/D	0	1000 + BBL	6.6"
1 / V	Skim Pak/4300	Rivers, Lakes,Harbor	< 2 KNOTS	ST*	3257 B/D	651 B/D	0	1000 + BBL	6.6"

Abbreviations for Chart above: W-Wilmington, SD-San Diego, BF-Bakersfield, V-Ventura

* ST- Stationary *AD-Advancing

All Skimmers above are dedicated Patriot OSRO-owned and controlled.

RESPONSE VESSELS

819.02 (b) (3) (A-J)

VESSEL NAME/ LOCATION	LENGTH/ BEAM/DRAFT	DESIGN	DOC/REG	OPERATING ENVIRONMENT	TOW ABILITY	HP	BOOM STOWED	PUMP RATE	DESIGN LIMITS
308 Colorado (W)	21'/8'6"/24"	WORK	CF7229UH	HARBOR, LAKES, RIVERS	Boom Only	150	0	N/A	INLAND/ NEARSHORE
310 Oregon (W)	26'/8'6"/26"	WORK	CF7231UH	OCEAN,HARBOR,LAKES,RIVER	Boom Only	TWIN 90	0	N/A	INLAND/ NEARSHORE
311 Jersey (W)	24'/9'6"/42"	WORK	CF7233UH	OCEAN,HARBOR,LAKES,RIVER	Boom Only	TWIN 150'S	0	N/A	INLAND/ NEARSHORE
300 MAKO (W)	21'/7'9"/24"	WORK	CF4713KB	HARBOR, LAKES, RIVERS	Boom Only	225	0	N/A	INLAND/ NEARSHORE
SKIFFS (W) 8 TOTAL	14'/55"/15"	WORK	Pending	HARBOR, LAKES, RIVERS	Boom Only	9.9	0	N/A	INLAND
307 Texas (SD)	26'/8'6"/25"	WORK	DL3513Z	OCEAN,HARBOR,LAKES,RIVER	Boom Only	150	800'	N/A	INLAND/ NEARSHORE
313 Delaware (SD)	26'/10'/30"	WORK	CF7159UH	OCEAN,HARBOR,LAKES,RIVER	Boom Only	TWIN 90	0	N/A	INLAND/ NEARSHORE
305 California (SD)	20'/954"/20"	WORK	CF2433PD	HARBOR, LAKES, RIVERS	Boom Only	150	0	N/A	INLAND/ NEARSHORE
SD 25 WORKSKIFF (SD)	20'/96"/25"	WORK	Pending	HARBOR, LAKES, RIVERS	Boom Only	25	0	N/A	INLAND/ NEARSHORE
SKIFF (SD)	14'/55"/15"	WORK	Pending	HARBOR, LAKES, RIVERS	Boom Only	N/A	0	N/A	INLAND/ NEARSHORE
312 Nevada (BF)	17'/60"/20"	WORK	WN5986RN	HARBOR, LAKES, RIVERS	Boom Only	60	0	N/A	INLAND/ NEARSHORE
Baker 25 (BF)	20'/95"/20"	WORK	Pending	HARBOR, LAKES, RIVERS	Boom Only	25	0	N/A	INLAND/ NEARSHORE
SKIFF (BF)	14'/55"/15"	WORK	Pending	HARBOR, LAKES, RIVERS	Boom Only	8	0	N/A	INLAND/ NEARSHORE
Vent 25 WORKSKIFF (V)	20'/95"/20"	WORK	Pending	HARBOR, LAKES, RIVERS	Boom Only	25	0	N/A	INLAND/ NEARSHORE
301 Arizona (V)	27'/8'6"/20"	WORK	CF4920NP	OCEAN,HARBOR,LAKES,RIVER	Boom Only	TWIN 200'S	0	N/A	INLAND/ NEARSHORE

RECOVERED OIL STORAGE

819.02 (b) (4) (A-E)

TYPE/NAME/ LOCATION	OFFICIAL #	LENGTH / BEAM/ DRAFT	MAX CAPACITY BBLS
TANK/ THOMPSON/ BE	T-3	N/A	120
TANK/ STAINLESS/ W	T-4	N/A	120
TANK/PERTO/V	T-5	N/A	120
TANK/ THOMPSON/ SC	T-6	N/A	120
TANK/HEIL/SC	T-7	N/A	120
TANK/ACRO/SC	T-8	N/A	120
TANK/ACRO/SD	T-9	N/A	120
TANK/WRIGHT/ W	T-10	N/A	120
TANK/WRIGHT/ W	T-11	N/A	120
TANK/WRIGHT/ W	T-12	N/A	120
TANK/WRIGHT/ W	T-13	N/A	120
TANK/WRIGHT/ W	T-14	N/A	120
TANK/HEIL/IE	T-15	N/A	120
TANK/HEIL/SD	T-16	N/A	120
TANK/ THOMPSON/BE	T-20	N/A	120
Truck/Ford/W	50	N/A	50
Truck/Peterbilt/V	70	N/A	70
Truck/Peterbilt/W	70	N/A	70
Truck/Peterbilt/ SD	70	N/A	70
Truck/Peterbilt/ SD	70	N/A	70

RECOVERED OIL STORAGE *cont..* **819.02 (b) (4) (A-E)**

TYPE/NAME/ LOCATION	OFFICIAL #	LENGTH / BEAM/ DRAFT	MAX CAPACITY	QUANTITY
BLADDER/FLEXI TANK/W	B2	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/W	B3	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/W	B5	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/W	B6	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/W	B7	30X60X4	1000 BBL	1
BLADDER/FLEXIT ANK/W	B11	80X80X5	3500 BBL	1
BLADDER/FLEXI TANK/V	B8	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/V	B4	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/SD	B1	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/W	B9	30X60X4	1000 BBL	1
BLADDER/FLEXI TANK/W	B10	30X60X4	1000 BBL	1

Abbreviations for Chart above: W-Wilmington, SD-San Diego, BF-Bakersfield, V-Ventura, SC-Santa Clarita, IE-Inland Empire

All storage tanks, bladders and trucks are Patriot dedicated OSRO Owned and Controlled.

2.4.3 Clean Seas LLC

Clean Seas LLC • 990 Cindy Lane, Unit B • Carpinteria, CA 93013-2900 • 24 Hr.: (805) 684-3838 • Fax: (805) 684-2650

G. E. "Ike" Ikerd
General Manager

January 11, 2013

Rob Yarbrough
ConocoPhillips
600 N. Dairy Ashford, TA 2136
Houston, TX 77079

Dear Mr. Yarbrough,

Enclosed is the 2013 "Certificate of Contractual Services" issued to Phillips Petroleum Company.

A letter and a copy of the certificates will be sent to the Bureau of Safety and Environmental Enforcement and to the Office of Spill Prevention and Response.

If you have any questions about coverage you can contact Kyle Hanson or me at (805) 684-3838.

Sincerely,

Enclosures

Clean Seas LLC • 990 Cindy Lane, Unit B • Carpinteria, CA 93013-2900 • 24 Hr.: (805) 684-3838 • Fax: (805) 684-2650

G. E. "Ike" Ikerd
General Manager

COPY

January 11, 2013

Thomas Cullen, Administrator
CA Dept of Fish & Wildlife, OSPR
1700 K Street, Suite 250
Sacramento, CA 95814

This letter will confirm that Phillips Petroleum Company is a member of Clean Seas, LLC. Clean Seas' response will be under the terms and conditions set forth in the Clean Seas Operating Agreement. Enclosed is a copy of the "Certificate of Contractual Services" issued to Phillips Petroleum Company.

If you have any questions you can contact Kyle Hanson or me at (805)684-3838.

Sincerely,

Enclosures

cc: ConocoPhillips

Clean Seas LLC • 990 Cindy Lane, Unit B • Carpinteria, CA 93013-2900 • 24 Hr.: (805) 684-3838 • Fax: (805) 684-2650

G. E. "Ike" Ikerd
General Manager

COPY

January 11, 2013

Craig Ogawa
Bureau of Safety and Environmental Enforcement
770 Paseo Camarillo
Camarillo, CA 93010

Dear Mr. Ogawa,

This letter will confirm that ConocoPhillips is a member of Clean Seas, LLC. Clean Seas' response will be under the terms and conditions set forth in the Clean Seas Operating Agreement. Enclosed is a copy of the "Certificate of Contractual Services" issued to ConocoPhillips.

If you have any questions you can contact Kyle Hanson or me at (805) 684-3838

Sincerely,

Enclosures

Cc: ConocoPhillips

Clean Seas LLC • 990 Cindy Lane, Unit B • Carpinteria, CA 93013-2900 • 24 Hr.: (805) 684-3838 • Fax: (805) 684-2650

G. E. "Ike" Ikerd
General Manager

February 7, 2013

Mr. Rob Yarbrough
ConocoPhillips
600 N. Dairy Ashford, TA 2136
Houston, TX 77079

Re: **ConocoPhillips**
Line 300/400, Santa Maria/Santa Margarita/Orcutt Pump Stations

Dear Mr. Yarbrough:

Thank you for your payment of $51,800 for your Contract Associate Fees for the period 01/01/13 through 12/31/13.

The "Certificate of Contractual Services" for the facilities are enclosed.

A letter and a copy of the certificates will be sent to the Office of Spill Prevention and Response within the State of California notifying them of the services under contract.

If you have any questions you can contact Pat Elliott at (805)684-3838 ext.105.

Sincerely,

Enclosures

Clean Seas LLC • 990 Cindy Lane, Unit B • Carpinteria, CA 93013-2900 • 24 Hr.: (805) 684-3838 • Fax: (805) 684-2650

G. E. "Ike" Ikerd
General Manager

February 7, 2013

Thomas Cullen, Administrator
CA Dept of Fish & Wildlife, OSPR
1700 K. Street, Suite 250
Sacramento, CA 95814

RE: ConocoPhillips
Line 300/400, Santa Maria/Santa Margarita/Orcutt Pump Stations

This letter will confirm that oil spill response services for the above named facilities have been extended to December 31, 2013. Such response will be under the terms and conditions set forth in the "Contract Response Agreement".

Enclosed are copies of the "Certificates of Contractual Services" issued to **ConocoPhillips.**

Sincerely,

CERTIFICATE OF CONTRACTUAL SERVICES

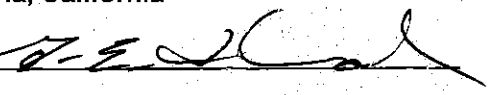
CLEAN SEAS, LLC

Issued to:

PHILLIPS PETROLEUM COMPANY

as a Member of Clean Seas, LLC for activities involving oil production and/or transportation of oil to facilities in or near the marine waters within the Clean Seas' Area of Response in accordance with the current Clean Seas Operating Agreement. The contractual services provided shall remain in effect from January 1, 2013, until properly terminated, or December 31, 2013, whichever shall first occur.

CLEAN SEAS, LLC
Carpinteria, California

By: 

Name: G.E. Ikerd

Title: General Manager

Dated: January 11, 2013

CERTIFICATE OF CONTRACTUAL SERVICES

CLEAN SEAS, LLC

Issued to:

CONOCOPHILLIPS

as a Contract Associate of Clean Seas, LLC for the operation of its facility, **Line 300**, in Clean Seas' Area of Response Seaward of the Contiguous Zone in accordance with the Clean Seas Contract Response Agreement extended as of January 1, 2013. The contractual services provided by the Contract Response Agreement shall remain in effect until properly terminated or December 31, 2013, whichever shall first occur.

CLEAN SEAS, LLC
Carpinteria, California

By: _____

Name: G.E. Ikerd

Title: General Manager

Dated: February 7, 2013

CERTIFICATE OF CONTRACTUAL SERVICES

CLEAN SEAS, LLC

Issued to:

CONOCOPHILLIPS

as a Contract Associate of Clean Seas, LLC for the operation of its facility, **Line 400**, in Clean Seas' Area of Response Seaward of the Contiguous Zone in accordance with the Clean Seas Contract Response Agreement extended as of January 1, 2013. The contractual services provided by the Contract Response Agreement shall remain in effect until properly terminated or December 31, 2013, whichever shall first occur.

CLEAN SEAS, LLC
Carpinteria, California

By: _____

Name: G.E. Ikerd

Title: General Manager

Dated: February 7, 2013

CERTIFICATE OF CONTRACTUAL SERVICES

CLEAN SEAS, LLC

Issued to:

CONOCOPHILLIPS

as a Contract Associate of Clean Seas, LLC for the operation of its facility, **Santa Maria Pump Station**, in Clean Seas' Area of Response Seaward of the Contiguous Zone in accordance with the Clean Seas Contract Response Agreement extended as of January 1, 2013. The contractual services provided by the Contract Response Agreement shall remain in effect until properly terminated or December 31, 2013, whichever shall first occur.

CLEAN SEAS, LLC
Carpinteria, California

By: _____

Name: G.E. Ikerd

Title: General Manager

Dated: February 7, 2013

CERTIFICATE OF CONTRACTUAL SERVICES

CLEAN SEAS, LLC

Issued to:

CONOCOPHILLIPS

as a Contract Associate of Clean Seas, LLC for the operation of its facility, **Orcutt Pump Station**, in Clean Seas' Area of Response Seaward of the Contiguous Zone in accordance with the Clean Seas Contract Response Agreement extended as of January 1, 2013. The contractual services provided by the Contract Response Agreement shall remain in effect until properly terminated or December 31, 2013, whichever shall first occur.

CLEAN SEAS, LLC
Carpinteria, California

By: _____

Name: G.E. Ikerd

Title: General Manager

Dated: February 7, 2013

CERTIFICATE OF CONTRACTUAL SERVICES

CLEAN SEAS, LLC

Issued to:

CONOCOPHILLIPS

as a Contract Associate of Clean Seas, LLC for the operation of its facility, **Santa Margarita Pump Station**, in Clean Seas' Area of Response Seaward of the Contiguous Zone in accordance with the Clean Seas Contract Response Agreement extended as of January 1, 2013. The contractual services provided by the Contract Response Agreement shall remain in effect until properly terminated or December 31, 2013, whichever shall first occur.

CLEAN SEAS, LLC
Carpinteria, California

By: 

Name: G.E. Ikerd

Title: General Manager

Dated: February 7, 2013

2.4.4 NRC Environmental

411 S Keeler, AB 08-Reposition
Bartlesville, OK 74617

ConocoPhillips

03/07/2012

NRC Environmental Services Inc
Todd Roloff
or Contracting Management
P.O. Box: 678205
DALLAS, TX, 75267-8205, US

Re: ConocoPhillips Company's Spin-off of Refining & Marketing Business

Dear Sir or Madam:

On 14 July 2011, the Board of Directors of ConocoPhillips ("COP") announced that it would pursue the separation of COP's Refining & Marketing business and COP's Exploration & Production into two separate stand alone companies via a tax free spin off of the Refining & Marketing business. Phillips 66 Company ("Phillips 66") will be a global refining and marketing company. COP will be a global exploration and production company that will continue to be headquartered in Houston, Texas. The separation is expected to be completed during the second calendar quarter of 2012.

Since you are a valued contractor, Phillips 66 has indicated its desire to continue to receive goods and/or services under contract 41300.0-MSA-RFR (the "Contract"). Consequently, the Contract are hereby assigned to Phillips 66 as of the date the transfer of the downstream assets of COP to Phillips 66 is finalized (the "Closing Date"). COP will give you notice of the Closing Date, along with updated notice and billing information for the Contract, by posting such notice on COP's public web site. Should you wish to directly receive such notice, you may register at http://vendors.conocophillips.com/EN/Pages/GPSNotify.aspx and an email with the above information will be sent to the email address provided in your registration.

Phillips 66 hereby agrees to accept such assignment and to assume from COP any and all responsibility and liability of COP with regard to the Contract and performance thereunder, whether such responsibility and liability accrues or accrued prior or subsequent to the Closing Date.

Notwithstanding any of the foregoing, in the event the Closing Date has not occurred by 1 September 2012, this assignment letter shall be null and void, the assignment of the Contract shall not occur and the Contract between Contractor and COP shall remain in full force and effect without any modification.

Should you have any questions concerning this matter, please contact Scott H. Hoelscher at (918) 661-1441. Thank you in advance for your prompt attention to this matter.

Very truly yours,

CONOCOPHILLIPS COMPANY

PHILLIPS 66 COMPANY

41300

1-86 S

41300.0-MSA-RFR

Master Services Agreement-REF

Master Service Agreement

CONOCOPHILLIPS COMPANY

With

NRC ENVIRONMENTAL SERVICES

Effective 02/01/2007

41300.0-MSA-RFR

CONOCOPHILLIPSCOMPANY
MASTERSERVICEAGREEMENT

This Agreement is effective on 02/01/2007 (mm,dd,yyyy), by and between ConocoPhillips Company, (hereinafter called "Company") and NRC ENVIRONMENTAL SERVICES (hereinaftercalled"Contractor").

WHEREAS, Company may from time to time desire Contractor to perform work and/or provide items of equipment, machinery, materials or supplies in the conduct of Company's operations; and

WHEREAS, Company and Contractor desire to establish certain general terms and conditions, which shall apply to and become part of each and every contract, whether written or oral, entered into between the parties.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree that this Agreement shall consist of this signature document and the following Sections attached here to and made apart hereof:

SECTION I – STATEMENT OF WORK
SECTION II – COMPENSATION, INVOICING AND PAYMENTS
SECTION III – TERMS AND CONDITIONS, PART1
SECTION IV – TERMS AND CONDITIONS, PART2
SECTIONV – EXHIBITS ENTIRE AGREEMENT AND OTHER CONDITIONS

This Agreement reflects the entire agreement between the parties with respect to its subject matter. Except for any secrecy or other nondisclosure agreements between the parties, all other oral or written agreements, contracts, understandings, conditions, or representations with respect to the subject matter of this Agreement are superseded by this Agreement.

Notwithstanding the foregoing, Company understands and agrees that Contractor provides services to National Response Corporation to assist National Response Corporation in meeting its obligations under that certain Facility Standby Services Agreement between Company and National Response Corporation covering OSRO coverage services at Company's Washington facilities or any other facility under an OSRO coverage contract with National Response Corporation. Performance by Contractor of services at these facilities shall be performed in accordance with the OSRO coverage contract in place between Company and National Response Corporation.

General or special conditions in any of Contractor's price lists, invoices, tickets, receipts or other documents presented to Company relating to the work hereunder are null and void, regardless of whether signed by an employee of Company.

SIGNATURES:

ConocoPhillips Company
Signature: _____
Name: _____

NRC ENVIRONMENTAL SERVICES
Signature: _____
Name: _____

41300.0-MSA-RFR

Title: Contract Specialist

Date: Feb 29, 2008

Title: VICE PRESIDENT

Date: FEB 27, 2008

SECTION I – STATEMENT OF WORK

1. PERFORMANCE OF WORK

Company and Contractor may agree from time to time that Contractor shall perform certain work and/or provide items of equipment, machinery, materials or supplies for Company.

Contractor shall diligently perform all work in a skillful and workmanlike manner. Except as otherwise specifically agreed, Contractor shall provide all labor and skills and all equipment, machinery, materials and supplies necessary for the performance of such work. Title to all work, including all studies, designs, specifications, and data shall belong to Company.

Supplementary drawings, plans, and specifications, which in the judgment of Company may be necessary or useful to facilitate the progress of the work, will be furnished by Company. Such documents are intended to be explanatory of each other but, should Contractor believe there are any discrepancies or misunderstandings as to the meaning of anything contained therein, Contractor shall request an explanation from Company, whose explanation shall be final and binding on Contractor. Such explanations shall be given by Company in writing to Contractor. Copies of drawings, plans, and specifications shall at all times be kept on file by Contractor and shall be readily accessible at locations where work is being performed.

Company and Contractor further agree that Contractor and any Affiliate of Company may agree from time to time that Contractor shall perform certain work and/or provide items of equipment, machinery, materials or supplies for such Affiliate under the terms of this Agreement other than services provided by Contractor to National Response Corporation to assist National Response Corporation in meeting its obligations under that certain Facility Standby Services Agreement between Company and National Response Corporation covering OSRO coverage services at Company's, Washington facilities, or any other Company facility under any agreement between Company and National Response Corporation.

2. CONTRACTS BETWEEN THE PARTIES

2.1. Any contract whereby Contractor agrees to perform work and/or provide items of equipment, machinery, materials or supplies for Company may be written or oral. The parties shall endeavor, however, to execute a "Scope of Work" in the form set forth in Exhibit "A", attached hereto and made a part hereof, or such other call-off document that includes, but is not limited to Contractor's identifying vendor and contract numbers and ordering address, Company's purchasing organization and group, and material or service description(s), quantity ordered, unit of measurement, price, delivery date and tax usage code and jurisdiction (hereinafter referred to as "Scope of Work"), prior to beginning any work, but such shall not be a condition precedent to the applicability of this Agreement.

2.2. Likewise, any contract whereby Contractor agrees to perform work and/or provide items of equipment, machinery, materials or supplies for an Affiliate of Company may be written or oral in the same manner as provided above. In such event, the references to Company in this Agreement shall mean such Affiliate of Company entering into such contract with Contractor solely with respect to work for and/or providing the items of equipment, machinery, materials or supplies to such Affiliate of Company. By entering into any such oral agreement or executing a Scope of Work, such Affiliate shall be deemed to ratify, and agrees to be bound by, the terms and conditions of this Agreement with respect to the work covered by said oral contract or Scope of Work.

2.3. Except as may be specifically stated otherwise herein, this Agreement shall apply to every contract of whatever nature entered into between the parties during the term hereof with the same force and effect as if the terms and conditions hereof were fully set forth in any such contract. In the event of a conflict between the terms of this Agreement and (a) a Scope of Work or (b) a separate Company-issued purchase order that references this Agreement, the terms of this Agreement shall control. Any purported amendment of the terms, requirements or obligations

of this Agreement shall be void and of no force unless it is (i) in writing, (ii) signed by duly authorized representatives of both parties, (iii) expressly refers to the specific article or section to be amended, including a reference to the number and heading of the same, and (iv) expressly indicates agreement of the parties to amend such specific article or section referred to therein.

2.4. This Agreement, however, shall apply only to contracts entered into by Company which are performed in the United States of America and to any other contracts and Scope of Works except OSRO services rendered by Contractor for National Response Corporation, which reference this Agreement. It shall also apply to the procurement of equipment, machinery, materials or supplies provided to Company pursuant to any separate Company-issued purchase order that references this Agreement.

Except as provided on the first page of this Agreement, the Agreement supersedes any and all previous Master Service Agreements, or their equivalents to the extent they cover the Scope of Work covered by this Agreement, between Company and Contractor with respect to the above referenced contracts and shall apply to any such contracts (as described and limited in this Article 2) from and after the date hereof.

2.5. This Agreement supersedes any and all previous Master Service Agreements, or their equivalents to the extent they cover the scope of work covered by this Agreement, between Company and Contractor with respect to the above referenced contracts and shall apply to any such contracts (as described and limited in this Article 2) from and after the date hereof.

3. DESCRIPTION OF WORK

All work performed under this Agreement shall be set forth by a Scope of Work as defined in Exhibit "A" ("Scope of Work") issued to Contractor.

7.1. that such are loaned or furnished by Company without any warranty or representation as to condition from the standpoint of safe use by Contractor or suitability for Contractor's contemplated use and any use by Contractor will be at its sole risk and liability;

7.2. that, upon first taking physical possession, Contractor shall thereafter have care, custody, and control until (a) in the case of items not destined for incorporation into the work, returned to Company's physical possession and (b) in the case of items incorporated into the work, when the facilities are transferred to Company's care, custody, and control;

7.3. to return same to Company at conclusion of use, or earlier if requested by Company, in as good of condition as when received by Contractor, ordinary wear and tear excepted; and

7.4. that, notwithstanding anything to the contrary contained in Section III, Article 10, Risk Structure, Contractor shall be liable to Company for any damage or loss thereof while such vehicles, equipment, materials, tools, or other property are within Contractor's care, custody and control.

8. MINORITY-OWNED AND WOMEN-OWNED SUPPLIERS

Contractor's selection processes for procurement of third party goods, equipment and services utilized on behalf of Company shall include minority-owned and women-owned businesses for consideration and where possible Contractor shall provide maximum use of minority-owned and women-owned subcontractors and suppliers in performance of the work. A minority-owned business is defined as one that is at least 51% owned by a minority or group of minorities and has its management and daily business controlled by one or more such individuals. Minorities shall include, but are not limited to, Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, and Asian-Indian Americans (hereinafter referred to singularly as an "MBE" or in a group as "MBEs"). A women-owned business is defined as one that is at least 51% owned by a woman or group of women and has its management and daily business controlled by one or more such individuals (hereinafter referred to singularly as an "WBE" or in a group as "WBEs").

Contractor shall report quarterly to Company the dollar amounts paid by Contractor to MBE and WBE subcontractors and suppliers for goods, equipment and services used in the performance of the work.

9. NOTICES

Unless otherwise specifically provided, all notices and other communications provided for in this Agreement or any contract hereunder shall be in writing and shall be effective upon receipt. Such notices and communications shall be given either: (a) by hand delivery to an authorized representative of the party to whom directed, or (b) by United States mail, postage prepaid, or (c) by courier service guaranteeing delivery within two days or less, charges prepaid, or (d) by facsimile to the address of the party as designated in any contract hereunder for matters relating to any specific work under that contract or to the following addresses for matters relating to this Agreement:

COMPANY:

ConocoPhillips Company
P.O. Box 8
Ferndale, Wa 98248
Attn: Val Bynon
Phone No.: 360-380-7143
Facsimile No.: 918-662-1855
e-mail: val.a.bynon@conocophillips.com

CONTRACTOR:
NRC Environmental Services, Inc.
1605 Ferry Point

Alameda, CA 94501
Attn: Todd Roloff
Phone No.: 510-749-1390
Facsimile No.: 510-749-1390
e-mail: troloff@nroes.com

Any notice, other than a force majeure notice under Section III, Article 9, Force Majeure, delivered after normal business hours at the receiving party's place of business shall not be deemed delivered until the receiving party's following business day. Either party may at any time change its address, facsimile number or attention recipient upon written notice to the other party.

10. TERMINATION OF AGREEMENT AND CONTRACTS

This Agreement shall continue in full force and effect for an initial term of one (1) year from the date of this Agreement and from month to month thereafter unless terminated at any time during the initial term or thereafter by thirty (30) days written notice by one party hereto to the other party, except, regardless of whether notice is given, this Agreement shall not terminate with respect to contracts which have not yet been paid for or completed.

Company may terminate any contract entered into under this Agreement immediately upon notice with or without cause. If Company terminates such a contract in the absence of a material breach by Contractor, Company shall owe Contractor only the compensation earned to the time of notice of termination plus any demobilization fee provided for in such contract. In the event the termination was due to a material breach by Contractor, Company shall owe Contractor only the compensation earned to time of notice of termination plus any demobilization fee provided for in such contract less any additional costs and expenses incurred by Company by reason of such breach including additional costs incurred by having to obtain a replacement contractor. Such termination and deduction for additional costs and expenses shall be without prejudice to the other legal or equitable remedies which may be available to Company.

The releases and indemnities contained in this Agreement shall survive the termination of this Agreement and any contract hereunder.

11. COMPANY ENTRY AND ACCESS TO FACILITIES

Company reserves the right to move into Contractor's on-site work and storage areas as necessary to complete Company work. Company's partial occupancy shall not constitute acceptance of Contractor's work.

Use of roads on Company's premises shall be allowed from the public roads to job site for access and transportation of Contractor's personnel, materials and equipment. Pipe supports or other structures spanning roadways will not be removed or altered to accommodate dimensions of equipment or vehicles supplied by Contractor. Company will designate the entrance gates for use by Contractor's personnel, materials and equipment. Contractor shall perform all work with minimum interference with the operations of Company and others on Company's premises.

Contractor shall not do work on Company premises except during Company's standard working hours without the prior written consent of the Company's Representative, except in the case of an emergency.

12. GENERAL PROVISIONS

12.1. The captions and headings used in this Agreement are intended for convenience only and shall not be used for purposes of construction or interpretation.

12.2. No waiver by either party of any one or more defaults by the other party in the performance

41300.0-MSA-RFR-COMP-RFR-2.0

ConocoPhillips Company - Compensation Agreement

Related Agreement Name	41300.00-MSA-RFR
Related Scope of Work Number	______________
ConocoPhillips Representative:	specialized services
Contractor Name:	NRC Environmental Services Inc
Contractor Representative:	
Effective Date:	09/01/2009
Expiration Date:	08/31/2014

Whereas, ConocoPhillips and NRC Environmental Services Inc agree that the rights and obligations of the parties shall be governed by the above referenced **AGREEMENT** and, if applicable, Scope of Work Agreement, and such provisions, representations, certifications and specifications as are attached or incorporated by reference herein.

CONOCOPHILLIPS COMPANY	NRC Environmental Services Inc
Signature: [signature]	Signature: [signature]
Name: VA Byron	Name: JAMES C RIEDEL
Title: Contract Specialist	Title: GENERAL MANAGER, Marine And Land ER Services
Date: 7/20/2009	Date: 7/21/09

2.5 Response Contractors Capabilities

RESPONSE CONTRACTOR CAPABILITIES

Off-Site Response Contractor Resources

The Company contracts with MSRC for oil spill response and cleanup. The Company is also a member of Clean Seas. Both MSRC and Clean Seas provide equipment and personnel resources available to respond to all of the required planning volume tiers. Additional resources will be provided by contract with Patriot Environmental Services and NRC Environmental Services. These OSRO's are capable of providing the response equipment and supplies, as well as trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response.

Contractor Oil Response Capability Summary

Contractor	On Water	On Shore	Shallow Water
Clean Seas and its cooperative resources noted on page 2 of this Section	X		X
MSRC and its STARS contractors	X		X
Patriot Environmental Services		X	X
NRC Environmental Services	X	X	X

Refer to the Clean Seas Regional Resource Manual for a full listing of cooperative resources. A listing of other spill response contractors under contract is provided in this Appendix.

CONTRACTOR RESOURCES AND LOGISTICS

Clean Seas and its cooperative resources, followed by MSRC would be the Company's primary spill contractor for containing and cleaning up a worst case spill on open water and in shallow water areas near the coastline. Although at least twenty percent of the Clean Seas response capacity is compatible for use in shallow water, the surf zone would hamper deployment of shallow water cleanup equipment near the Company's coastal pipeline routes.

The Company will utilize spill containment and cleanup contractors on shoreline areas and on land, in the event that Company equipment and materials must be augmented to effectively respond to an onshore oil spill. A listing of the Company's spill containment and cleanup contractors is presented in this section of the Plan.

As required by OSPR regulations, Clean Seas will notify the OSPR Administrator when major equipment is removed from service for 24 hours or more if such movement would affect timely implementation of the plan. Notification will be made prior to removing equipment for regularly scheduled maintenance and within 24 hour of removing equipment for unscheduled repairs. Clean Seas will identify appropriate backup equipment at the time of such notification.

INDUSTRY COOPERATIVE RESOURCES

The Company is a partner in the Clean Coastal Waters (CCW), Clean Seas (CS), Clean Bay (CB) and Oil Spill Services Center (OSSC) cooperatives. These cooperatives provide a means of mobilizing borrowed equipment and manpower in the event of a major oil spill. The resources of these cooperatives are available to the Company, should a leak threaten or enter coastal waters.

Except for Clean Seas, the other cooperative resources would not be needed for the spill scenarios evaluated for the Coast Area pipeline system; even the worst case discharge.

The Company is a member of the Clean Seas oil spill cooperative, and can call upon the organization's resources in the event of an onshore pipeline spill that flows into navigable waters. If an oil spill were to occur into a natural drainage at the coastline, or spread to a flowing river, assistance would be obtained from Clean Seas for containment and cleanup operations in open waters and shallow water near the coastline.

CLEAN SEAS

Clean Seas is a non-profit oil spill response organization formed by member companies in the San Luis Obispo, Santa Barbara and Ventura County areas. The Clean Seas area of interest is the public and private properties, beaches, harbors, and offshore islands and waters along the coast of California between and including Cape San Martin to the north, and Point Dume to the south. The Company is a member company of Clean Seas as indicated by the Certificates of Contractual Services - Clean Seas that are reproduced on the following pages.

OSPR regulations require that a certain amount of non-cascadable equipment be nominated in each plan. For the Coast area, the required amount is 1,120 barrels per day of recovery capability that can be mobilized within 2 hours and on scene within 12 hours. This requirement is addressed in the attached letter of February 22, 1994 from Clean Seas to the Company.

For the sensitive areas identified in the trajectory analysis as having possible impact in the event of a spill, shoreline protection of those areas will be provided for with equipment supplied through Clean Seas.

Clean Seas can mobilize personnel and equipment to the San Luis Obispo Bay Area in approximately one to two hours, or to the open ocean outside of the Santa Maria River mouth in approximately three to four hours. Detailed information for Clean Seas resources is presented in this section. Sufficient resources are available including allowance for downtime due to equipment maintenance, personnel off time and other reasonably foreseeable eventualities.

In addition to its own resources, Clean Seas maintains a list of other vessels available to assist in emergencies. This list is provided in the Clean Seas Regional Resource Manual. Clean Seas would provide appropriate equipment and training for any responding vessels of opportunity.

MARINE SPILL RESPONSE CORPORATION (MSRC)

Marine Environment

Nationwide spill response and clean-up services for marine and threatened marine environment can be arranged through Marine Spill Response Corporation (MSRC).

A copy of MSRC's Service Agreement and their 24-hour Emergency telephone numbers are listed on the next page of this Section.

2.6 Command Post, Communications and Equipment & Personnel Staging Areas

Coast Area
Staging Area: Port San Luis Harbor District parking lot.
Command Post: Port San Luis Harbor District. DFG office in San Luis Obispo.

Northern Valley Lines Area
Harris Ranch Inn & Restaurant
24505 West Dorris Avenue
Coalinga, CA 93210
1-800-942-2333 or (559) 935-0717

Southern Lines
Courtyard by Marriott
2633 Sepulveda Blvd.
Torrance, CA 90505
(310) 533-8000

Annex 3 – Table of Contents

3.0 Sensitive Area General Response Strategies

The 14 sensitive areas are:

- Water Intakes/Public Water Supplies
- Schools
- Medical Facilities
- Residential Areas
- Businesses
- Wetlands/Other Sensitive Environments
- Fish and Wildlife Sensitive Environments
- Water Resources/Lakes and Streams
- Endangered Flora and Fauna
- Recreational Areas
- Transportation Routes (Air, Land, and Water)
- Utilities
- Other Areas of Economic Importance
- Wellhead Protection Areas

Shoreline Access

Shoreline access is described in the Site Strategy Sheets (see discussion in preceding paragraph).

U. S. Geological Survey Maps

The pipeline routes have been overlaid on USGS maps. These maps can be used to estimate flow routes of released oil. These maps are reproduced at the end of this section.

Thomas Guide Maps

Reproductions of Thomas Guide maps of the pipeline area provided and may be utilized to identify transportation routes and residential or commercial areas.

3.0.1 Northern Lines Coast Area

Sensitive Species

The table contained in this section of the Plan provides a list of the sensitive plant and animal species that may occur in the general vicinity of the Company Northern Pipelines system. These plant and animal species are recognized with respect to their biological significance by various county, state and federal agencies. The listing is not necessarily exhaustive, as further input would be desired from State Department of Fish and Wildlife personnel to address the risk to sensitive species in a particular location during an actual spill response effort.

This tabulated information should not be interpreted as a summary of the sensitive species affected by Company facilities. Many of the species have specific habitat preferences and requirements. Therefore, these sensitive species may not necessarily occur in the pipeline corridor and may not be affected by a spill.

Wildlife Rehabilitation

The Company is aware of the California Oiled Wildlife Care Network (OWCN) that has been established. The Oiled Wildlife Care Network (OWCN) is a statewide collective of trained wildlife care providers, regulatory agencies, academic institutions and wildlife organizations working to rescue and rehabilitate oiled wildlife in California. With this statement, the Company commits to using the OWCN to satisfy their oiled wildlife requirements. The Company is aware that the Responsible Party has the financial responsibility for oil wildlife care.

Area Contingency Plan

The Area Contingency contains information on the environmental, economic and cultural sensitive resources at risk of damage from a marine oil spill.

Environmentally Sensitive Areas - Sections 4611 and 4612 contains maps and site summary sheets with information about the environmental sensitivity of specific locations within the planning area. Environmental resources are designated as the second priority for oil spill response, following only the top priority of human health and safety.

The environmental sites are ranked using a scale of A, 8, and C. Sites ranked A are the most sensitive to an oil spill. However, it must be noted that all biological communities and organisms are sensitive to the effects of oiling. Shorelines for which specific environmentally sensitive sites have not been identified still have resources sensitive to oiling.

Economically Sensitive Areas - Section 4621 contains information on significant economic resources at risk from an oil spill within the planning area. Strictly economic resources are designated as the third priority for dedication of oil spill response efforts, following human health and safety and environmental resources.

The economic sites are ranked using a continuation of the above scale with letters D, E and F. The criteria for economic ranking is described at the beginning of Section 4620, adopting the same logic as developed for environmental resources. Economic resources facing a greater potential for long-term damages receive a higher rank of priority for emergency response effort.

It is important to note that many marine resources have both environmental and economic importance, such as a coastal park or marine sanctuary. In these cases, the higher environmental ranking would be used for emergency response planning. It is also important to recognize that a need to set priorities for protection will occur only when response equipment or resources are inadequate to handle the volume of oil for a given incident.

Historical and Culturally Sensitive Areas - Section 4624. An important and immediate consideration with the occurrence of an oil spill along the California coastline is the possibility that the oil may adversely impact culturally and historically significant areas. The physical oiling of these sites can be damaging, but potential response actions can also be damaging if not properly advised by individuals knowledgeable about the specific location of these resources.

Much of the California coastline contains some evidence of archeological sites. To protect these sites from theft and vandalism, they have not been listed or mapped in this Plan. It is important that individuals and organizations knowledgeable as to the whereabouts of these resources be contacted as soon as possible, to assist with identification of sensitive areas for emergency response planning.

3.0.1.1 Shoreline Protection

The basis for the identification of shoreline protection and cleanup resources is the Clean Seas Regional Resource Manual (CSRRM) "spill envelope" shown in this Section. The "spill envelope" represents the maximum extent 3,000 barrels of oil would be expected to reach along the shoreline in three days if no response occurs. If the Company must respond to a spill, it will most likely be somewhere within the boundaries of the "spill envelope", though not everywhere. The CSRRM recognizes this and states: "no single spill could possibly impact the coastline over the entire spill envelope. A single spill could not simultaneously move along all of the trajectories used to develop the spill envelope." [page 202-1] Consequently, while the "spill envelope" is used to determine the extent of the area at risk, the resources required would never

need to encompass the entire area at once. The "spill envelope" is useful primarily to assist in defining the mix of resources that would be most suitable to respond to a spill, not the quantity.

This Section identifies, by CSRRM/ACP map location, the recommended primary and secondary protection strategies and the resources to implement those strategies for each sensitive area within the spill envelope identified in the CSRRM. Shoreline protection is more likely to be required close to the source of a spill than farther away. Thus, the areas closest to Avila are shaded. However, since the area covered by the table is far larger than any single spill would affect, only a subset of locations identified in this Section would need protection. Therefore, except for the four areas nearest Avila, only 50% of the additional resources are considered necessary to respond to a worst case spill involving the facility.

Shoreline Protection Resource Summary

Sensitive Area Protection Resources								
Location	RRM/ ACP MAP X REF	Primary Strategy	Secondary Strategy	Boom Length	Boats (note)	Workers	Heavy Equip.	Operator
Oak Knoll Creek	CS 03-05	Sed. Dike	None			5	1	1
San Simeon Point	CS-04-01	Sed. Dike	None			5	1	1
Pico Creek	CS-04-02	Sed. Dike	None			5	1	1
San Simeon Creek	CS-04-03	Sed. Dike	None			5	1	1
Villa Creek	CS 05-03	Sed. Dike	None			5	1	1
Cayucos Creek	CS 06-01	Sed. Dike	None			5	1	1
Morro Bay	CS 06-06	Hbr Boom	None	3,500	4	15	1	1
Islay Creek	CS 07-01	Sed. Dike	None			5	1	1
Diablo Canyon Area*	CS 07-03	Hbr Boom	None	200	2	5	1	1
San Luis Obispo Creek*	CS 08-03	Sed. Dike	Hbr Boom	200	2	10	1	1
Pismo Creek*	CS 09-02	Sed. Dike	None			5	1	1
Arroyo Grande Creek*	CS 09-03	Sed. Dike	None			5	1	1
Oso Flaco Creek	CS 10-01	Sed. Dike	None			5	1	1
Santa Maria River	CS 10-04	Sed. Dike	Hbr Boom	2,000	2	15	2	2
Schuman Creek	CS 11 01	Sed. Dike	Hbr Boom	200		5	1	1
San Antonio Creek	CS 11 03	Sed. Dike	Hbr Boom	250		10	1	1
Santa Ynez River	CS 12 01	Sed. Dike	Hbr Boom	2,000	2	15	1	1
* Areas nearest Avila			Totals	8,350	12	125	19	19
Note: Boats based on number and recommended location & method of securing booms on CSRRM maps								

The following identifies the shoreline protection resources most likely to be needed in the event of a spill from the pipeline system. The resources for the four areas located closest to Avila are added to 50% of the resources required for the balance of the area covered by the 24-hour spill envelope. These estimated shoreline protection resource requirements are compared on the Table to the shoreline protection resources available from Clean Seas.

Protection Resources Estimate

Sensitive Area Protection Resource Summary	Boom (ft)	Boats	Workers	Heavy Equip.	Operators
Probable on Water Resources (Shaded Locations)	400	4	25	4	4
Estimated Additional Resources (50% of rest)	3,975	4	50	8	8
Totals	4,375	8	75	12	12
Protection Resources Available From Clean Seas Table # (in CSRRM) Page # (in CSRRM)	9,424 501-1 (500-1)	23 (500-5)	571 502-1 (500-11)	62 502-2 (500-13)	(provided by equipment vendor)

The above table demonstrates that the Company has more than adequate shoreline protection resources available from Clean Seas. In addition, other companies in the Company contractor database are also capable of providing resources for shoreline protection.

Shoreline Cleanup

The types and quantities of shoreline cleanup resources required depend on the type of shoreline, its accessibility, the volume of oil that must be recovered, and other factors, such as tidal cycles, winds, and currents. The distribution of shoreline types that could be affected by a spill from the pipeline system is shown on the following table. This table is a summary of the ESI categories from the Clean Seas Oil Spill Cleanup Manual.

The dominant shoreline types are of ESI types 1 through 4 comprising 67 percent of the total shoreline. While another 9 percent is ESI type 9 and 5 percent is ESI 10, these ESI types are represented only in the Pico Creek and Morro Bay areas and at the Santa Ynez River mouth, locations quite distant from Avila. Eighty two percent of the total shoreline is in ESI types 1 through 6. Therefore, the shoreline cleanup resources available to the Company should be capable of responding primarily to these dominant shoreline types. The resource requirements analysis for shoreline cleanup considers primarily the dominant shoreline types in determining the resource requirements.

Another factor to be considered is the accessibility of the shoreline in areas that might be affected by a spill. The OSPR Guidance Document and the Central Coast Area Contingency Plan contain access information regarding access locations within the area of concern. For this analysis, the accessibility of specific shoreline types, where shoreline type is a factor in cleanup, was estimated. It was assumed that 20 percent of the shoreline affected by a spill would be inaccessible for the purposes of estimating response resources.

Summary of Shoreline ESI Types

ESI Type	Total Miles	Percent
1 - Cliff	18.3	14 %
2 - Platform	21.4	16 %
3 - Fine/Medium Sand	34.8	26 %
4 - Coarse Sand/Gravel	14.8	11 %
5 - Mixed Sand/Gravel	9.3	7 %
6 - Gravel & Riprap	11.0	8 %
7 - Exposed Tidal	3.0	2 %
8 - Sheltered Rocky	2.1	2 %
9 - Sheltered Tidal	12.7	9 %
10 - Salt Marsh	6.5	5 %
Total	133.9	100 %

The following table provides this estimate of inaccessible versus accessible shoreline. This is used as the input for estimating resources required for shoreline cleanup.

Distribution of Shoreline Types

Substrate ->	Beach		Cobble		Marsh	Rock/ Block	
ESI Types ->	3,4,5,7,9		6		10	1,2,8	
Factors:	Access	No Access*	Access	No Access*			Total
Miles of Shoreline**	59.7	14.9	8.8	2.2	6.5	41.8	133.9
% of Shoreline Type	45%	11%	7%	2%	5%	31%	100%+

Notes:
* Inaccessible shoreline estimated at 20 percent of total shoreline for type(s).
** Miles of shoreline.
+ Totals do not add to 100% due to rounding.

The following table provides an estimate of the resources required to respond to an OSPR worst case spill of 2,320 barrels. The calculations are based on actual experience in several shoreline oil spills in California and use the percentages from the previous table. The calculations involve estimates of the volumes of material that will be recovered and the types of equipment necessary to recover that material. The Company has contracts with contractors capable of providing all the equipment identified on the following table. See this Plan for information on contractors and equipment.

Other Resources

Shoreline Maps

Because the Company pipelines are near the coast between Pismo Beach and Avila Beach, OSPR Map Nos. 090 through 092, together with the corresponding Site Strategy Sheets, have been copied and included in this section for rapid availability. The Site Summary Sheets describe each sensitive resource, response strategies, equipment/special considerations and access and logistics information.

3.0.1.2 Sensitive Species

Sensitive Species that Potentially Occur in San Luis Obispo and Santa Barbara Counties

Scientific Name	Common Name	Status		
		Fed	State	CNPS
Animals				
Agelaius tricolor (nesting colony)	tricolored blackbird	FSC/MBTA	---	N/A
Ambystoma californiense	California tiger salamander	FC	CSC	N/A
Antrozous pallidus	Pallid bat	---	CSC	N/A
Athene cunicularia (burrow sites)	burrowing owl	FSC	CSC	N/A
Bufo microscaphus californicus	Arroyo toad	FE	CSC	N/A
Charadrius alexandrinus nivosus (nesting)	western snowy plover	FT	CSC	N/A
Clemmys marmorata pallida	southwestern pond turtle	FSC	---	N/A
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	MBTA	CE	N/A
Danaus plexippus	monarch butterfly	---	---	N/A
Eucyclogobius newberryi	tidewater goby	FE	CSC	N/A
Falco mexicanus (nesting)	prairie falcon	MBTA	CSC	N/A
Gambelia sila	blunt-nosed leapard lizard	FE	CE	N/A
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	FE	CE	N/A
Gila orcutti	Arroyo chub	FSC	CSC	N/A
Lichnanthe albipilosa	white sand bear scarab beetle	FSC	---	N/A
Neotoma lepida intermedia	San Diego desert woodrat	FSC	CSC	N/A
Oncorhynchus mykiss irideus	southern steelhead	FE	CSC	N/A
Polyphylla nubila	Atascadero June beetle	FSC	---	N/A
Rana aurora draytonii	California red-legged frog	FT	CSC	N/A
Scaphiopus hammondii	western spadefoot	FSC	CSC	N/A
Sterna antillarum browni (nesting colony)	California least tern	FE/MBTA	CE	N/A
Tryonia imitator	mimic tryonia	FSC	---	N/A
Vireo bellii pusillus (nesting)	least bell=s vireo	FE/MBTA	CE	N/A

Sensitive Species that Potentially Occur in San Luis Obispo and Santa Barbara Counties Continued

Vulpes macrotis mutica	San Joaquin kit fox	FE	CT	N/A
Plants				
Antirrhinum ovatum	oval-leaved snapdragon	---	---	4
Arctostaphylos cruzensis	Arroyo De La Cruz manzanita	FSC	---	1B
Arctostaphylos luciana	Santa Lucia manzanita	FSC	---	1B
Arctostaphylos morroensis	Morro manzanita	FT	---	1B
Arctostaphylos pechoensis	Pecho manzanita	FSC	---	1B
Arctostaphylos pilosula	Santa Margarita manzanita	FSC	---	1B
Arctostaphylos purissima	La Purisima manzanita	---	---	1B
Arctostaphylos rudis	sand mesa manzanita	FSC	---	1B
Arctostaphylos tomentosa ssp. *eastwoodiana*	Eastwood=s manzanita	---	---	1B
Arctostaphylos wellsii	Well=s manzanita	---	---	1B
Arenaria paludicola	marsh sandwort	FE	CE	1B
Calochortus obispoensis	San Luis Mariposa lily	---	---	1B
Calycadenia villosa	dwarf calycadenia	---	---	1B
Calystegia subacaulis ssp. *episcopalis*	Cambria morning-glory	---	---	1B
Camissonia hardhamiae	Hardman=s evening-primrose	FSC	---	1B
Carex obispoensis	San Luis Obispo sedge	---	---	1B
Chlorogalum pomeridianum var. *minus*	dwarf soaproot	--	--	1B
Chorizanthe breweri	Brewer=s spineflower	---	---	1B
Chorizanthe rectispina	straight-awned spineflower	FSC	---	1B
Cirsium fontinale var. *obispoensis*	Chorro Creek bog thistle	FE	CE	1B
Cirsium loncholepis	La Graciosa thistle	FPE	CT	1B
Cirsium rhothophilum	surf thistle	FSC	CT	1B
Clarkia speciosa ssp. *immaculata*	Pismo clarkia	FE	CR	1B
Cordylanthus rigidus ssp. *littoralis*	seaside bird=s-beak	FSC	CE	1B
Delphinium parryi ssp. *blochmaniae*	dune larkspur	FSC	---	1B
Dithyrea maritima	beach spectaclepod	FSC	CT	1B
Dudleya abramsii ssp.*bettinae*	San Luis Obispo serpentine	FSC	---	1B

Sensitive Species that Potentially Occur in San Luis Obispo and Santa Barbara Counties Continued

	dudleya			
Dudleya blochmaniae ssp. *blochmaniae*	Blochman=s dudleya	FSC	---	1B
Erigeron blochmaniae	Blochman=s leafy daisy	---	---	1B
Eriodicton altissimum	Indian knob mountainbalm	FE	CE	1B
Eriodicton capitatum	Lompoc yerba santa	FPE	CR	1B
Fritillaria viridea	San Benito fritillary	FSC	---	4
Hemizonia halliana	Hall=s tarplant	---	---	1B
Hemizonia parryi ssp. *congdonii*	Congdon=s tarplant	FSC	---	1B
Horkelia cuneata ssp. *sericea*	Kellogg=s horkelia	FSC	---	1B
Layia heterotricha	pale-yellow layia	FSC	---	1B
Layia jonesii	Jone=s layia	FSC	---	1B
Layia munzii	Munz=s tidy-tips	---	---	1B
Lupinus ludovicianus	San Luis Obispo County lupine	FSC	---	1B
Lupinus nipomensis	Nipomo mesa lupine	FPE	CE	1B
Madia radiata	showy madia	---	---	1B
Malacothamnus palmeri var. *involucratus*	Carmel Valley bush mallow	FSC	---	1B
Monardella crispa	crisp monardella	FSC	---	1B
Monardella frutescens	San Luis Obispo monardella	FSC	---	1B
Navarretia nigelliformis ssp. *radians*	shining navarretia	---	---	1B
Orobanche parishii ssp. *brachyloba*	short-lobed broom-rape	FSC	---	1B
Rorippa gamelii	Gambel=s water cress	FE	CE	1B
Sanicula maritima	adobe sanicle	FSC	CR	1B
Scrophularia atrata	black-flowered figwort	FSC	--	1B
Senecio aphanactis	rayless ragwort	---	---	2
Sidalcea hickmanii ssp. *anomala*	Cuesta Pass checkerbloom	FSC	CR	1B

Sensitive Species Table Key

FE	Federal Endangered Species
FPE	Federal Proposed Endangered
FT	Federal Threatened Species
FSC	Federal Species of Concern
FR	Federal Rare Species
FC	Federal Candadate Species
MBTA	Migratory Bird Treaty Act
CE	California State Endangered Species
CT	California State Threatened Species
CSC	California Department of Fish and Game Species of Concern
CR	California Rare Species
CNPS 1B	Plants categorized by the California Native Plant Society as Rare, Threatened, or Endangered in California and elsewhere
CNPS 2	Plants categorized by the California Native Plant Society as Rare, Threatened, or Endangered in California, But More Common Elsewhere
CNPS 4	Plants of Limited Distribution (A Watch List)
N/A	Not Applicable
---	None

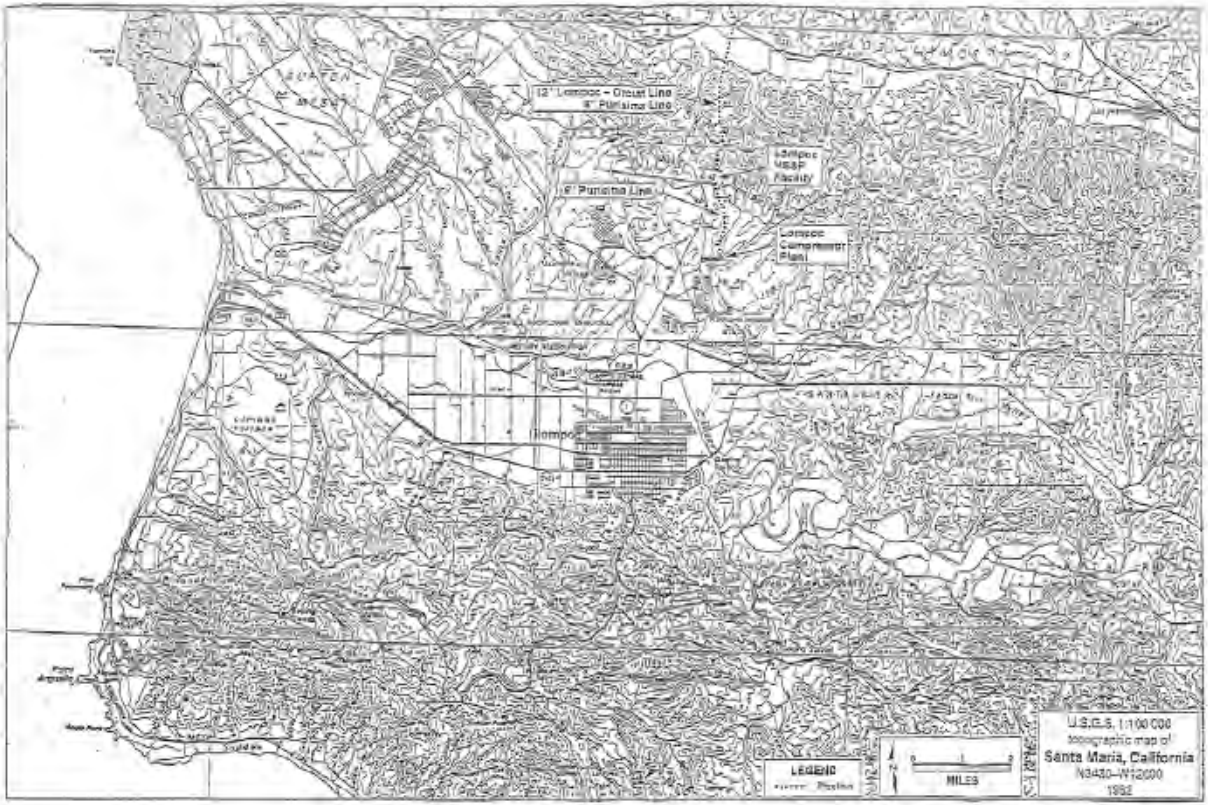
Sources:

California Department of Fish and Game, 1997. California Natural Diversity Data Base, California Department of Fish and Game, Sacramento, CA.

Skinner, M.W., and B.M. Pavlik (eds.). 1994. Inventory of rare and endangered vascular plants of California. Special Publication No. 1 (fifth edition). California Native Plant Society, Sacramento, CA.

SANTA MARIA TOPOGRAPHICAL MAP 1

PHMSA 000076654

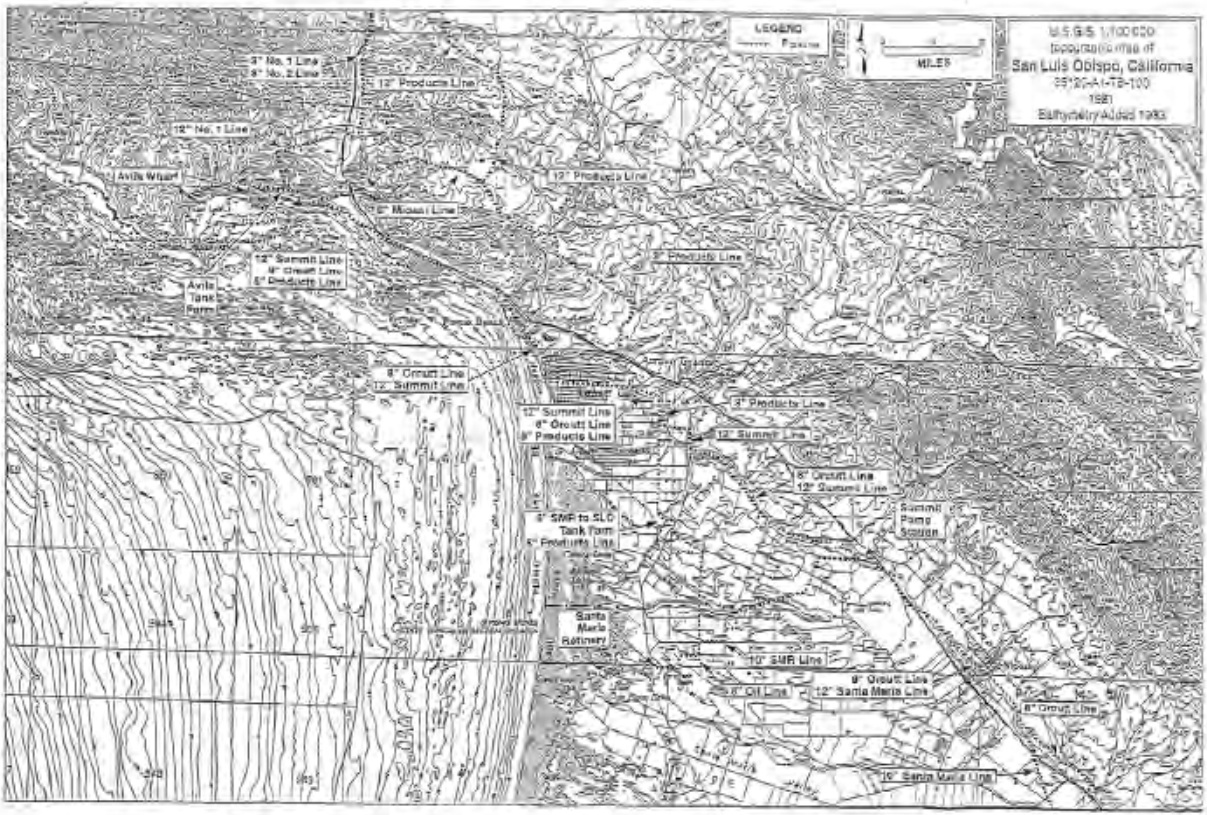


SANTA MARIA TOPOGRAPHICAL MAP 2

PHMSA 000076655

SAN LUIS OBISPO TOPOGRAPHICAL MAP 1

PHMSA 000076656

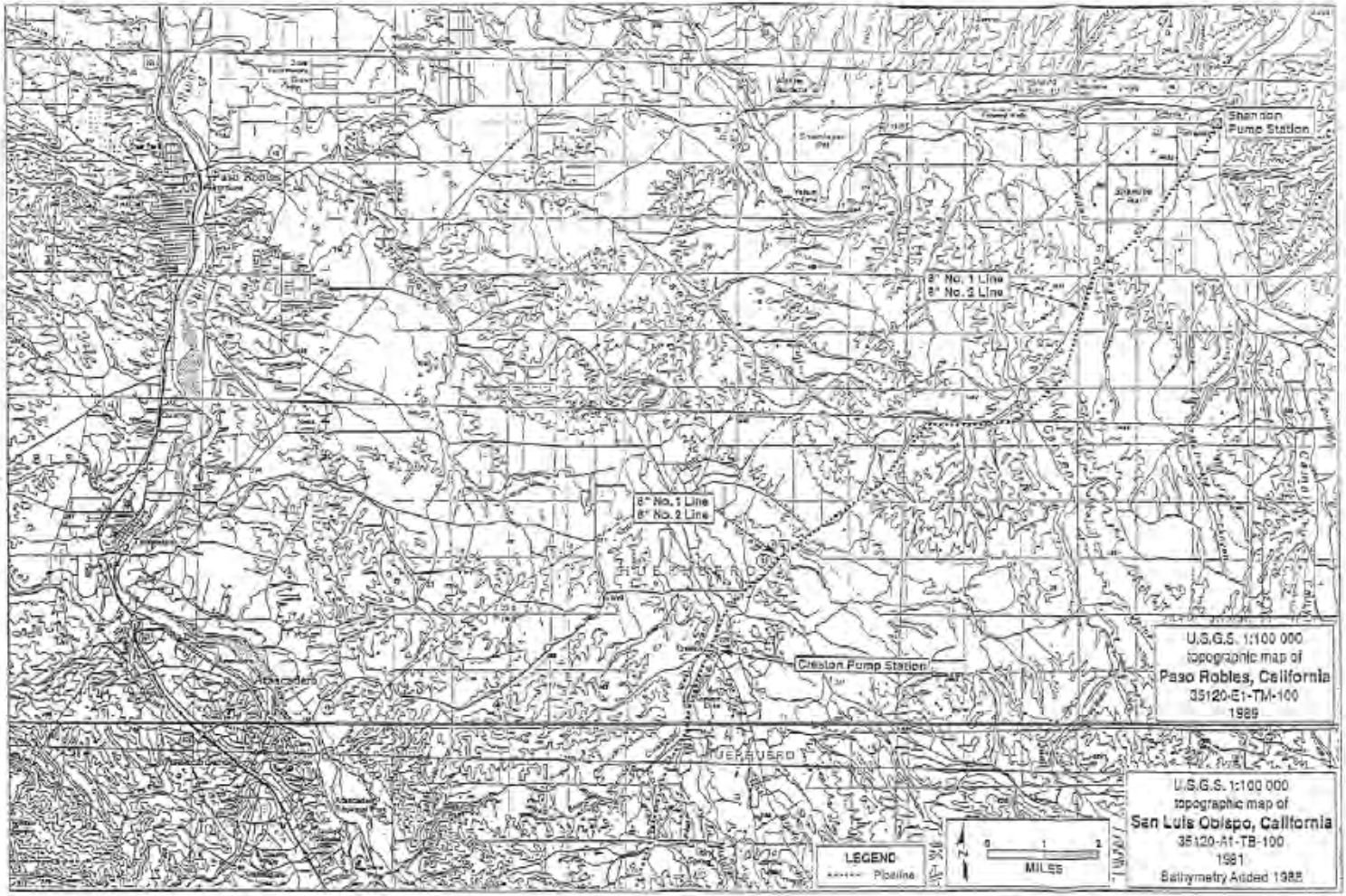


SAN LUIS OBISPO TOPOGRAPHICAL MAP 2

PHMSA 000076657

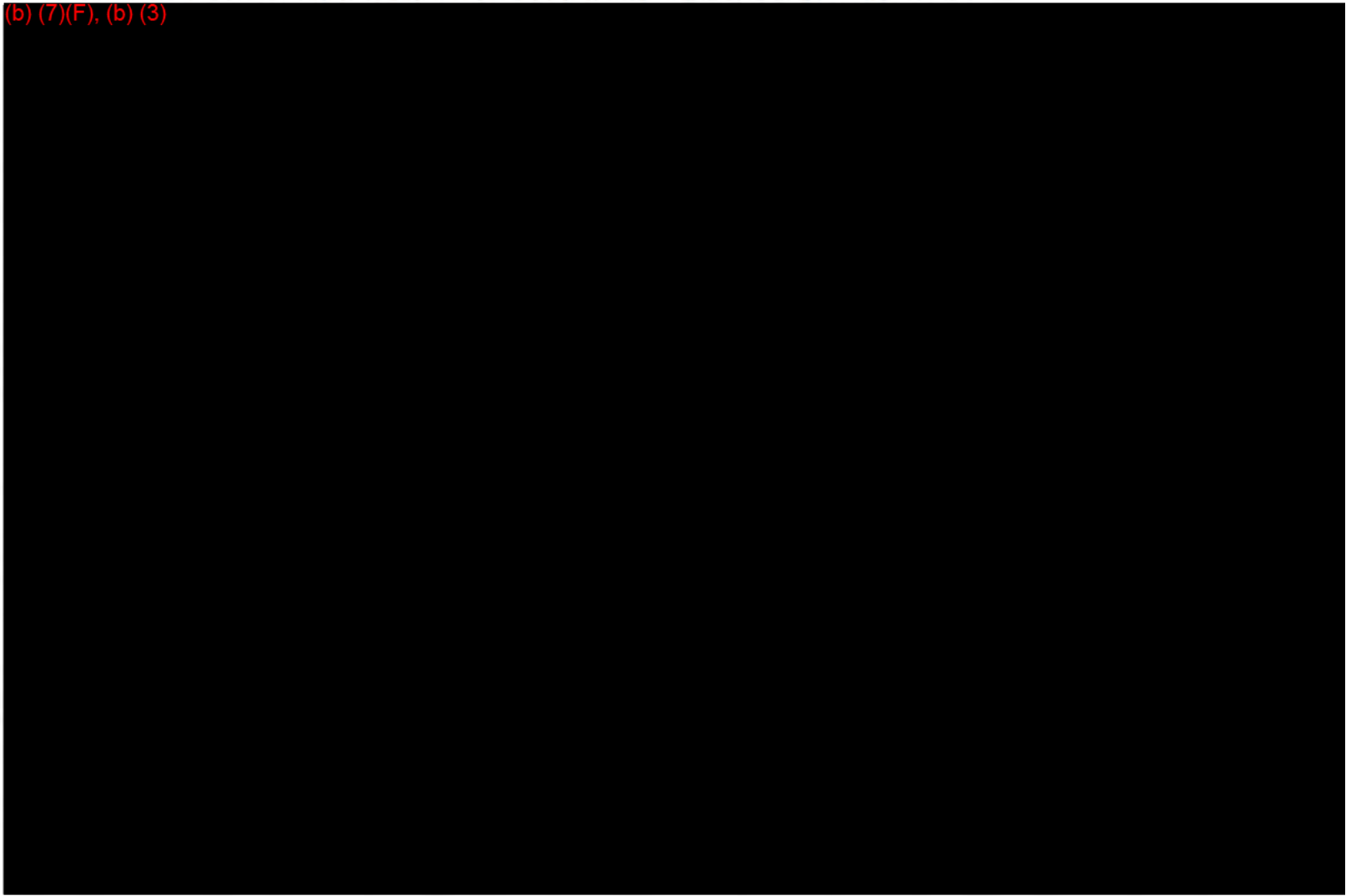
SAN LUIS OBISPO TOPOGRAPHICAL MAP 3

PHMSA 000076658



WELL LOCATION AND GROUNDWATER CONTOUR MAP, SAN ANTONIO VALLEY

(b) (7)(F), (b) (3)



4-340 -A Site Summary- San Luis Obispo Creek Inlet 4-340 -A

County: San Luis Obispo
USGS Quad: Pismo Beach
Thomas Guide Location 693 A-4
NOAA Chart:
Latitude N (b) (7)
Longitude W [redacted]

Last Page Update : 3/31/2011

SITE DESCRIPTION:
See Division I map. San Luis Obispo Creek Inlet, fronted by Avila Beach (medium to course grained sandy beach). Creek mouth inlet is approx. 75' across. There is a fringing marsh, a tidal flat area, and a small lagoon under bridge. This is a very popular recreational beach. Rip rap and mud flat on east side of creek approx. 300' upstream of creek mouth. A mixed sand and gravel beach and rocky platform on west side of creek.

SEASONAL and SPECIAL RESOURCE CONCERNS

Species of concern are present year round, except for Red-Necked Grebes present in winter. Steelhead (critical habitat) peak spawning March - July. Red-Legged frogs breed Nov.-March. Tidewater Goby peak nesting in estuary sediments is April-May.
Throughout Division I, black abalone (endangered) may be present in rocky intertidal habitat (proposed critical habitat).

RESOURCES OF PRIMARY CONCERN

Abundant shorebirds including gulls, Terns, Sandpipers, Killdeer, Coots, Western Grebes, Whimbrels, Egrets, Mallards, Herons, and Red-Necked Grebes. Seabirds include cormorants, belted Kingfisher, and the endangered Brown Pelican. Western snowy plovers (threatened species) utilize this beach.

Southern Sea Otters can be observed offshore.

In San Luis Obispo Creek, the endangered species Tidewater Goby and Steelhead Trout (threatened species) are present. Southwestern Pond Turtles (candidate species), and Red-Legged Frogs (federally threatened) may also be found here.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact SHPO and Native American Heritage Commission

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O	Salmon rearing pens	Central Coast Salmon Enhancement Inc.	(805) 473-8221
T	Melissa Boggs Environmental Scientist	DFG OSPR	(805) 558-1005
C	Lynn Gamble Historic Info Center	SHPO/UCSB	(805) 893-2474
T	Mike Harris Sea otter expert	DFG OSPR	(805) 772-1135
O	Brian Hatfield Marine mammal expert	Bio Res Div. USGS	(805) 927-3893
O	Brian Johnson Live fish market	B&J Enterprises	(805) 680-5143
T	Mathew McGoogan Steelhead trout expert	National Marine Fisheries Service	(562) 980-4026
O	Steve McGrath Harbor Manager	Port San Luis Harbor	(805) 595-5400
T	Dennis Michniuk Inland Fisheries Bio	DFG	(805) 549-6117
T	Elizabeth Petras Listed Species Biologist	National Marine Fisheries Service	(206) 619-1547
C	Katy Sanchez	Native American Heritage Commission	(916) 653-4040
O	Norm Scott Amphibian/reptile expert	Bio. Res. Div. USGS	(805) 927-3893
C	SHPO	State Office of Historic Preservation	(916) 445-7000
O	Carolyn Skinder Biologist	Monterey Bay National Marine Sanctuary	(805) 801-0773
T	Denise Steurer Biologist	U.S. Fish and Wildlife Service	(805) 644-1766

ADDITIONAL SITE SUMMARY COMMENTS:

4-340 -A Site Strategy - San Luis Obispo Creek Inlet 4-340 -A

County and Thomas Guide Location
693 A-4 San Luis Obispo

NOAA CHART

Latitude N (b) (7) **Longitude W** [redacted]

Last Page Update : 4/25/2008

CONCERNS and ADVICE to RESPONDERS:

Nov-March minimize trampling estuary/creek vegetation due to frog breeding. Avoid disturbing bottom lagoon sediments to protect tidewater gobies especially April-July goby nesting season. Peak steelhead (critical habitat) spawning March - July. Throughout Division I, black abalone (endangered) may be present in rocky intertidal habitat (proposed critical habitat).
Streamside Vegetation - Minimize disturbance to streamside vegetation.
Wave washover - May carry oil over natural berm into the lagoon during extreme onshore and tidal conditions.

Wetland/riparian habitat – Mud flats, marshlands, and creeks contain fragile habitat subject to damage from human activities such as walking and vehicle use. Oil can be trampled into sediments by responders where it will not be recoverable. Avoid walking in mudflats, marshy areas, and riparian habitat/waterways whenever possible. Use skiffs to access response sites if conditions permit. When crews must walk in soft bottom wetland areas to access cleanup sites, restrict the number and size of pathways. Mark authorized pathways with flagging or tape. Place temporary ramps (e.g. plywood sheets) in sensitive marshy areas where heavy use is expected.

SHORELINE PRE-CLEANING may be warranted before oil reaches the beach when the shoreline is covered with kelp, driftwood, etc which could become oiled and create more oiled waste. Consult with trustees prior to engaging in activities on shoreline. Move unoiled vegetation, driftwood, etc. above the high tide line. When the shoreline is narrow, un-oiled debris may need to be stockpiled elsewhere. It is suggested that photos be taken to document distribution of beach debris prior to collection so that it can be replaced to its pre-spill distribution when spill cleanup is complete. Pre-cleaning of shorelines should be conducted by hand crews to the greatest practical extent to minimize disturbance to wildlife and their habitats.

HAZARDS and RESTRICTIONS:
Avila Beach is under the Harbor District's Jurisdiction. This is a highly used recreational beach. Live fish markets with water intakes on Hartford Pier.

SITE STRATEGIES

Strategy 4-340.1 Objective: Deflect/exclude oil from entering creek.

For winter or high flows, when creek mouth is open, High flow-deflection booming to deflect oil onto sandy beaches on either and or both sides of creek. Suggest 1,000 ft of 12" to 20 " containment boom can be walked across creek or can use small boat to tow containment boom across. May need to get permission from Avila Beach Resort Golf Course along west creek bank, (805) 595-2307. Boom at appropriate angle for swift currents and changing tidal influences. Deploy exclusion/containment boom across mouth of lagoon to minimize likelihood of oiling estuary. Install boom in a configuration which blocks channel and diverts oil to a collection point. If needed, line river/stream bank, rip-rap, side channels, and sandy beaches within lagoon, seaward of the exclusion/containment booms to restrict oil to open water area of main channel to protect vegetated banks and sensitive areas within the inlet/estuary. Use swamp boom backed by sorbent booms, if waters are shallower, and use harbor boom backed by sorbent booms, when water depths are greater. Check/maintain boom for effectiveness and integrity, overwash, and leakage problems, boom positioning and security, and sorbent replacement as necessary.

Strategy 4-340.2 Objective: Exclude oil from entering creek.

During summer or low flow, when creek mouth is open block entrance with sediment berm or sandbag berm (fine to medium grained sand), and install flow through pipes as necessary to prevent flooding. When erosion from waves or overflows could erode berm, armor berm and banks by covering with plastic sheeting anchored by sand bags. When overflow could occur due to accumulation of water behind the containment berm install underflow piping and/or a spillway in the berm. When underflow pipes are installed, prevent entrainment of oil in vortices by anchoring containment and sorbent booms upstream of the pipe intake, venting the pipes, beveling inlets, or placing beach balls over the vortices. When overwash could bring oil into inlet over berm back exclusion/containment berm with containment and/or sorbent booms and/or snare. Regular monitoring and maintenance will be necessary (2 staff twice daily). Check for berm effectiveness and integrity, overwash, and leakage problems, boom position and security, and sorbent replacement as necessary.

Strategy 4-340.3 Objective: Exclude oil from creek/estuary.

When creek mouth is closed consider installing excelsior fencing along top of natural berm to capture oil when there is a potential for high tidal washover.

When creek mouth is open use filter barrier for exclusion/containment – Use this method when the cross-section of the watercourse does not exceed 20 feet in width, water flow volume is low, the channel bottom is capable of receiving and holding metal stakes, the spill consists of heavy petroleum, and berming or booming methods are not feasible due to lack of materials or accessibility. Construct a filter barrier across the channel using two parallel rows of metal stakes, upon which construction fencing is fastened. Place permeable sorbent materials such as snare or excelsior, between the two lines of fencing to capture oil. Re-adjust sorbent materials as necessary minimize entrainment and/or leakage and to accommodate flow, tidal, oceanic, and meteorological changes. Replace sorbent materials as necessary to maintain sorbent quality.

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
4-340.1	1000				2			1	1	SSS		6	
4-340.2									1	SSS	Backhoe or sandbags, piping, plastic sheeting	6	
4-340.3			300 FF						1	SSS	Excelsior fencing, metal stakes	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From the south: Take Hwy 101 N to Avila Beach Dr. exit. Take Avila Beach Dr. to the end to Port San Luis parking area. From the north: Take Hwy 101 S (or Hwy 5 S to Hwy 41 W to Hwy 46 W to Hwy 101 S), to Avila Beach exit San Luis Bay DR. Take San Luis Bay Dr. to stop sign, turn right on Avila Beach Dr. follow directions above.

LAND ACCESS: Vehicle/ATV access possible w/ Harbor Dept. permission

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Port San Luis boat launch.

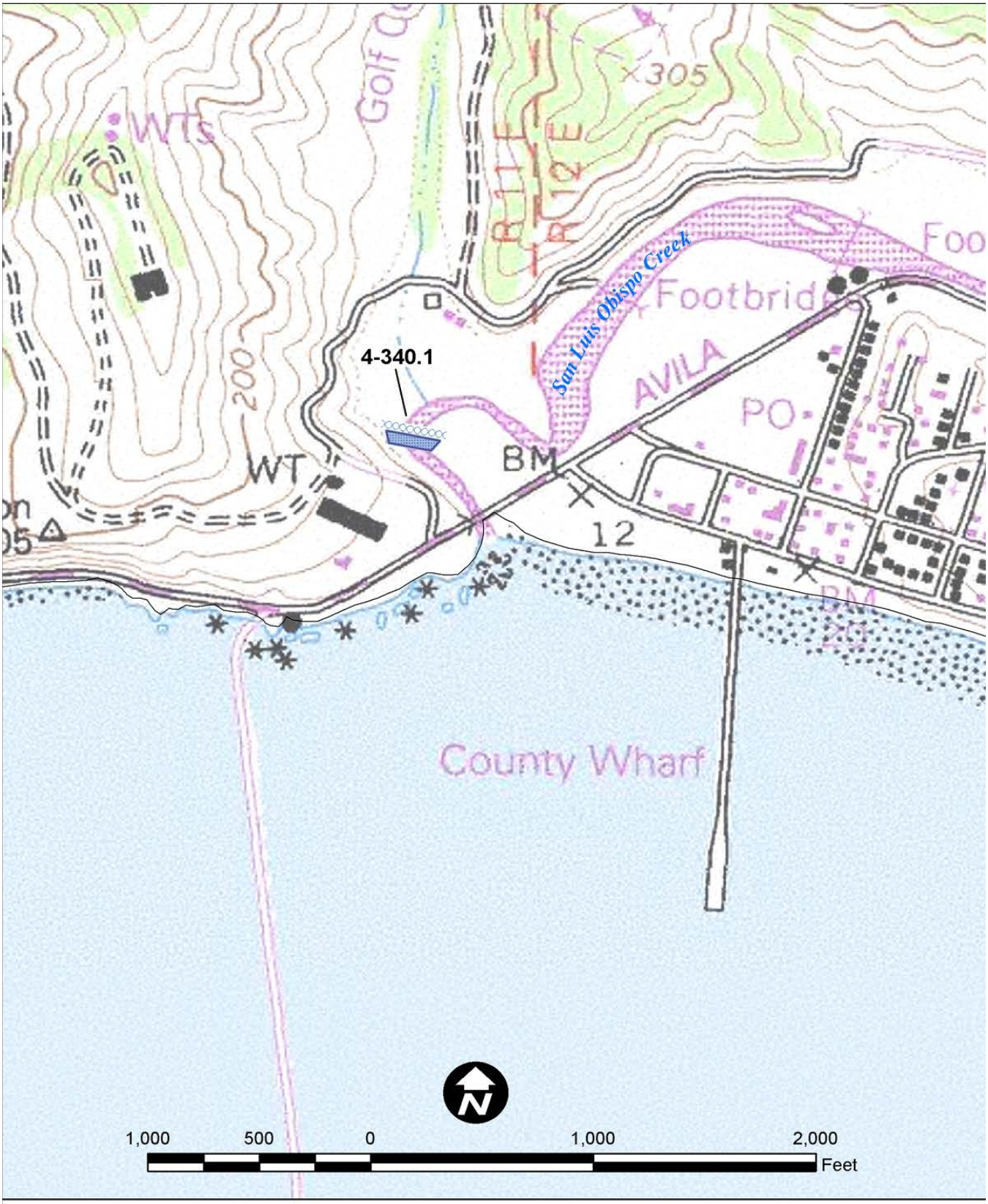
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging Area: Port San Luis Harbor District parking lot.
Command Post: Port San Luis Harbor District. DFG office in San Luis Obispo.
Airports: SLO County Airport is approx. 15 min.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

4-340 -A Strategy Diagram- San Luis Obispo Creek Inlet 4-340 -A



CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site: 4-340-A Site Name: San Luis Obispo Creek Inlet

Source: Melissa Boggs (OSPR)
Map produced by: Greg Ewing (OSPR) April 15, 2011

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

4-345 -B Site Summary- Avila Rock (Offshore rock) 4-345 -B

County: San Luis Obispo
USGS Quad: Pismo Beach

Thomas Guide Location
NOAA Chart:

Latitude N (b) (7)
Longitude W [redacted]

Last Page Update : 3/31/2011

SITE DESCRIPTION:
See Division I map. Avila Rock offshore from Fossil Point, just southeast of Avila Beach. This offshore rock is part of the Coastal National Monument under the jurisdiction of Bureau of Land Management.

SEASONAL and SPECIAL RESOURCE CONCERNS

California sea lions are present year round and pupping season is May-June. Brown pelicans roost summer-fall with peak numbers in Sept-Oct.

RESOURCES OF PRIMARY CONCERN

Brown pelicans roost on Avila Rock.

Large concentrations of California sea lions haulout year round. Southern sea otters can be observed in this area year round.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact SHPO and Native American Heritage Commission.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
T	Melissa Boggs Environmental Scientist	DFG OSPR	(805) 558-1005
C	Lynn Gamble Historic Info Center	SHPO/UCSB	(805) 893-2474
T	Rick Hanks Manager	U.S.BLM, Coastal Natl. Monument	(831) 372-6115
T	Mike Harris Sea otter expert	DFG OSPR	(805) 772-1135
O	Brian Hatfield Marine mammal expert	Bio Res Div. USGS	(805) 927-3893
O	Steve McGrath Harbor Manager	Port San Luis Harbor	(805) 595-5400
T	Elizabeth Petras Listed Species Biologist	National Marine Fisheries Service	(206) 619-1547
C	Katy Sanchez	Native American Heritage Commission	(916) 653-4040
C	SHPO	State Office of Historic Preservation	(916) 445-7000
T	Denise Steurer Biologist	U.S. Fish and Wildlife Service	(805) 644-1766
T	Sarah Wilkin Pinnipeds, turtles	National Marine Fisheries Service	(301) 755-4981

ADDITIONAL SITE SUMMARY COMMENTS:

4-345 -B Site Strategy - Avila Rock (Offshore rock) 4-345 -B

County and Thomas Guide Location
San Luis Obispo

NOAA CHART

Latitude N (b) (7) **Longitude W** (b) (7)

Last Page Update : 3/31/2011

CONCERNS and ADVICE to RESPONDERS:

Sensitive Biota including roosting birds, sea otters, and other marine mammals.
This offshore rock is part of the Coastal National Monument under the jurisdiction of Bureau of Land Management.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 4-345.1 Objective: Deflect oil from this offshore rock.

- Offshore containment and recovery (OCR) is the preferred option although heavy surf may hinder these operations. No specific response equipment listed due to the many variables associated with each spill regarding OCR. Early consideration should be given to the use of applied response technologies.

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
4-345.1												Offshore containment & recovery		

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From the south: Take Hwy 101 N to the Avila Beach Dr. exit. Take Avila Beach Dr. to the town of Avila. Turn left on San Miguel St. to Front St. to get to Avila Beach. Avila Rock is offshore southern end of Avila Beach.
From the north: Take Hwy 101 (or 5 S to Hwy 46 W to 41 W to 101 S) to Avila Beach exit, San Luis Bay Dr. to stop sign, turn right on Avila Beach Dr. follow directions from above.

LAND ACCESS: Boat access only.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Port San Luis Boat launch.

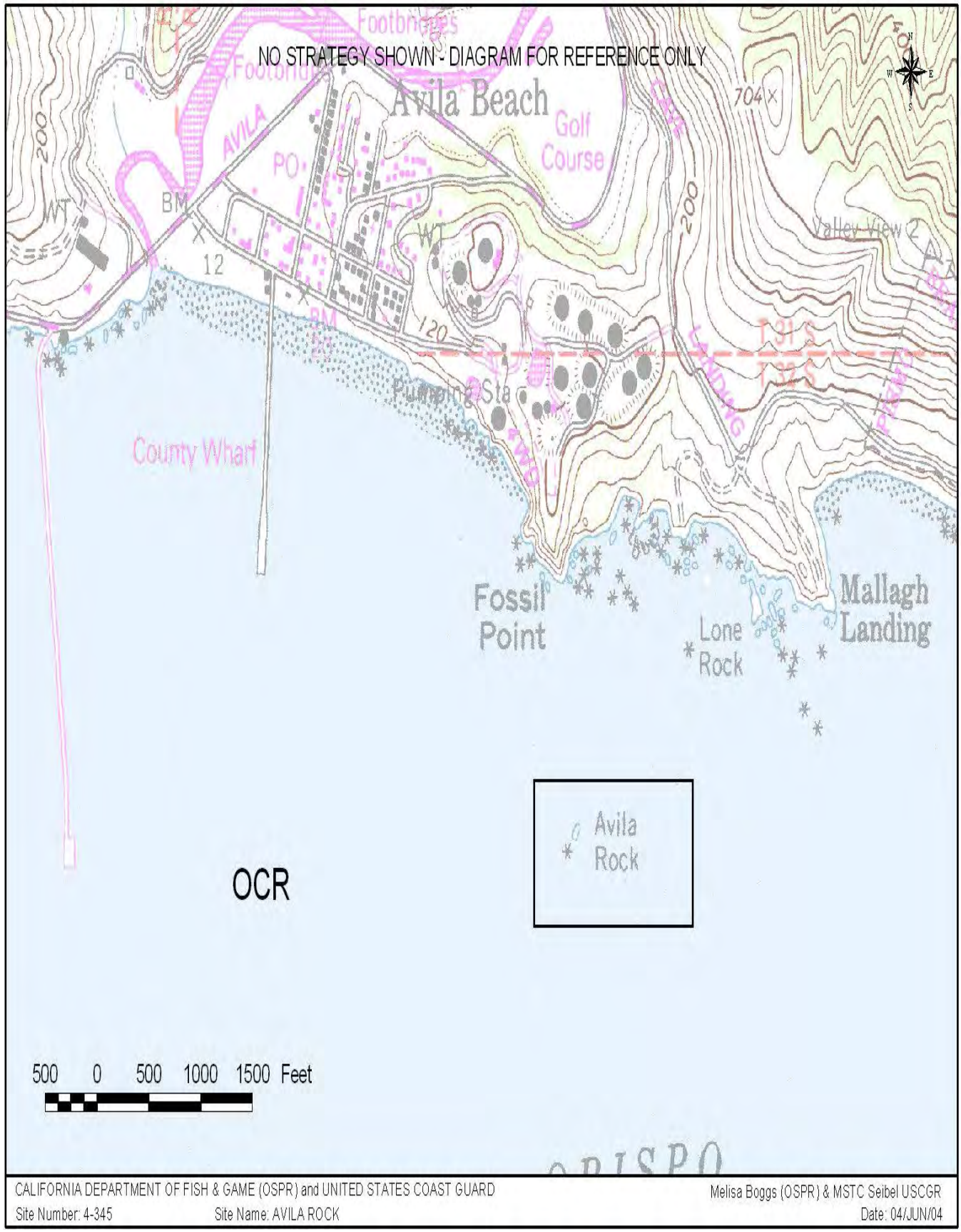
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging Area: Port San Luis Harbor District parking lot.
Command Post: Port San Luis Harbor District office. DFG office in San Luis Obispo.
Airports; SLO County Airport is approx. 15 min.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

4-345 -B Strategy Diagram- Avila Rock (Offshore rock) 4-345 -B



3.0.2 Northern Lines Valley Area

The table contained in this section of the Plan provides a list of the sensitive plant and animal species that may occur in the general vicinity of the Company Pipeline & Terminals system. These plant and animal species are recognized with respect to their biological significance by various county, state and federal agencies. The listing is not necessarily exhaustive, as further input would be desired from State Department of Fish and Wildlife personnel to address the risk to sensitive species in a particular location during an actual spill response effort.

This tabulated information should not be interpreted as a summary of the sensitive species affected by Company facilities. Many of the species have specific habitat preferences and requirements. Therefore, these sensitive species may not necessarily occur in the pipeline corridor and may not be affected by a spill.

Area Contingency Plan

The Area Contingency Plan contains information on the environmental, economic and cultural sensitive resources at risk of damage from a marine oil spill. Maps from the Area Contingency Plan showing the locations of environmentally sensitive sites in San Pablo Bay and Carquinez/Suisun Bay are located in this Plan.

Environmentally Sensitive Areas – The ACP contains maps and site summary sheets with information about the environmental sensitivity of specific locations within the planning area. Environmental resources are designated as the second priority for oil spill response, following only the top priority of human health and safety.

The environmental sites are ranked using a scale of A, B and C. Sites ranked A are the most sensitive to an oil spill. However, it must be noted that all biological communities and organisms are sensitive to the effects of oiling. Shorelines, for which specific environmentally sensitive sites have not been identified, still have resources sensitive to oiling.

Economically Sensitive Areas – The ACP contains information on significant economic resources at risk from an oil spill within the planning area. Strictly economic resources are designated as the third priority for dedication of oil spill response efforts, following human health and safety and environmental resources.

The economic sites are ranked using a continuation of the above scale with letters D, E and F. Economic resources facing a greater potential for long-term damages receive a higher rank of priority for emergency response effort.

It is important to note that many marine resources have both environmental and economic importance, such as a coastal park or marine sanctuary. In these cases, the higher environmental ranking would be used for emergency response planning. It is also important to recognize that a need to set priorities for protection will occur only when response equipment or resources are inadequate to handle the volume of oil for a given incident.

Historical and Culturally Sensitive Areas

An important and immediate consideration with the occurrence of an oil spill along the California coastline is the possibility that culturally and historically significant areas may be adversely impacted by the oil. The physical oiling of these sites can be damaging, but potential response actions can also be damaging if not properly advised by individuals knowledgeable about the specific location of these resources.

Much of the California coastline contains some evidence of archeological sites. To protect these sites from theft and vandalism, they have not been listed or mapped in this Plan. It is important that individuals and organizations knowledgeable as to the whereabouts of these resources be contacted as soon as possible, to assist with identification of sensitive areas for emergency response planning.

Shoreline Maps

OSPR Maps together with Site Summary Sheets are contained in the Area Contingency Plan. The Site Summary Sheets describe each sensitive resource, response strategies, equipment/special considerations and access and logistics information.

3.0.2.1 Rare, Threatened or Endangered Plant and Animal Species by Pipeline Segment

Pipeline Segment / Species Name	Status			Habitat
	State	Federal	CNPS	
Creston - Kern County Line				
California Tiger Salamander Ambystoma tigrinum californiense	SC	C2		Open Woodland, Grassland
Blunt-nosed Leopard Lizard Gambelia sila	SE	FE		Sparsely Vegetated Alkali and Desert Scrub
Southwestern Pond Turtle Clemmys marmorata pallida		C2		Permanent Water
Prairie Falcon Falco mexicanus	SC			Dry Open Terrain, Level/Hilly, Cliff Nesting
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
Sunset - South of McKittrick				
Lost Hills Saltbush Atriplex vallicola		C2	1B	Chenopod Scrub, Powdery Alkaline Soils
Kern Mallow Eremalche kernesis		FE	1B	Chenopod Scrub, Valley and Foothill Grassland, Clay Soils
Hoover's Eriastrum Eriastrum hooveri		FT	1B	Chenopod Scrub, Valley and Foothill Grassland
Blunt-nosed Leopard Lizard Gambelia sila	SE	FE		Sparsely Vegetated Alkali and Desert Scrub
Le Contes Thrasher Toxostoma lecontei	SC			Desert, Desert Scrub
Giant Kangaroo Rat Dipodomys ingens	SE	FE		Annual Grasslands, Alkali Scrub
San Joaquin Antelope Squirrel Ammospermophilus nelsoni	ST	C2		Valleys, Sparsely Vegetated Loam Soils
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
McKittrick - Kings County Line				
Oval-leaved Snapdragon Antirrhinum ovatum		C2	1B	Cismontane Woodland, Pinyon Juniper, Grassland
California Jewelflower Caulanthus californicus	SE	FE	1B	Chenopod Scrub, Valley and Foothill Grassland
Recurved Larkspur Delphinium recurvatum		C2	1B	Chenopod Scrub, Valley and Foothill Grassland, Alkali Soils
Kern Mallow Eremalche kernensis		FE	1B	Chenopod Scrub, Valley and Foothill Grassland, Clay Soils
Hoover's Eriastrum Eriastrum hooveri		FT	1B	Chenopd Scrub, Valley and Foothill Grassland
San Joaquin Wooly-threads Lembertia congdonii		FE	1B	
Blunt-nosed Leopard Lizard Gambelia sila	SE	FE		Sparsely Vegetated Alkali and Desert Scrub

McKittrick - Kings County Line – Continued				
Le Contes Thrasher Toxostoma lecontei	SC			Desert, Desert Scrub
Prairie Falcon Falco mexicanus	SC			Dry Open Terrain, Level/Hilly, Cliff Nesting
San Joaquin Antelope Squirrel Ammospermophilus nelsoni	ST	C2		Valleys, Sparsely Vegetated Loam Soils
Giant Kangaroo Rat Dipodomys ingens	SE	FE		Annual Grasslands, Alkali Scrub
San Joaquin Pocket Mouse Perognathus inornatus inornatus		C2		
Tulare Grasshopper Mouse Onychomys torridus tularensis	SC			Hot, Arid Valleys, Scrub Deserts
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
Kings County				
California Jewelflower Caulanthus californicus	SE	FE	1B	Chenopod Scrub, Valley and Foothill Grassland
Recurved Larkspur Delphinium recurvatum		C2	1B	Chenopod Scrub, Valley and Foothill Grassland, Alkali Soils
San Joaquin Wooly-threads Lembertia congdonii		FE	1B	
Blunt-nosed Leopard Lizard Gambelia sila	SE	FE		Sparsely Vegetated Alkali and Desert Scrub
Burrowing Owl Athene cunicularia	SC			Open Level Grassland, Prairie, Desert Floor
Prairie Falcon Falco mexicanus	SC			Dry Open Terrain, Level/Hilly, Cliff Nesting
San Joaquin Pocket Mouse Perognathus inornatus inornatus		C2		
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
Fresno County				
Hoover's Eriastrum Eriastrum hooveri		FT	1B	Chenopod Scrub, Valley and Foothill Grassland
San Joaquin Wooly-threads Lembertia congdonii		FE	1B	
Blunt-nosed Leopard Lizard Gambelia sila	SE	FE		Sparsely Vegetated Alkali and Desert Scrub
Tricolored Blackbird Agelaius tricolor		C2		Valleys and Low Foothills, Marshy Areas, Tules/Cattails
San Joaquin Antelope Squirrel Ammospermophilus nelsoni	ST	C2		Valleys, Sparsely Vegetated Loam Soils

Fresno County – Continued				
Giant Kangaroo Rat Dipodomys ingens	SE	FE		Annual Grasslands, Alkali Scrub
Tulare Grasshopper Mouse Onychomys torridus tularensis	SC			Hot, Arid Valleys, Scrub Deserts
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
Merced County				
Hispid Bird's-beak Cordylanthus mollis hispidus		C2	1B	Meadows, Damp, Alkaline Soils
Blunt-nosed Leopard Lizard Gambelia sila	SE	FE		Sparsely Vegetated Alkali and Desert Scrub
Tricolored Blackbird Agelaius tricolor		C2		Valley and Low Foothills, Marshy Areas, Tules/Cattails
Aleutian Canada Goose Branta canadensis leucopareia		FT		Lakes, Inland Prairie
Prairie Falcon Falco mexicanus	SC			Dry Open Terrain, Level/Hilly, Cliff Nesting
Giant Kangaroo Rat Dipodomys ingens	SE	FE		Annual Grasslands, Alkali Scrub
San Joaquin Pocket Mouse Perognathus inornatus inornatus		C2		
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
Stanislaus County				
Delta Button Celery Eryngium racemosum	SE	C2	1B	Riparian Scrub
Diamond-petaled California Poppy Eschscholzia rhombipetala		C2	1B	Valley and Foothill Grassland
Molestan Blister Beetle Lytta molesta		C2		
Aleutian Canada Goose Branta canadensis leucopareia		FT		Lake, Inland Prairie
Tricolored Blackbird Agelaius tricolor		C2		Valleys and Low Foothills, Marshy Areas, Tules/Cattails
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
San Joaquin County				
Delta Button Celery Eryngium racemosum	SE	C2	1B	Riparian Scrub
Caper-fruited Tropidocarpum Tropidocarpum capparideum		C2	1A	Valley and Foothill Grassland
California Red-legged Frog Rana aurora draytoni	SC	C2		Marshes, Ponds, Wooded Areas in Lowlands/ Foothills

San Joaquin County – Continued				
Tricolored Blackbird Agelaius tricolor		C2		Valleys and Low Foothills, Marshy Areas, Tules/Cattails
Burrowing Owl Athene cunicularia	SC			Open Level Grassland, Prairie, Desert Floor
Swainson's Hawk Buteo swainsoni	ST, SC	C3		Riparian Areas Adjacent to Fields
Riparian Woodrat Neotoma fuscipes riparia	SC	C2		Riparian Areas
San Joaquin Pocket Mouse Perognathus inornatus inornatus		C2		
San Joaquin Kit Fox Vulpes macrotis mutica	ST	FE		Annual Grassland, Grassy Open Shrubby Vegetation
Alameda County				
Caper-fruited Tropidocarpum Tropidocarpum capparideum		C2	1A	Valley and Foothill Grassland
Longhorn Fairy Shrimp Branchinecta longiantenna		C1		Vernal Pools
California Red-legged Frog Rana aurora draytoni	SC	C2		Marshes, Ponds, Wooded Areas in Lowlands/Foothills
Burrowing Owl Athene cunicularia	SC			Open Level Grassland, Prairie, Desert Floor
Clifton Court Forebay - Richmond				
Mt. Diablo Manzanita Arctostaphylos auriculata		C3	1B	Chaparral
Alameda Manzanita Arctostaphylos pallida	SE	C1	1B	Chaparral
Mt. Diablo Bird's-beak Cordylanthus nidularius	SR	C1	1B	Chaparral
Recurved Larkspur Delphinium recurvatum		C2	1B	Chenopod Scrub, Valley and Foothill Grassland, Alkali Soils
Mt. Diablo Buckwheat Eriogonum truncatum		C2	1A	Chaparral, Coastal Scrub, Valley and Foothill Grassland
Diablo Rock-rose Helianthella castanea		C2	1B	Broadleaved Upland Forest, Chaparral
Brewer's Dwarf Flax Hesperolinon breweri		C2	1B	Serpentine and Other Chaparral, Foothill Grassland
Santa Cruz Tarplant Holocarpha macradenia	SE	C1	1B	Coastal Prairie, Valley and Foothill Grassland
Rock Sanicle Sanicula saxatilis	SR	C2	1B	Broadleaved Upland Forest, Chaparral
Uncommon Jewelflower Streptanthus albidus peramoenus		C1	1B	Braodleaved Upland Forest, Chaparral
Caper-fruited Tropidocarpum Tropidocarpum capparideum		C2	1A	Valley and Foothill Grassland

Clifton Court Forebay – Richmond – Continued				
No Common Name Helminthoglypta nickliniana bridgesi		C2		Hillsides, Grasses and Weeds
Molestan Blister Beetle Lytta molesta		C2		
Longhorn Fairy Shrimp Branchinecta longiantenna		C1		Vernal Pools
California Tiger Salamander Ambystoma tigrinum californiense	SC	C2		Open Woodland, Grassland
California Red-legged Frog Rana aurora draytoni	SC	C2		Marshes, Ponds, Wooded Areas in Lowlands/Foothills
Alameda Whipsnake Masticophis lateralis euryxanthus	ST	C2		Valley/Foothill Hardwood Habitat
San Joaquin Pocket Mouse Perognathus inornatus inornatus		C2		
Salt Marsh Harvest Mouse Reithrodontomys raviventris	SE	FE		Saline Emergent Wetlands
Burrowing Owl Athene cunicularia	SC			Open Level Grassland, Prairie, Desert Floor
San Francisco Bay Region				
Suisun Marsh Aster Aster chilensis lentus		C2	1B	Brackish Marsh
Suisun Thistle Cirsium hydrophilum hydrophilum		C1	1B	Brackish Marsh
Soft-haired Bird's Beak Cordylanthus mollis mollis	SR	C2	1B	Salt and Brackish Marsh
Delta Tule Pea Lathyrus jepsonii jepsonii		C2	1B	Salt, Brackish, and Freshwater Marshes
Tidewater Goby Eucyclogobius newberryi		C2		Brackish Water
Chinook Salmon Oncorhynchus tshawaytscha	SE	FT		
California Tiger Salamander Ambystoma tigrinum californiense	SC	C2		Tidal Freshwater Marshes
California Red-legged Frog Rana aurora draytoni	SC	C2		Tidal Freshwater Marshes
San Francisco Garter Snake Thamnophis sirtalis	SE	FE		Tidal Freshwater Marshes
Western Pond Turtle Clemmys marmorata		C2		Tidal Freshwater Marshes
Common Loon Gavis immer	SC			Open Water

San Francisco Bay Region – Continued				
California Gull Larus californicus	SC			Open Water, Intertidal Mudflats, Tidal Marshes
Caspian Tern Sterna caspia				Open Water, Intertidal Mudflats, Tidal Marshes
Elegant Tern Sterna elegans	SC			Open Water, Rocky Shore, Intertidal Mudflats
California Least Tern Sterna antillarum browni	SE	FE		Open Water, Tidal Salt Marshes
Marbled Murrelet Brachyramphus marmoratus	SE	FT		Open Water
Burrowing Owl Athene cunicularia	SC			Tidal Salt/Brackish Marshes
Long-eared Owl Asio otus	SC			Tidal Marshes
Short-eared Owl Asio flammeus	SC			Tidal Marshes
Black Swift Cypseloides niger	SC			Rocky Shore
Bank Swallow Riparia riparia	ST, SC			Tidal Freshwater Marshes
Western Bluebird Sialia mexicana		Sensitive		Tidal Brackish Marshes
Saltmarsh Common Yellowthroat Geothlypis trichas sinuosa	SC	C2		Tidal Salt Marshes
Alameda Song Sparrow Melospiza melodia pusillula	SC	C2		Tidal Salt Marshes
Suisun Song Sparrow Melospiza melodia maxillaris	SC	C2		Tidal Salt Marshes
Pablo Song Sparrow Melospiza melodia samuelis	SC	C2		Tidal Salt Marshes
Tricolored Blackbird Agelaius tricolor		C2		Tidal Brackish/Freshwater Marshes
Saltmarsh Wandering Shrew Sorex vagrans halicoetes	SC	C1		Tidal Marshes
Salt Marsh Harvest Mouse Reithrodontomys raviventris	SE	FE		Tidal Salt/Brackish Marshes
San Pablo Vole Microtus californicus sanpabloensis		C2		Tidal Brackish Marshes
Humpback Whale Megoptera novaengliae		FE		Open Water

Key to Status:

Federal Status (determined by U.S. Fish and Wildlife Service):

FE Federally listed, endangered
FT Federally threatened
C1 Designation as endangered is pending
C2 Possibly endangered but more information is needed
C3 Previously considered as a candidate.

State Status:

ST State listed, threatened.
SR State listed, rare.
SE State listed, endangered.
SC Species of Special Concern (California Dept. of Fish and Wildlife)

California Native Plant Society (CNPS) Status:

1A Presumed extinct in California.
1B Rare throughout the range of the species.
2 Rare in California but common elsewhere.
3 More information is needed for assignment to Categories 1, 2 or 4.
4 Limited in distribution; does not appear to be threatened at present but must be monitored.

Reference: California Natural Diversity Database (10/19/91).

3.0.2.2 Sensitive Resources

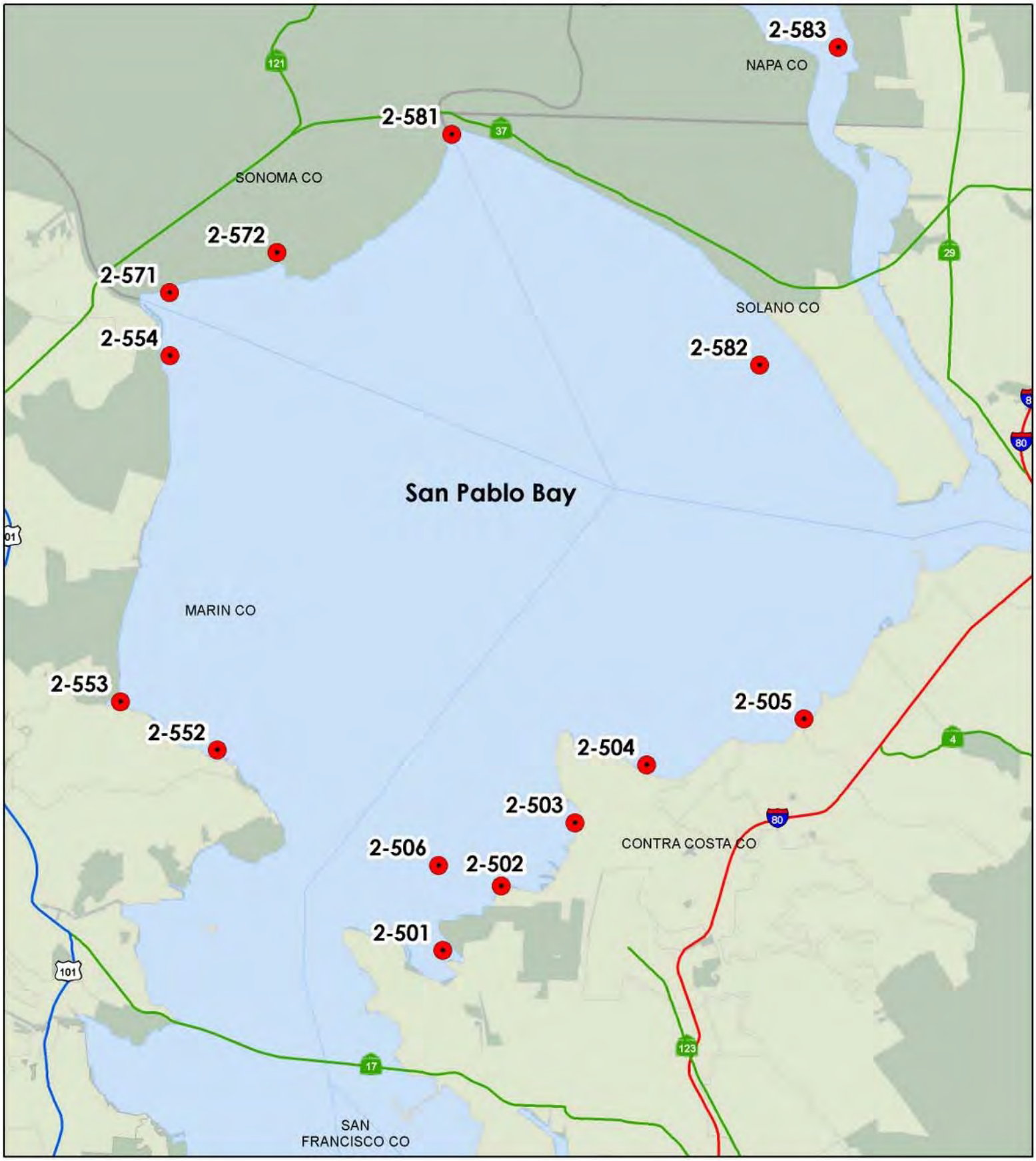
Sensitive Resources

Pipeline Segment	Biological Resources	Economic Resources
Richmond Products Line		
1		Town of Rodeo in pathway. COP SFR (510-799-4411), Rodeo Marina (510-799-4436)
2		Pacific Refining (510-799-8000)
3	SF-505A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Towns of Hercules and Pinole in pathway. Storm drains proceed directly to Bay (510-799-8247 for Hercules and 510-724-9010 for Pinole).
4	SF-504A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Town of El Sobrante in pathway. Point Pinole Regional Park (510-635-0135)
5	SF-502A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Town of San Pablo in pathway. New Keesa Party Boat (510-787-1720). Point Pinole Regional Park (510-635-0135)
6	SF-501A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Towns of San Pablo and Richmond in pathway. New Keesa Party Boat (510-787-1720).
7		Town of Richmond in pathway. Tweed Towing (510-233-4213), Metropolitan California Stevedore Company (510-232-1371), California Oils Corp. (510-233-7660), Time Oil Co. (510-232-7447), Levin-Richmond Terminal Corp. (510-232-4422), Riedel Environmental Serv. (510-234-7400), Texaco Refining and Marketing (510-232-7671), Castrol, Inc. (510-263-6312), Gold Bond Building Prod. (510-234-6745), Tosco Terminal (510-235-7600), ARCO Products (510-263-0313), Pasha Maritime (510-234-8550), Manson Construction (510-232-6319), American Navigation (510-234-8847), Marin Tug & Barge (510-236-5880), Chevron (510-620-4620), Channel Marina (510-233-2246), Richmond Yacht Harbor Ltd. (510-237-9554), Marina Bay Boathouse (510-236-1013), Sanford Wood Marine (510-236-6633), Bay Ship & Yacht (510-234-7960), Richmond Boat Works (510-232-5800), Hawthorn's (510-620-0400), Brooks Island Regional Park (510-635-0135)
Line 200		
1		Town of Rodeo in pathway. COP SFR (510-799-4411), Rodeo Marina (510-799-4436)
2		Town of Rodeo in pathway. COP SFR (510-799-4411), Rodeo Marina (510-799-4436)

3		Martinez Regional Shoreline (510-635-0135)
4	SF-601A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Tenco Services (925-228-3300), Shell Oil (925-313-6161), Wickland Oil (925-228-3227), Martinez Marina (925-372-3585), C & E Boat Repair (925-228-5404), Diablo Marine Services (925-372-0855), The Albatross (925-228-3800), Martinez Regional Shoreline (510-635-0135)
5	SF-601A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Tenco Services (925-228-3300), Shell Oil (925-313-6161), Wickland Oil (925-228-3227), Martinez Marina (925-372-3585), C & E Boat Repair (925-228-5404), Diablo Marine Services (925-372-0855), The Albatross (925-228-3800), Martinez Regional Shoreline (510-635-0135)
6	SF-603A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	US Naval Weapons Station (925-246-5531),
7		Martinez Reservoir
8	SF-603A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	US Naval Weapons Station (925-246-5531),
9	SF-603A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	US Naval Weapons Station (925-246-5531),
10		
11		
12	SF-605A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	US Naval Weapons Station (925-246-5531),
13		Marsh Creek Reservoir
14		Marsh Creek Reservoir
15		Marsh Creek Reservoir
16		
16a		Marsh Creek Reservoir
16b		Marsh Creek Reservoir
17	SF-922A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	Discovery Bay Yacht Harbor (209-634-5928), Lazy M Marina (209-634-4555)
17a		
17b		
18		
19		
20		
21		
22		

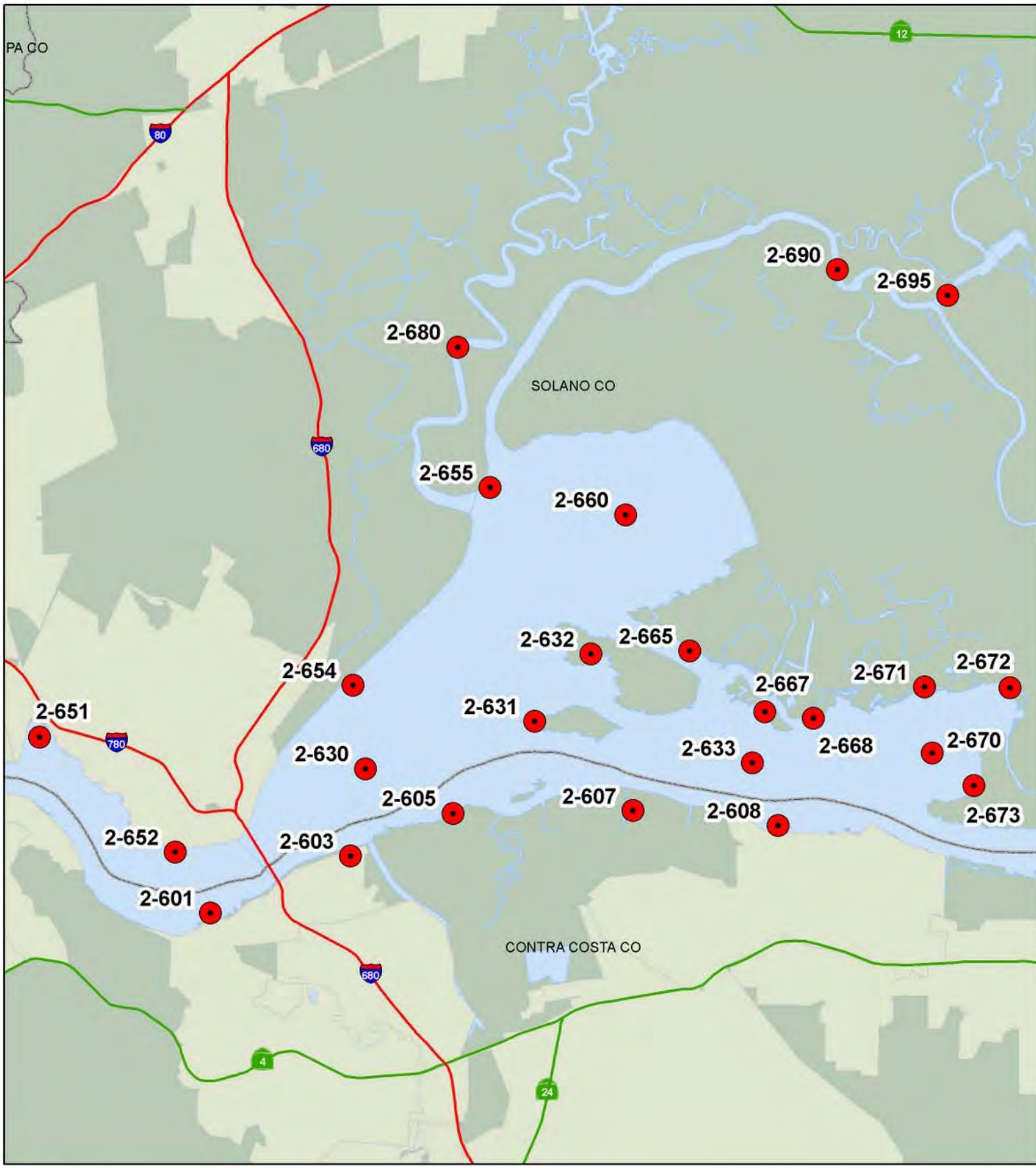
23		
24		
24a		
25	SF-922A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	California Aqueduct, Discovery Bay Yacht Harbor (209-634-5928), Lazy M Marina (209-634-4555), Bethany Reservoir State Recreation Area (209) 687-1800.
26		California Aqueduct
27		California Aqueduct
28		California Aqueduct
29	SF-20A, SF-21A, SF-18A and SF-10A Call California Department of Fish and Game at (916) 445-0045 and US Fish and Wildlife Service at (916) 978-4866	California Aqueduct

SF Geographic Response Area 5
San Pablo Bay
Environmentally Sensitive Sites



Mike Schommer (OSPR) & Greg Ewing (OSPR)
Date: May 2, 2011

SF Geographic Response Area 6
Carquinez Strait and Suisun Bay
Environmentally Sensitive Sites



Sensitive Sites

0 1 2 4 Miles

Craig Haffner (OSPR) & Greg Ewing (OSPR)
Date: May 2, 2011

3.0.3 Southern Lines Area

Wildlife Rehabilitation

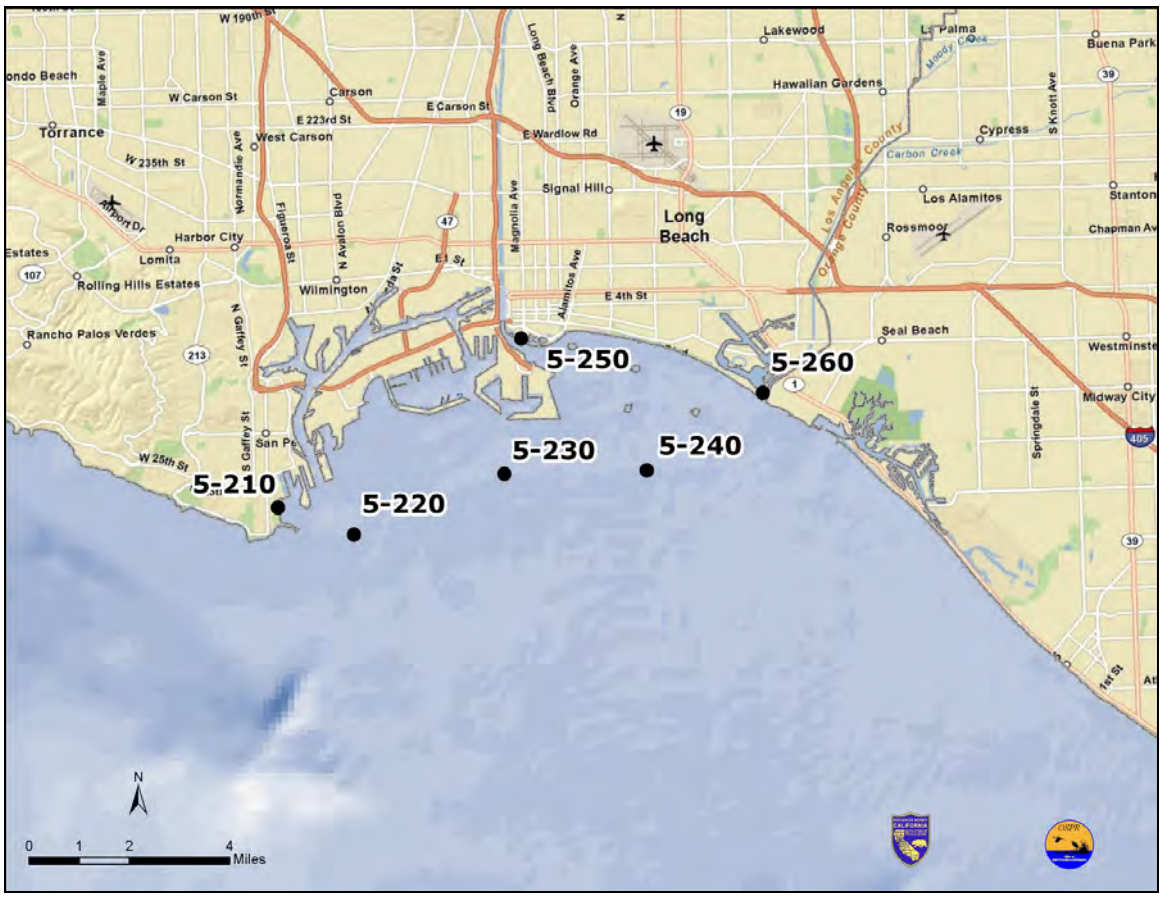
Activation of the OSPR Wildlife Operations (WO) Resources

The best time to prevent wildlife impacts after a spill has occurred is during the earliest stages of the spill response. Therefore, it is imperative that OSPR be notified in a timely manner. Under California's OSPRA, the OSPR has the mandate and the capacity to mobilize its wildlife protection resources immediately, if necessary, to provide the best achievable protection for the state's wildlife, in accordance with the state contingency plan and the ACP (Government Code §§ 8574.7, 8670.3(c)(1), 8670.5, 8670.7(b). Therefore, the ACP and the UC may anticipate that WO will be initiated by OSPR immediately upon first notification of a spill. When taking early actions, OSPR will maintain close coordination with the evolving UC. Such early, but prudent, initiation of a wildlife response will ensure timely mobilization of dedicated resources, minimize resource impacts, and will contribute to effective cost containment. In these instances, OSPR's early WO will be guided by the ACP and will be integrated with the UC as it is formed. As soon as feasible, but in any event after the first 24 hours of a spill, the WBD will direct the development of the wildlife-operations element of the Incident Action Plan (IAP)-for the review and approval of the UC. Wildlife operations response activities should be described on the "Work Assignment Form" (ICS Form 204) and integrated into to daily IAP to be approved by the UC. The IAP will identify and authorize WO response actions for the duration of the spill.

Activation of OWCN

The OWCN responds hand-in-hand with the OSPR during WO and, if needed, activation can be virtually simultaneous. Activation may be initiated by OSPR through the Duty Officer at OSPR's Headquarters Operations Center in Sacramento, upon first notification of a spill or at some later point by the WBD or an Incident Commander (IC) in consultation with the UC. Through OWCN, dedicated wildlife operations equipment (such as shallow-water vessels) and specially trained response contractors and personnel can be deployed immediately in combinations dictated by spill-specific circumstances. In consultation with the UC and the WBD, the OWCN Response Director may begin early notification actions of the OWCN response personnel and facilities, placing them on stand-by and enabling them to prepare their facilities. The OSPR and OWCN can be contacted directly regarding spill notification and WO response or through the USCG, per the Notifications Section of this RZ Appendix.

The following pages contain sensitive area maps and information.



Index Map – Los Angeles/Long Beach Harbors Environmentally Sensitive Sites

5-210 -A Site Summary- Cabrillo Beach Wetlands 5-210 -A

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	854 C1	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	San Pedro	NOAA Chart:	18749	ACP Division:	LA-G

Last Page Update : 2/24/2011

SITE DESCRIPTION:

Small (3.2 acre) mitigation site wetland adjacent to Cabrillo Beach. Sheltered habitat within Los Angeles Harbor.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - All year. California Least Tern - April to September.

RESOURCES OF PRIMARY CONCERN

Mudflat-marsh ecosystem with resting and feeding waterfowl, seabirds, and shorebirds.

California Least Tern (Federal and State endangered species), California Brown Pelican, shorebirds, waterfowl, and seabirds.

Invertebrates.

Intertidal mudflat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		Los Angeles Port Police (24 hr)	(310) 732-3500
O		Los Angeles City Fire Dept. (24 hr)	(800) 688-8000
O		Los Angeles County Fire	(323) 881-6105
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8am - 5pm)	(760) 431-9440
O		Cabrillo Marine Aquarium	(310) 548-7562
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052

ADDITIONAL SITE SUMMARY COMMENTS:

5-210 -A Site Strategy - Cabrillo Beach Wetlands 5-210 -A

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	854 C1	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	San Pedro	NOAA Chart:	18749	ACP Division:	LA-G

Last Page Update : 3/21/2011

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-210.1 Objective: Exclusion of oil entry to wetland.

Boom (100') to prevent oil entry to inlet.

Strategy 5-210.2 Objective: Exclusion of oil entry to wetland.

Boom (1450') boom may be placed to move oil to a collection point.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special and Equipment or comment kinds	staff deploy	Staff tend
5-210.1	100				0		0	0			0		2	
5-210.2	1450				3	Danforth 40 lb	1	0			0		4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Wetland and boat launch are adjacent to each other. From Pacific Ave. in San Pedro, go east on Stephen M. White Drive until you enter Cabrillo Beach. Go to the north end of the parking lot.

LAND ACCESS: Access to site by land is granted by the Cabrillo Marine Aquarium.

WATER LOGISTICS:
Limitations: depth, obstruction: Shallow water. Heavy small boat traffic.

Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

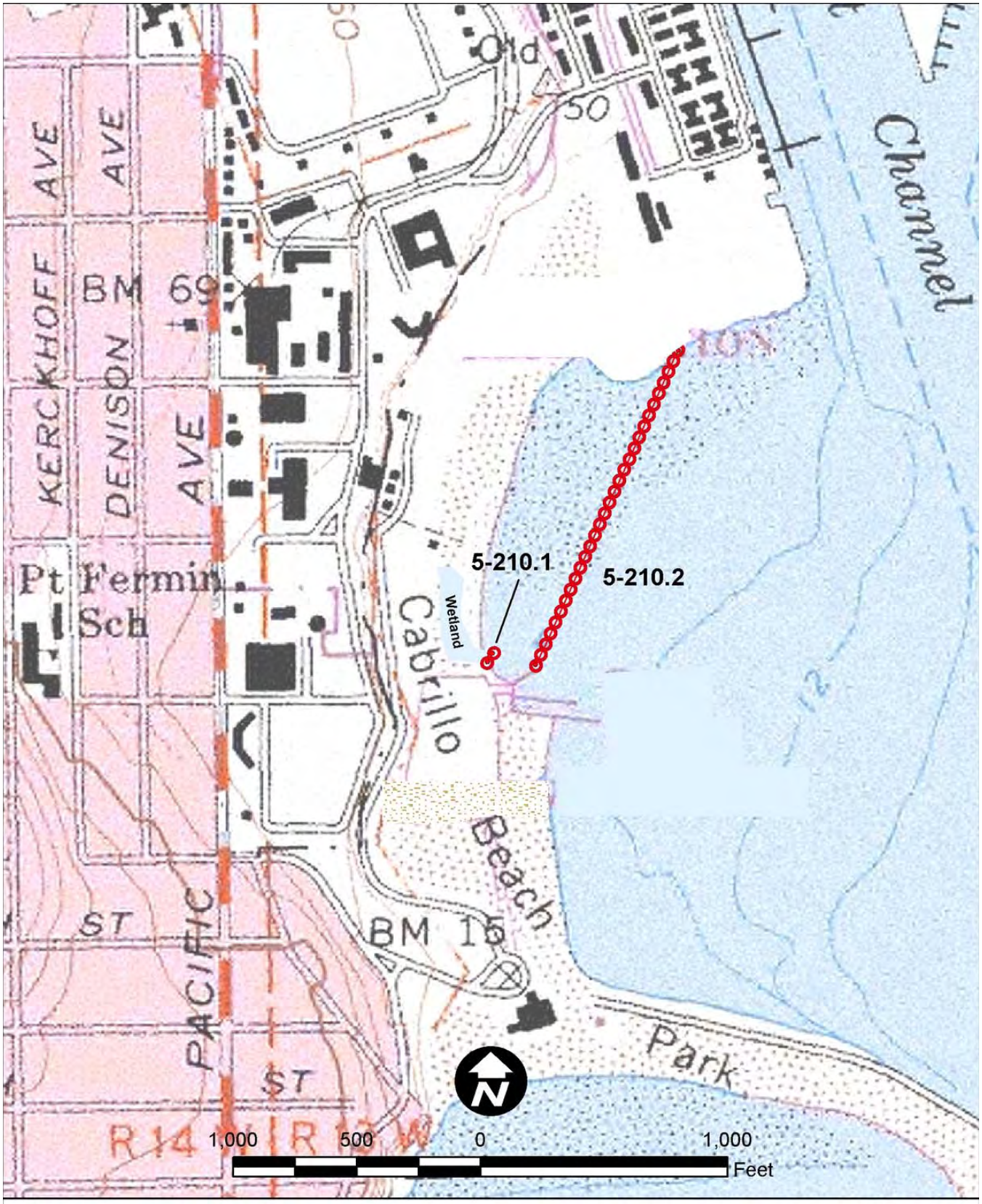
A 100' section of boom is immediately available at the Cabrillo Marine Aquarium.

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

There are several locations available along Stephen White Dr., Shishoean Rd., and Oliver Victor Circle that have access to the beach.

5-210 -A Strategy Diagram- Cabrillo Beach Wetlands 5-210 -A



CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site: 5-210 Site Name: Cabrillo Beach Weland

Corey Kong (OSPR) & Greg Ewing (OSPR)
Date: Feb. 22, 2011

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-220 -A/C Site Summary- Los Angeles Harbor Breakwater 5-220 -A/C

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	854 E3	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	San Pedro	NOAA Chart:	18751	ACP Division:	LA-G

Last Page Update : 2/15/2011

SITE DESCRIPTION:

This site consists of the entire breakwater marked as the Los Angeles Breakwater on the Los Angeles and Long Beach NOAA Nautical Chart # 18751. This rocky rip rap structure protects the inner portions of Los Angeles and Long Beach Harbor from waves and chop.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - High concentrations of seabirds and marine mammals (esp. during the night). Spiny Lobster fishery is October through March (contact the Dept. of Fish and Game for exact fishing season information).

RESOURCES OF PRIMARY CONCERN

Seabird roosting site. During the night, this is a major Brown Pelican roosting site.

California Brown Pelican, terns, gulls, and migratory birds.

California Sea Lion.

Spiny Lobster and finfish.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		Los Angeles City Fire Dept. (24 hr)	(800) 688-8000
O		Los Angeles Port Police (24 hr)	(310) 732-3500
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	Sarah Wilkins Marine Mammals	NOAA/Nat. Mar. Fish. Service	(301) 755-4981

ADDITIONAL SITE SUMMARY COMMENTS:

5-220 -A/C Site Strategy - Los Angeles Harbor Breakwater 5-220 -A/C

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	854 E3	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	San Pedro	NOAA Chart:	18751	ACP Division:	LA-G

CONCERNS and ADVICE to RESPONDERS:

Last Page Update : 2/15/2011

Principal concerns are oil contamination and response activity impacts to seabirds, marine mammals, and other sensitive plants and wildlife. The primary objective is to minimize exposure of oil to the natural resources present at the site. Other concerns are the impacts resulting from response activities. Avoid low flying aircraft/helicopters (<1000 ft) over site. Avoid noisy boat traffic near the site.

HAZARDS and RESTRICTIONS:

Watch weather and sea conditions. High energy wave action.

SITE STRATEGIES

Strategy 5-220.1 Objective: Open water containment and recovery and/or the use of alternative response technologies to prevent oil from reaching the breakwater.

This site is difficult to protect. Mechanical shoreline protection techniques are not likely to be effective because of high wave energy and rocky conditions at the site.

a) Recommended response strategy is on-water containment and recovery (e.g towed boom arrays).
b) Pursue feasibility of alternative response technologies (e.g. dispersants and in-situ burning) to reduce the volume of oil reaching the site.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
5-220.1						On-Water Recovery/ART								

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launch available at Cabrillo Beach. From Pacific Ave. in San Pedro, go east on Stephen M. White Drive until you enter Cabrillo Beach. Go to the north end of the parking lot.

LAND ACCESS: Access best by boat.

WATER LOGISTICS:
Limitations: depth, obstruction: Heavy boat traffic (all sizes of vessels).

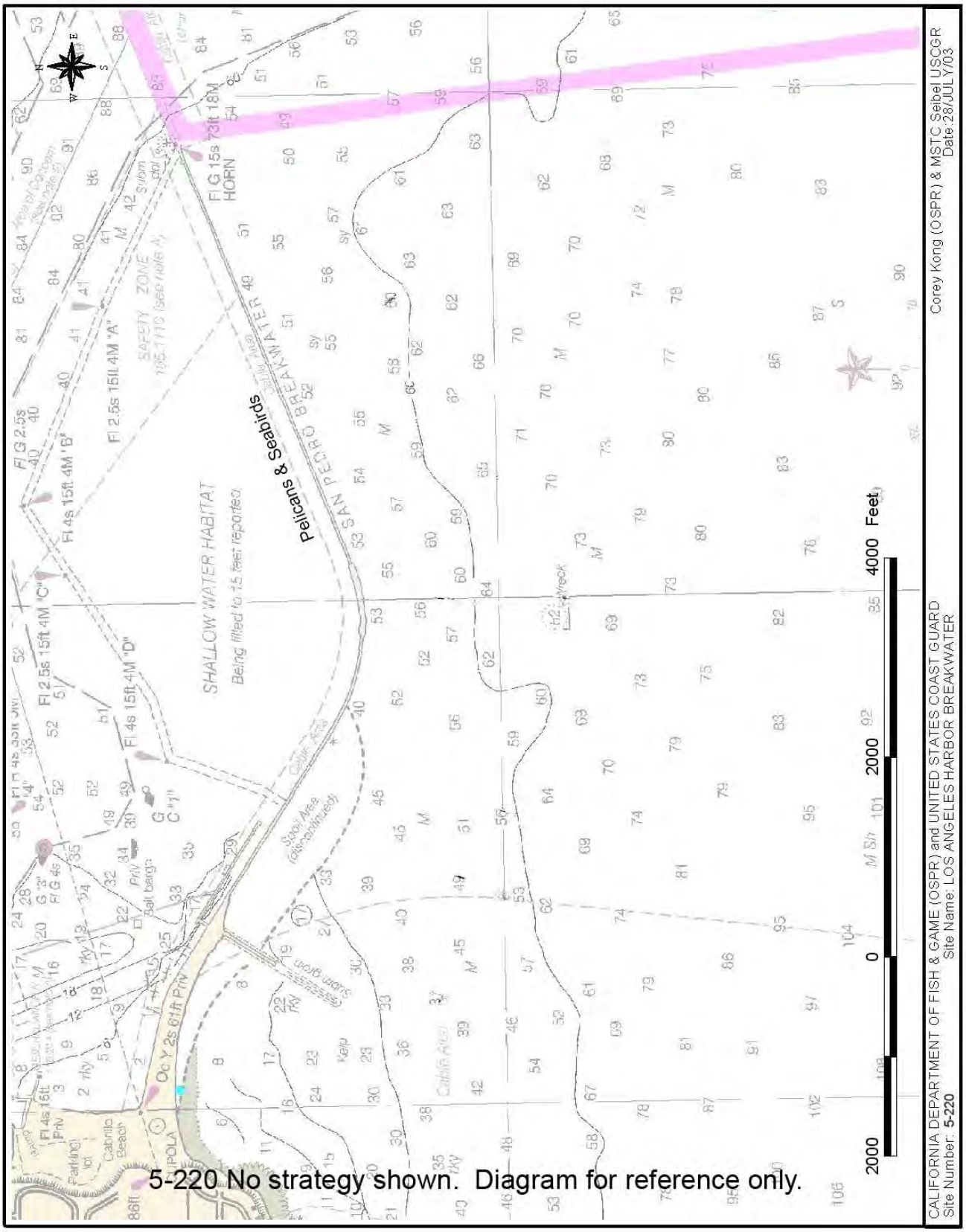
Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

5-220 -A/C Strategy Diagram- Los Angeles Harbor Breakwater 5-220 -A/C



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-230 -A/C Site Summary- Middle Breakwater 5-230 -A/C

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	854 J1	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Long Beach	NOAA Chart:	18751	ACP Division:	LA-G

Last Page Update : 2/15/2011

SITE DESCRIPTION:

This site consists of the entire breakwater marked as the Middle Breakwater on the Los Angeles and Long Beach NOAA Nautical Chart # 18751. This rocky rip rap structure protects the inner portions of Los Angeles and Long Beach Harbor from waves and chop.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - Presence of listed species. Spiny Lobster fishery is October through March (contact the Dept. of Fish and Game for exact fishing season information).

RESOURCES OF PRIMARY CONCERN

Seabird roosting site. During the night, this is a major Brown Pelican roosting site.

California Brown Pelican, terns, gulls, and migratory birds.

California Sea Lion.

Spiny Lobster and finfish.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		NRG Power - Long Beach	(562) 506-2536
O		Port of Long Beach Police (24 hr)	(562) 590-4185
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	Sarah Wilkins Marine Mammals	NOAA/Nat. Mar. Fish. Service	(301) 755-4981

ADDITIONAL SITE SUMMARY COMMENTS:

5-230 -A/C Site Strategy - Middle Breakwater 5-230 -A/C

					Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	854 J1	Decimal Degrees:	(b) (7)	[redacted]
USGS Quad:	Long Beach	NOAA Chart:	18751	ACP Division:	LA-G	

Last Page Update : 2/15/2011

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species roosting habitat.

HAZARDS and RESTRICTIONS:

Watch weather and sea conditions. High energy wave action.

SITE STRATEGIES

Strategy 5-230.1 Objective: Open water containment and recovery and/or the use of alternative response technologies to prevent oil from reaching the breakwater.

This site is difficult to protect. Mechanical shoreline protection techniques are not likely to be effective because of high wave energy and rocky conditions at the site.

a) Recommended response strategy is on-water containment and recovery (e.g towed boom arrays).
b) Pursue feasibility of alternative response technologies (e.g. dispersants and in-situ burning) to reduce the volume of oil reaching the site.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	type and gear	Boom boat	Skiffs punts	Skimmers No	Type	No	Special and	Equipment or kinds	comment	staff deploy	Staff tend
5-230.1														On-Water Recovery/ART		

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launch available at Cabrillo Beach. From Pacific Ave. in San Pedro, go east on Stephen M. White Drive until you enter Cabrillo Beach. Go to the north end of the parking lot.

LAND ACCESS: Access by boat only.

WATER LOGISTICS:
Limitations: depth, obstruction: Heavy boat traffic (all sizes of vessels).

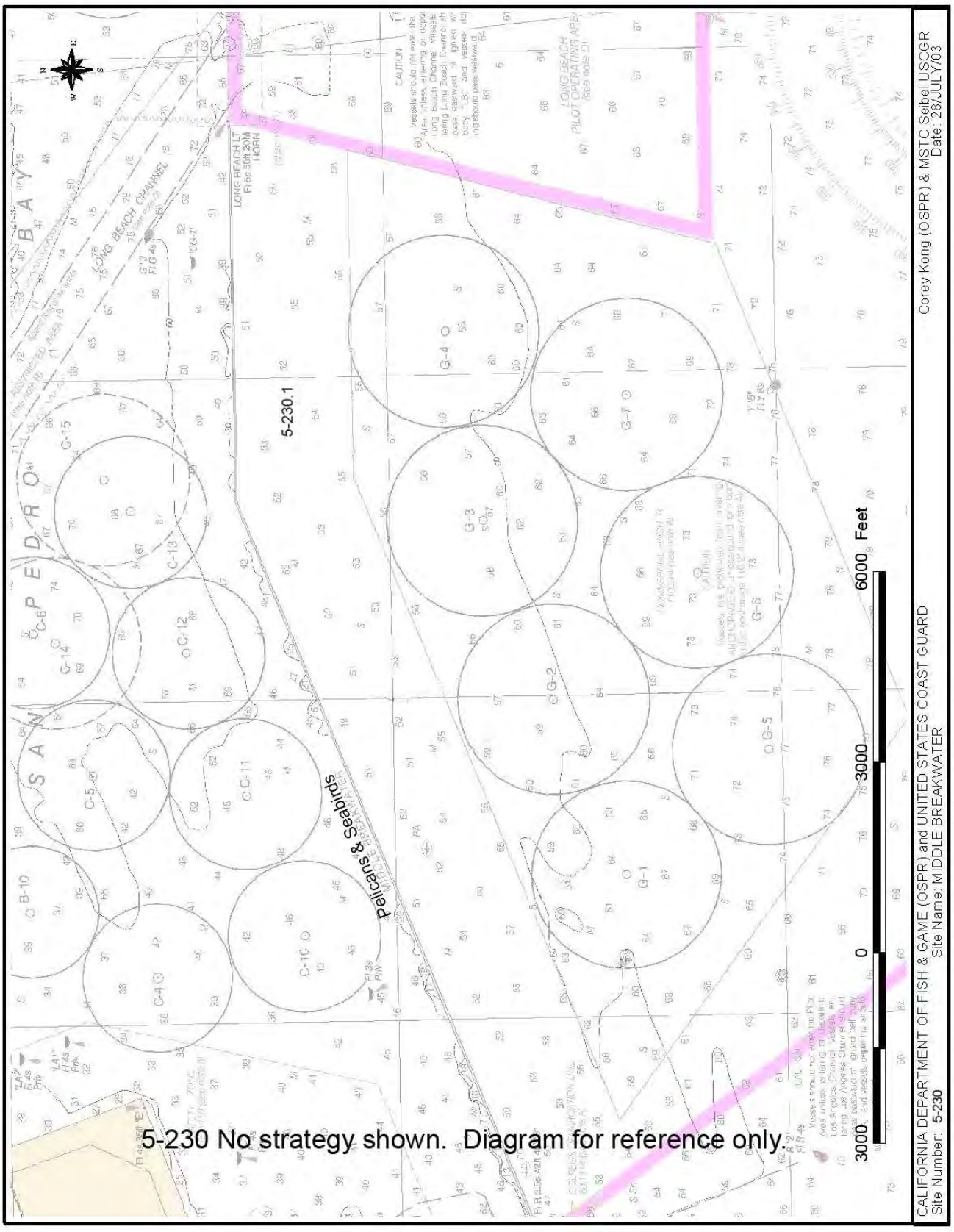
Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

5-230 -A/C Strategy Diagram- Middle Breakwater 5-230 -A/C



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-240 -A/C Site Summary- Long Beach Harbor Breakwater 5-240 -A/C

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	825 H7	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Long Beach	NOAA Chart:	18751	ACP Division:	LA-H

Last Page Update : 2/15/2011

SITE DESCRIPTION:

This site consists of the entire breakwater marked as the Long Beach Breakwater on the Los Angeles and Long Beach NOAA Nautical Chart # 18751. This rocky rip rap structure protects the inner portions of Los Angeles and Long Beach Harbor from waves and chop.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - Presence of listed species. Spiny Lobster fishery is October through March (contact the Dept. of Fish and Game for exact fishing season information).

RESOURCES OF PRIMARY CONCERN

Seabird roosting site. During the night, this is a major Brown Pelican roosting site.

California Brown Pelican, terns, gulls, and migratory birds.

California Sea Lion.

Spiny Lobster and finfish.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		NRG Power - Long Beach	(562) 506-2536
O		Port of Long Beach Police (24 hr)	(562) 590-4185
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8am - 5pm)	(760) 431-9440
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	Sarah Wilkins Marine Mammals	NOAA/Nat. Mar. Fish. Service	(301) 755-4981

ADDITIONAL SITE SUMMARY COMMENTS:

5-240 -A/C Site Strategy - Long Beach Harbor Breakwater 5-240 -A/C

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	825 H7	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Long Beach	NOAA Chart:	18751	ACP Division:	LA-H

Last Page Update : 2/15/2011

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species roosting habitat.

HAZARDS and RESTRICTIONS:

Watch weather and sea conditions. High energy wave action.

SITE STRATEGIES

Strategy 5-240.1 Objective: Open water containment and recovery and/or the use of alternative response technologies to prevent oil from reaching the breakwater.

This site is difficult to protect. Mechanical shoreline protection techniques are not likely to be effective because of high wave energy and rocky conditions at the site.

a) Recommended response strategy is on-water containment and recovery (e.g towed boom arrays).
b) Pursue feasibility of alternative response technologies (e.g. dispersants and in-situ burning) to reduce the volume of oil reaching the site.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	type and gear	Boom boat	Skiffs punts	Skimmers No	Type	No	Special and	Equipment or kinds	comment	staff deploy	Staff tend
5-240.1														On-Water Recovery/ART		

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launching at 590 Queensway Drive. From Ocean Blvd. in Long Beach, go south on Queensway Bay and then west on Queensway Dr.

LAND ACCESS: Access by boat only.

WATER LOGISTICS: Heavy boat traffic (all sizes of vessels).
Limitations: depth, obstruction

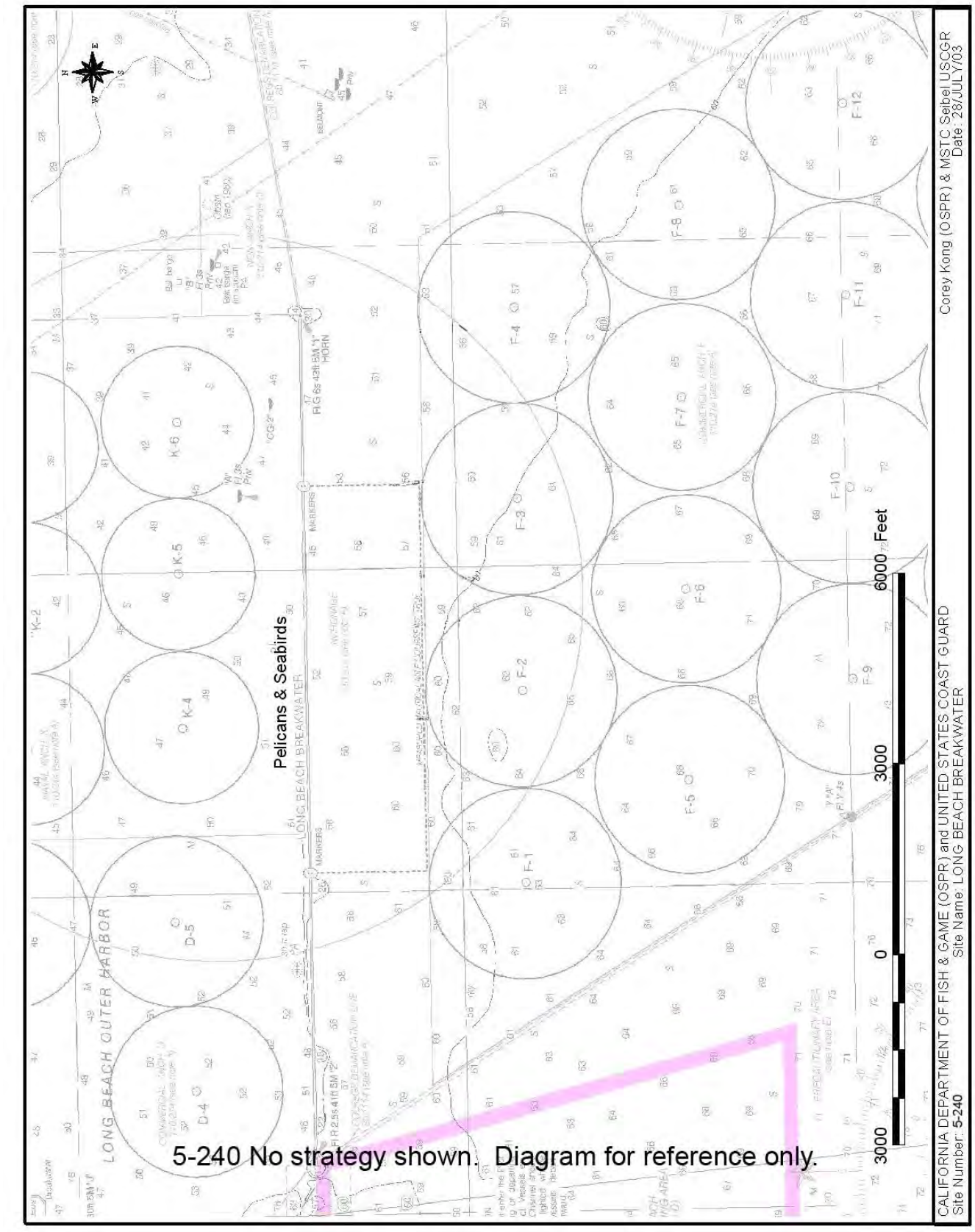
Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

5-240 -A/C Strategy Diagram- Long Beach Harbor Breakwater 5-240 -A/C



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-250 -A Site Summary- Golden Shore Marine Reserve 5-250 -A

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	825 C1	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Long Beach	NOAA Chart:	18749	ACP Division:	LA-H

Last Page Update : 2/15/2011

SITE DESCRIPTION:

This tidal saltmarsh was constructed as mitigation for impacts from the Queensway Bay project. The area is primarily a mud flat during low tides with fringing vegetation. During the highest tides, a major portion of the wetland is flooded.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - All year.

RESOURCES OF PRIMARY CONCERN

Coastal lagoon and wetlands complex with resting and feeding seabirds, shorebirds, and waterfowl.

California Brown Pelican, California Least Tern (Federal and State endangered species), Belding's Savannah Sparrow (State endangered species), waterfowl, and shorebirds.

Juvenile California Halibut and other finfish species.

Intertidal mudflat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		Long Beach Fire Dept. (24 hr)	(562) 570-9400
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052

ADDITIONAL SITE SUMMARY COMMENTS:

5-250 -A Site Strategy - Golden Shore Marine Reserve 5-250 -A

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	825 C1	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Long Beach	NOAA Chart:	18749	ACP Division:	LA-H

CONCERNS and ADVICE to RESPONDERS:

Last Page Update : 4/21/2005

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-250.1 Objective: Exclusion of oil entry to wetland.

Boom to prevent oil entry to inlet. Support with sorbent boom inside harbor boom.

Strategy 5-250.2 Objective: Exclusion of oil entry to wetland.

Cross channel deflection boom to boat ramp on north side of channel.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
5-250.1	200	0	0	200	0		0	0	0	0		2	
5-250.2	2000	0	0	0	4	Danforth 40 lb	1	0	0	0		4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

To site: from Ocean Blvd. in Long Beach, go south on Golden Shore to the parking lot adjacent to wetland. To boat launch: from Ocean Blvd., go south on Queensway Bay and then west to 590 Queensway Dr.

LAND ACCESS:

WATER LOGISTICS:

Limitations: depth, obstruction — Shallow water and strong currents.

Launching, Loading, Docking and Services Available: — All services available.

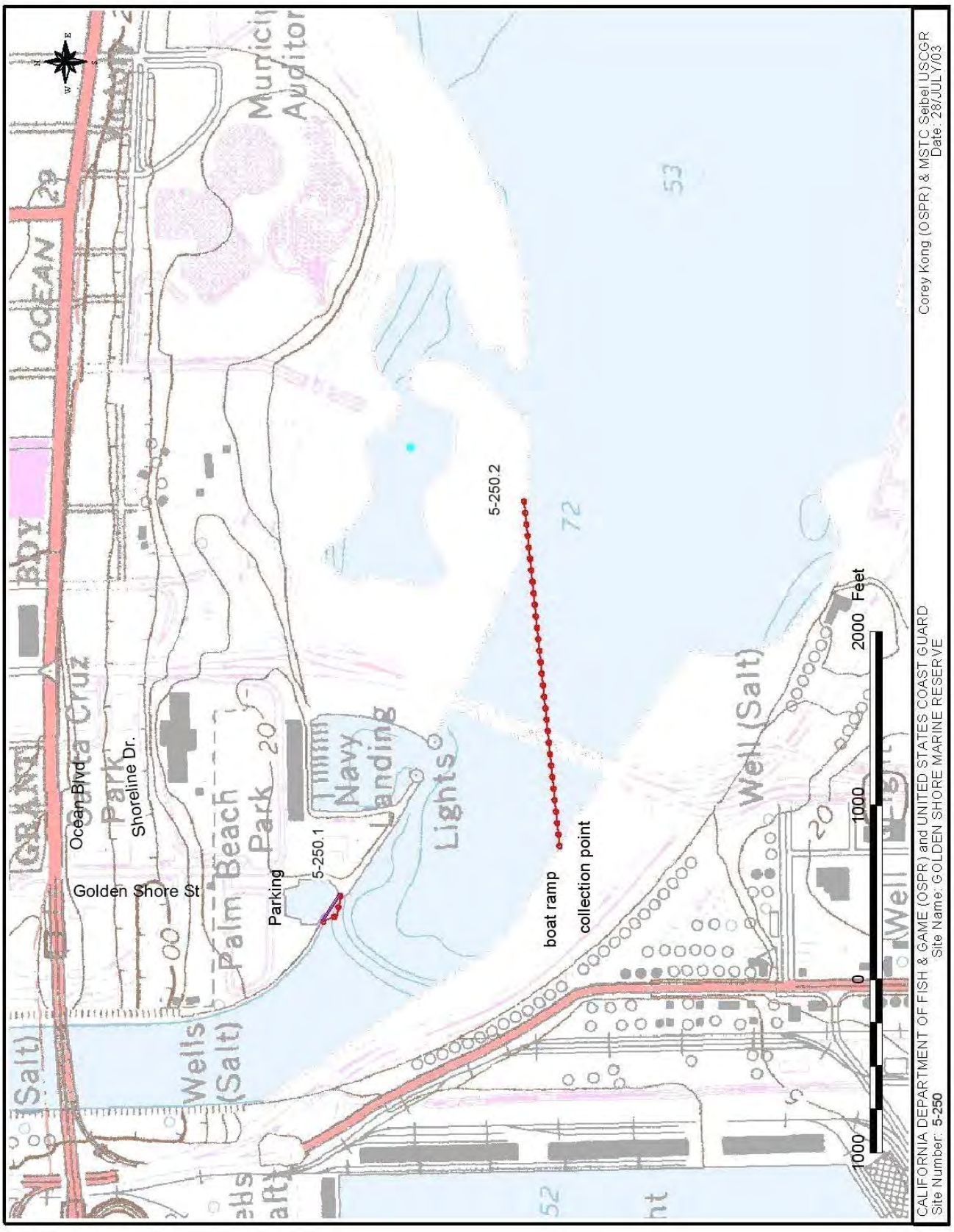
FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

The site has a permanent exclusion boom at the opening to the wetland.

5-250 -A Strategy Diagram- Golden Shore Marine Reserve 5-250 -A



5-260 -A Site Summary- Alamitos Bay/Los Cerritos Wetlands 5-260 -A

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	826 D4	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Seal Beach	NOAA Chart:	18749	ACP Division:	LA-H

Last Page Update : 2/15/2011

SITE DESCRIPTION:

Developed coastal embayment. Many marinas/boat slips but still contains a large area of sand and mud shoreline, particularly inside seawall and deep in back bay.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - All year.

RESOURCES OF PRIMARY CONCERN

Coastal lagoon and wetlands complex.

California Brown Pelican, shorebirds, seabirds, and waterfowl.

Juvenile California Halibut and other finfish species. Green Sea Turtle.

Intertidal mudflat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		LA Dept. of Water & Power (24 hr)	(562) 431-2578
O		AES Power - Long Beach	(562) 493-7803
O		Long Beach Fire Dept. (24 hr)	(562) 570-9400
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8am - 5pm)	(760) 431-9440
O		Long Beach Lifeguards (8am - 6pm)	(562) 570-1360
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052

ADDITIONAL SITE SUMMARY COMMENTS:

5-260 -A Site Strategy - Alamitos Bay/Los Cerritos Wetlands 5-260 -A

				Latitude N	Longitude W
County:	Los Angeles Co.	Thomas Guide Location:	826 D4	Decimal Degrees:	(b) (7) [redacted]
USGS Quad:	Seal Beach	NOAA Chart:	18749	ACP Division:	LA-H

Last Page Update : 3/21/2011

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species and wetland habitat.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-260.1 Objective: Exclusion of oil entry to Alamitos Bay.

Boom to prevent oil entry to bay. Harbor boom (800') stored at Alamitos Bay Yacht Club. Anchor points on both sides of channel.

Strategy 5-260.2 Objective: Exclusion of oil entry to Steamshovel Slough (Los Cerritos Weltand).

Use this strategy if oil breaches boom strategy 5-260.1. This strategy can also be used for spills originating in Alamitos Bay or upstream of the Los Cerritos Wetland. Boom to prevent oil entry into Steamshovel Slough. Anchor points on both sides of channel on banks.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
5-260.1	800	0	0	0	0		1	0			0	2	
5-260.2	360	0	0	0	0		1	0			0	2	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launch available at Alamitos Bay. From PCH in Long Beach, go west on Second St. Boat launch is at 6201 E. Second St.

LAND ACCESS: Parking lot at 72nd Pl. and Ocean Blvd.

WATER LOGISTICS:
Limitations: depth, obstruction: Strong currents. Heavy small boat traffic.

Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

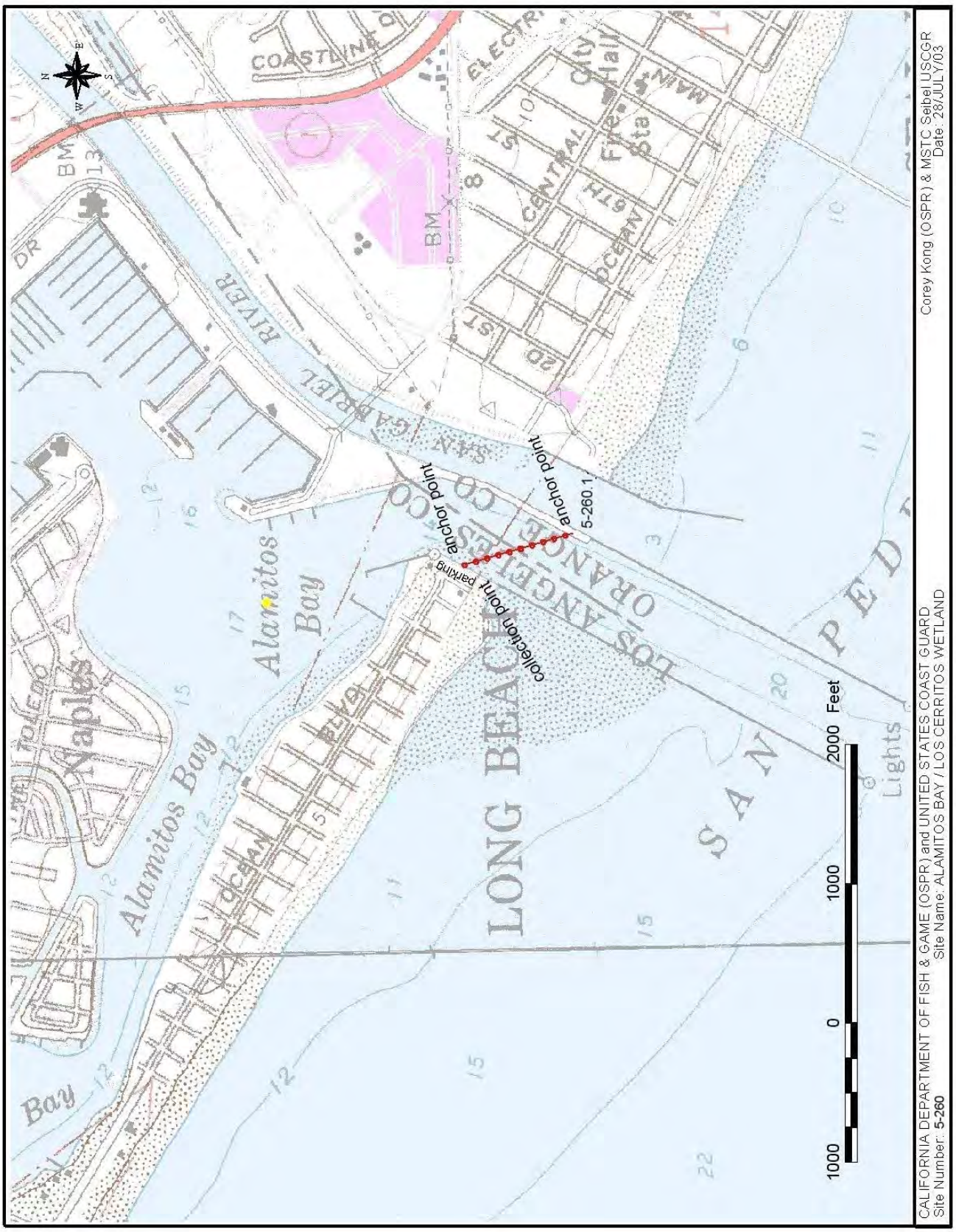
Pre-staged booms available adjacent to the Alamitos Bay Yacht Club at Ocean Blvd. and 72nd Place. There is parking and staging at public parking lot.

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

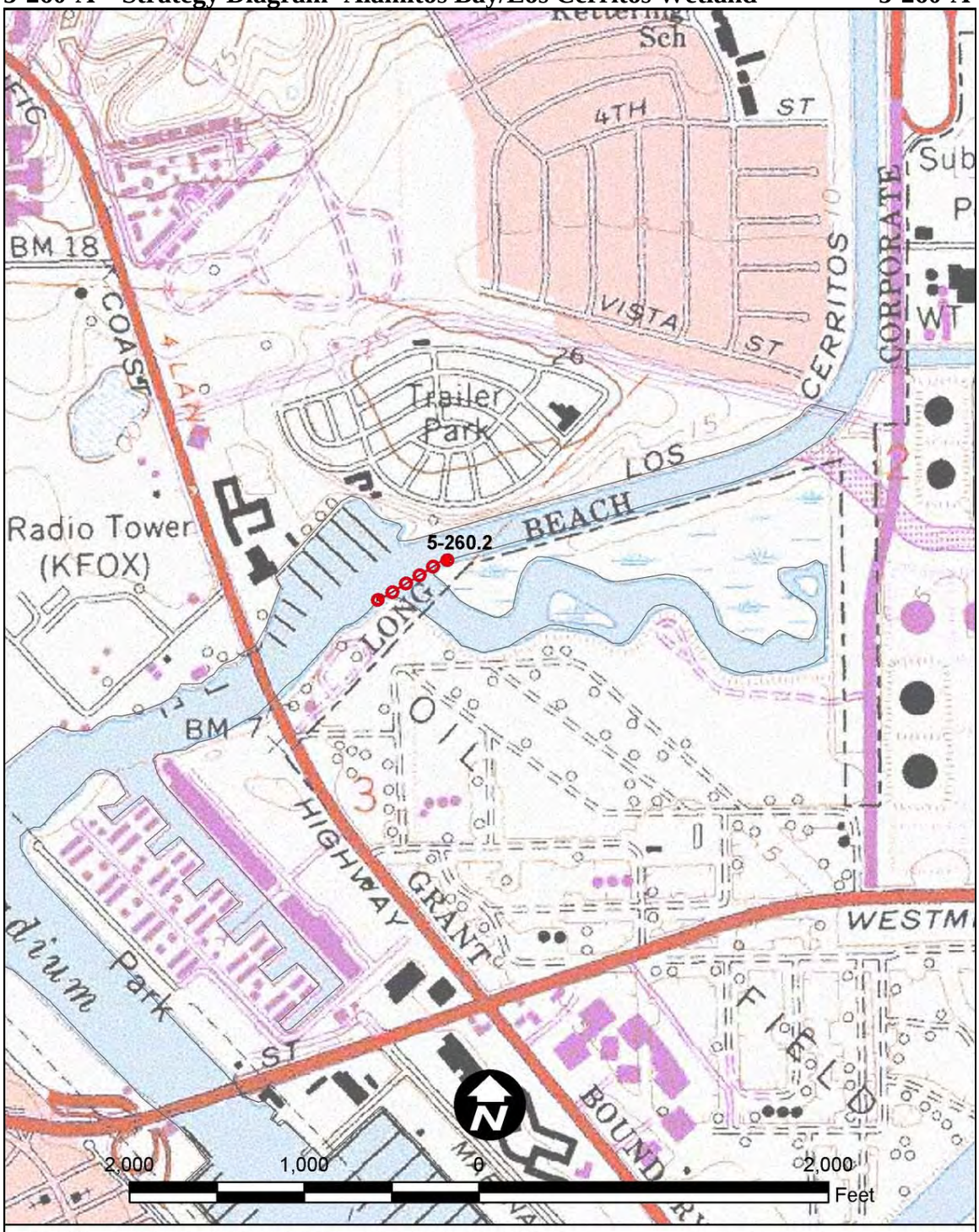
800 feet of 20" boom is pre-staged in storage containers located at the Alamitos Bay Yacht Club to be used to close off the channel. The boom can be deployed by Long Beach Lifeguards. There are several locations along Marina Dr.and Ocean Blvd. that have access to the beach.

5-260 -A Strategy Diagram- Alamitos Bay/Los Cerritos Wetlands 5-260 -A



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-260-A Strategy Diagram- Alamitos Bay/Los Cerritos Wetland 5-260-A



CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site: 5-260A Site Name: Los Cerritos Wetlands

Corey Kong (OSPR) & Greg Ewing (OSPR)
Date: Feb. 22, 2011

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

Index Map – Orange County Environmentally Sensitive Sites

5-310 -A Site Summary- Anaheim Bay (Seal Beach National Wildlife Refuge) 5-310 -A

County: **Orange Co.**
USGS Quad: **Seal Beach**
Thomas Guide Location: **826 G5**
NOAA Chart: **18749**
Latitude N: (b) (7) (5) (b)
Longitude W: [redacted]
Decimal Degrees:
ACP Division: **OR-A**
Last Page Update : 2/15/2011

SITE DESCRIPTION:
One of the most extensive and valuable wetlands in Orange County. Coastal lagoon, with extensive wetlands and marsh. Opening of bay has been channelized and lined with riprap, but inside bay past the Hwy1/Pacific Coast Highway bridge are extensive wetlands.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - All year.

RESOURCES OF PRIMARY CONCERN

Coastal lagoon and wetlands complex.

California Least Tern (Federal and State endangered species), Snowy Plover (foraging area) (Federal endangered species), California Brown Pelican, Light-footed Clapper Rail (Federal and State endangered species), Peregrine Falcon, Belding's Savannah Sparrow (State endangered species), Black Skimmer, waterfowl, shorebirds, and seabirds.

Juvenile finfish - nursery grounds.

Intertidal mudflat.

Salt Marsh Bird's Beak (Federal and State endangered species) and Eel Grass.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
T		Seal Beach National Wildlife Refuge	(562) 598-1024
O		Orange County Harbor Patrol (24 hr)	(949) 723-1002
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
TE		USN Dispatch - NWSSB (after hours)	(562) 626-7229
TE		U.S. Navy Environmental Office (M-F 730am-4pm)	(562) 626-7776
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052

ADDITIONAL SITE SUMMARY COMMENTS:

5-310 -A Site Strategy - Anaheim Bay (Seal Beach National Wildlife Refuge) 5-310 -A

County: **Orange Co.**
USGS Quad: **Seal Beach**
Thomas Guide Location: **826 G5**
NOAA Chart: **18749**
Latitude N: (b) (7) (5) (b)
Longitude W: [redacted]
ACP Division: **OR-A**

Last Page Update : 4/21/2005

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

The Navy may impose security restrictions in the event of a spill. This could effectively close off a portion of Anaheim Bay and deployment of the preferred strategies. Strategies 5-310.1, 5-310.2, and 5-310.3 could be delayed until the Navy reopens this area to responders. If the Navy closes this area, alternative strategies 5-310.4, 5-310.5, and 5-310.6 will have to be deployed. Watch weather and sea conditions.

SITE STRATEGIES

Strategy 5-310.1 Objective: Exclusion of oil entry to Seal Beach National Wildlife Refuge.

Use deflection boom to deflect oil to the east beach fronts.

Strategy 5-310.2 Objective: Exclusion of oil entry to Seal Beach National Wildlife Refuge.

Use deflection boom at entrances to deflect oil to the north and south beach fronts.

Strategy 5-310.3 Objective: Exclusion of oil entry to Seal Beach National Wildlife Refuge.

Use deflection boom at entrances to bay to deflect oil to collection points.

Strategy 5-310.4 Objective: Navy Security Alternative. Exclusion of oil entry to Seal Beach National Wildlife Refuge.

Use this strategy if the origin of the spill is offshore. Towed boom array using OSRO vessels and vessels of opportunity (each boom 660' to 750') as necessary.

Strategy 5-310.5 Objective: Navy Security Alternative. Exclusion of oil entry to Seal Beach National Wildlife Refuge.

Use this strategy if the origin of the spill is from the secure area. Use a single stretch of 24" boom from the northeast corner of the PCH bridge to the small beach/mudflat next to the Simple Green building.

Strategy 5-310.6 Objective: Navy Security Alternative. Exclusion of oil entry to Seal Beach National Wildlife Refuge.

Use this strategy if the origin of the spill is from the secure area. Use a single stretch of 18" boom to line the inlets to Anaheim Bay.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
5-310.1	1500	0	0	0	4	Danforth 40 lb	1	0			0		4	
5-310.2	3100	0	0	0	5	Danforth 40 lb	1	0			0		4	
5-310.3	750	0	0	0	0		1	0			0		4	
5-310.4	0	0	1500 Ocea	0	0		4	0			0		4	
5-310.5	5000	0	0	0	8	Danforth 40 lb	2	2			2	Stakes	4	
5-310.6	0	6000	0	0	8	Danforth 40 lb	2	2			8	Stakes	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launches available in Huntington Harbor. From Bolsa Chica St. in Huntington Beach, go west on Edinger Ave. until it ends at Sunrise Aquatic Park. Additional launching at PCH and Warner Ave. (next to Huntington Beach Fire Station No. 7).

LAND ACCESS: Land access on the Seal Beach Naval Weapons Station (SBNWS).

WATER LOGISTICS:
Limitations: depth, obstruction: Shallow water and strong currents. Heavy small boat traffic.
Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

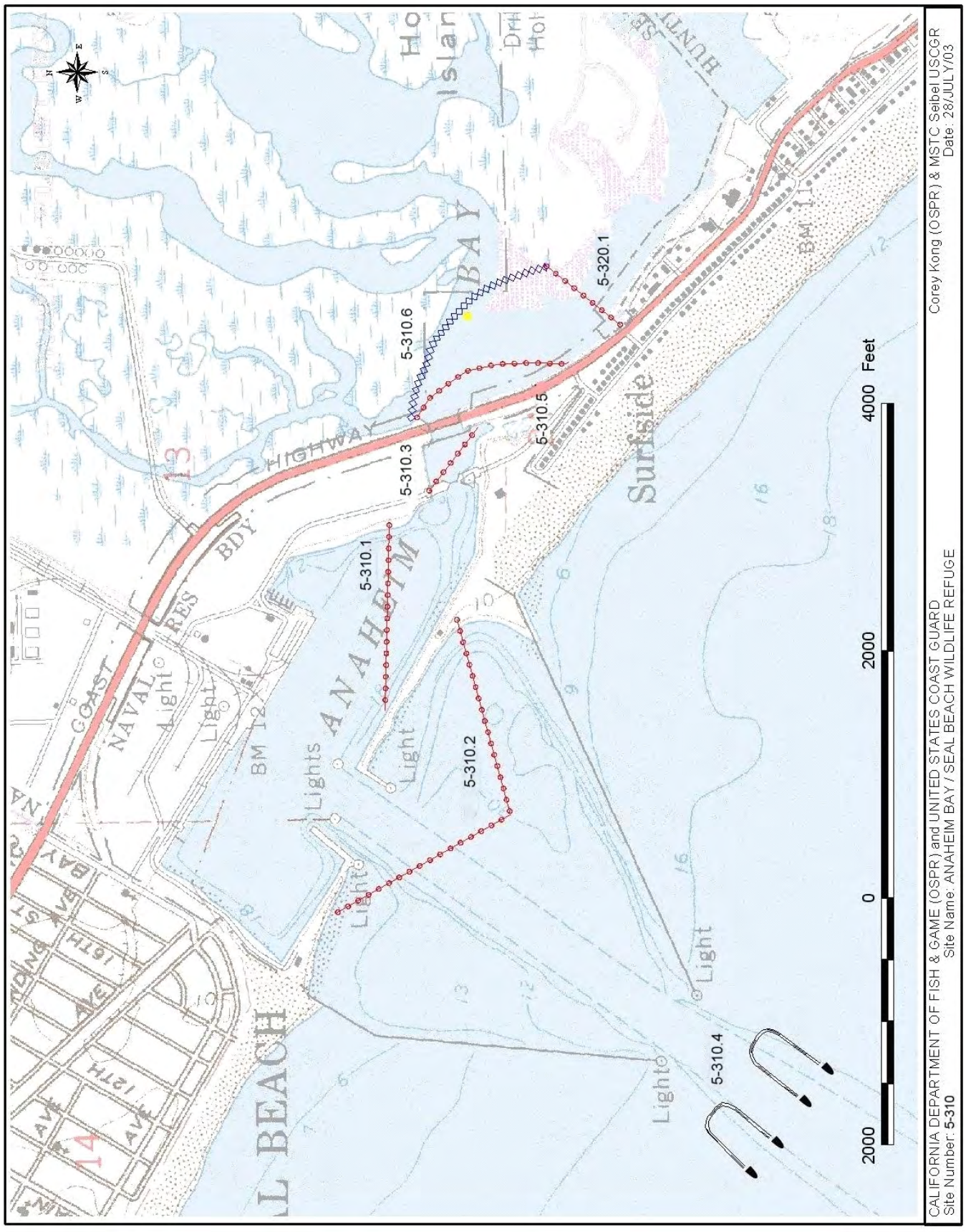
Marine Spill Response Corporation has pre-staged 8,950 ft of boom located throughout the SBNWS. Both boat launch locations have adequate space for parking and staging.

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

Contact the Commanding Officer (CO) at the SBNWS for deployment of pre-staged boom across the channel in the event of impact. Primary boom placement is under the control of the SBNWS CO.

5-310 -A Strategy Diagram- Anaheim Bay (Seal Beach National Wildlife Refuge) 5-310 -A



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-320 -A Site Summary- Inner Bolsa Chica 5-320 -A

County: **Orange Co.**
USGS Quad: **Seal Beach**
Thomas Guide Location: **857 B1**
NOAA Chart: **18746**
Latitude N Longitude W
Decimal Degrees: (b) (7) [redacted]
(5) (b)
ACP Division: **OR-A**
Last Page Update : 2/15/2011

SITE DESCRIPTION:
Coastal lagoon and wetlands complex (actually an extension of Anaheim Bay). Extensive oil field production at the southern portion of the wetland. Currently no direct connection to the ocean.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - All year.

RESOURCES OF PRIMARY CONCERN

Coastal lagoon and wetlands complex (actually an extension of Anaheim Bay).

California Least Tern (Federal and State endangered species), Snowy Plover (nesting inside the non-intertidal area, foraging at the beach) (Federal endangered species), California Brown Pelican, Peregrine Falcon (State endangered species), Belding's Savannah Sparrow (State endangered species), Black Skimmer, seabirds, shorebirds, and waterfowl.

Salt Marsh Harvest Mouse (Federal and State endangered species).

Juvenile finfish.

Intertidal mudflat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		Orange County Harbor Patrol (24 hr)	(949) 723-1002
O		Bolsa Chica Conservancy	(714) 846-1114
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
O		Orange County Sheriffs Dept. (24 hr)	(714) 288-6742
O		Huntington Beach Lifeguards	(714) 536-2581
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
O		Huntington Beach Police Dept. (24 hr)	(714) 536-5333
T		Seal Beach National Wildlife Refuge	(562) 598-1024
TE		USN Dispatch - NWSSB (after hours)	(562) 626-7229
TE		U.S. Navy Environmental Office (M-F 730am-4pm)	(562) 626-7776
O		Huntington Beach Fire Dept. (24 hr)	(714) 536-2501
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	Kelly O'Reilly DFG Reserve Manager	Calif. Dept. of Fish and Game Reg 5	(714) 840-1959

ADDITIONAL SITE SUMMARY COMMENTS:

5-320 -A Site Strategy - Inner Bolsa Chica 5-320 -A

County: **Orange Co.**
USGS Quad: **Seal Beach**
Thomas Guide Location: **857 B1**
NOAA Chart: **18746**
ACP Division: **OR-A**
Latitude N: (b) (7) (5) (b)
Longitude W: [redacted]

Last Page Update : 4/21/2005

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-320.1 Objective: Exclusion of oil entry to wetland.

Deflection booms in Huntington Harbor. Collection using skimmers and vacuum trucks.

Strategy 5-320.2 Objective: Exclusion of oil entry to wetland.

Exclusion boom(s) at Warner Ave. bridge.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special No	Special Equipment or comment and kinds	staff deploy	Staff tend
5-320.1	2000				4	Danforth 40 lb	1	0			0		4	
5-320.2	300				0		1	0			0		4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Boat launches available in Huntington Harbor. From Bolsa Chica St. in Huntington Beach, go west on Edinger Ave. until it ends at Sunrise Aquatic Park. Additional launching at PCH and Warner Ave. (next to Huntington Beach Fire Station No. 7).

LAND ACCESS: Parking lot for Ecological Reserve at PCH and Warner Ave.

WATER LOGISTICS:
Limitations: depth, obstruction: Shallow water and strong currents.
Launching, Loading, Docking and Services Available: All services available.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

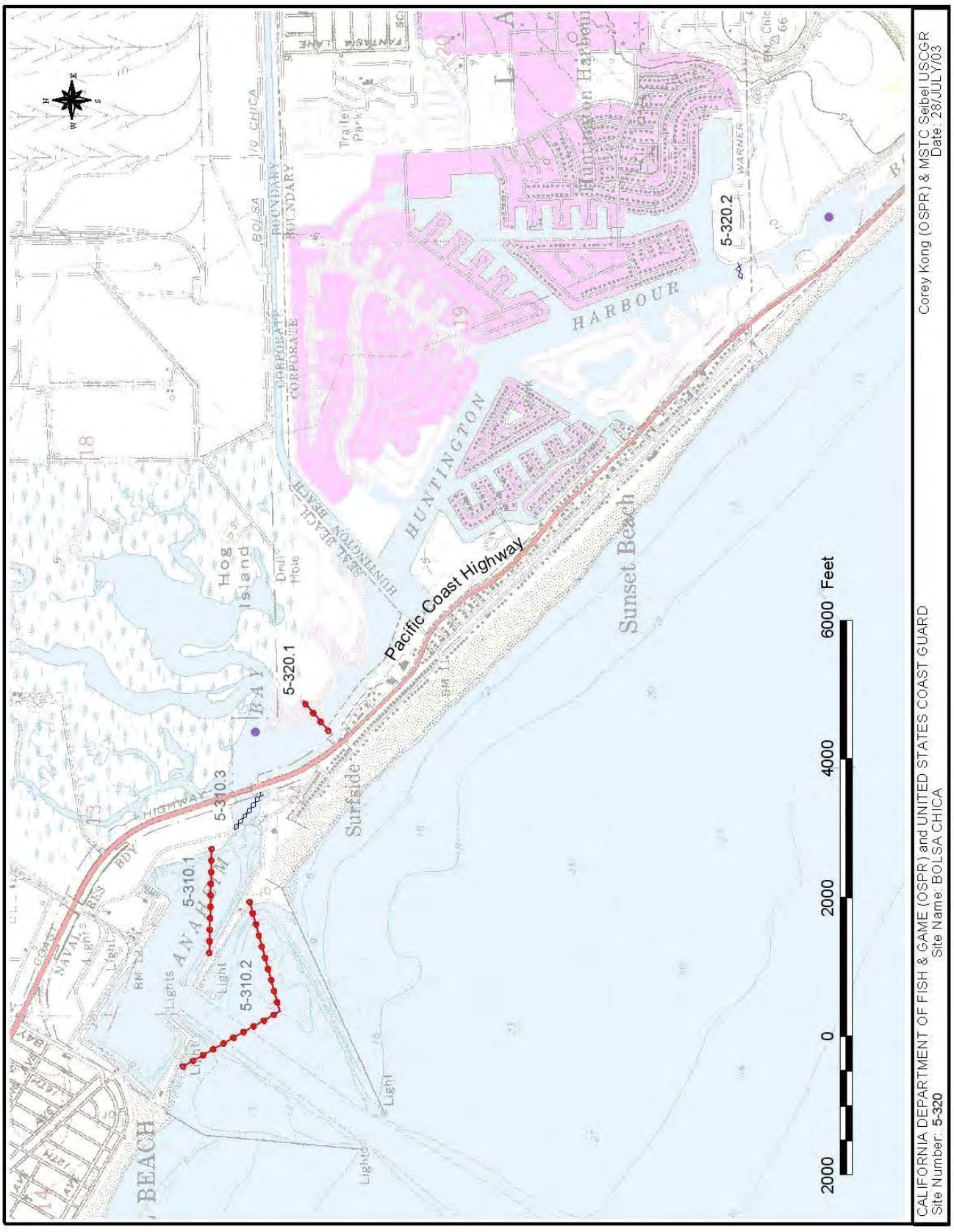
Pre-staged booms at Naval Weapons Station and Huntington Harbor are available. Also see site sheet for Anaheim bay; an additional 2000 feet of harbor boom will be needed. Both boat launching locations have adequate space for parking and staging. Additional parking and staging at the Bolsa Chica Ecological Reserve Interpretive Center at 3842 Warner Ave.

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

If the origin of the spill is offshore, strategies for site 5-310 will have to be deployed also.

5-320 -A Strategy Diagram- Inner Bolsa Chica 5-320 -A



5-325 -A Site Summary- Bolsa Chica - Restored Wetlands 5-325 -A

County: **Orange Co.**
USGS Quad: **Seal Beach**
Thomas Guide Location: **857 E5**
NOAA Chart: **18746**
Latitude N / Longitude W
Decimal Degrees: (b) (7) [redacted]
(5) (b)
ACP Division: **OR-A**
Last Page Update : 1/18/2011

SITE DESCRIPTION:
Restored (2006) coastal lagoon and wetlands complex. Completely surrounded by a levee with road. Extensive oil field production at the eastern portion of the wetland. There is no connection by water to the Inner Bolsa Chica (5-320A) sensitive site.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - All year. Western Levee Road will have limited access during nesting season (April - September) and will require biolgical consultation before access during this period.

RESOURCES OF PRIMARY CONCERN

Coastal lagoon and wetlands complex.

California Least Tern (Federal and State endangered species), Snowy Plover (Federal endangered species) (both species nesting at man-made nesting islands), California Brown Pelican, Belding's Savannah Sparrow (State endangered species), seabirds, shorebirds, and waterfowl.

40 - 60 Species of finfish are expected to utilize basin.

Intertidal mudflat.

Pickleweed, Cord grass, Eel Grass

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
T		U.S. Fish and Wildlife Service (8am - 5pm)	(760) 431-9440
O		Huntington Beach Police Dept. (24 hr)	(714) 536-5333
O		Huntington Beach Fire Dept. (24 hr)	(714) 536-2501
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
E	Environmental Advisor	Aera Energy	(714) 969-4396
E	Safety Advisor	Aera Energy	(714) 969-3272
E	Emergency Contact	Aera Energy (24 hr)	(800) 247-5977
T		Calif. Dept. of Parks and Recreation (Emergencies)	(916) 358-1300
E	Response Planner	Aera Energy	(661) 978-5652
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	Kelly O'Reilly DFG Reserve Manager	Calif. Dept. of Fish and Game Reg 5	(714) 840-1959
T	Sarah Wilkins Marine Mammals	NOAA/Nat. Mar. Fish. Service	(301) 755-4981

ADDITIONAL SITE SUMMARY COMMENTS:

5-325 -A Site Strategy - Bolsa Chica - Restored Wetlands 5-325 -A

County: **Orange Co.**
USGS Quad: **Seal Beach**
Thomas Guide Location: **857 E5**
NOAA Chart: **18746**
Latitude N / Longitude W
Decimal Degrees: (b) (7) (5) (b)
ACP Division: **OR-A**

CONCERNS and ADVICE to RESPONDERS:

Last Page Update : 1/18/2011

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation and mudflats. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

Watch weather and sea conditions such as high energy wave action at the wetland entrance. Watch for shallow sandbars at the wetland entrance, entry channel to the east of the inner bridge, and in the basin near the launch ramp. Tidal currents can be strong and dangerous in the entry channel and throughout the wetland. Loose rip-rap may be a hazard for shoreline activities.

SITE STRATEGIES

Strategy 5-325.1 Objective: Offshore containment and recovery activities to minimize or avert oil from impacting shoreline habitats and wildlife.

a) Recommended primary response strategy is on-water containment and recovery before oil reaches inlet. b Pursue feasibility of alternative response technologies (e.g. dispersants and in-situ burning) before oil reaches the inlet.

Strategy 5-325.2 Objective: Deflection booming to prevent further intrusion of oil into wetland.

This strategy should only be used when there is enough water to safely deploy. It should be deployed only at higher tides and when there are no sandbars. Use deflection boom as per diagram to deflect oil to collection area at northeast corner of boom.

Strategy 5-325.3 Objective: Deflection booming to prevent further intrusion of oil into wetland.

Use deflection boom as per diagram to deflect oil to collection area at northeast corner of boom.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	type and gear	Boom boat	Skiffs punts	Skimmers No	Type	Special Equipment or comment No	and kinds	staff deploy	Staff tend
5-325.1	0	0	0 Ocea	0	0		0	0			0	ART & On-water containment and recovery	0	
5-325.2	0	0	2400 18"	0	4	Danforth 40 lb	0	1			2	each Stakes or 2500 lb shore anchors	4	
5-325.3	0	0	1700 18"	0	3	Danforth 40 lb	0	1			2	each Stakes or 2500 lb shore anchors	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From Pacific Coast Highway in Hutington Beach, access through Bolsa Chica State Beach or access through Aera Energy one block east of Pacific Coast Highway off Seapoint Dr.

LAND ACCESS: Parking lot at Bolsa Chica State Beach for oceanside of inlet. Access through Aera Energy for tidal basin side of the inlet. Contact Aera.

WATER LOGISTICS: Limitations: depth, obstruction — Shallow water and strong currents.

Launching, Loading, Docking and Services Available: Boat launch is available on the north side of the Oil Service Bridge. There are no docks. Fuel is available at nearby service stations north and south on Pacific Coast Highway.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

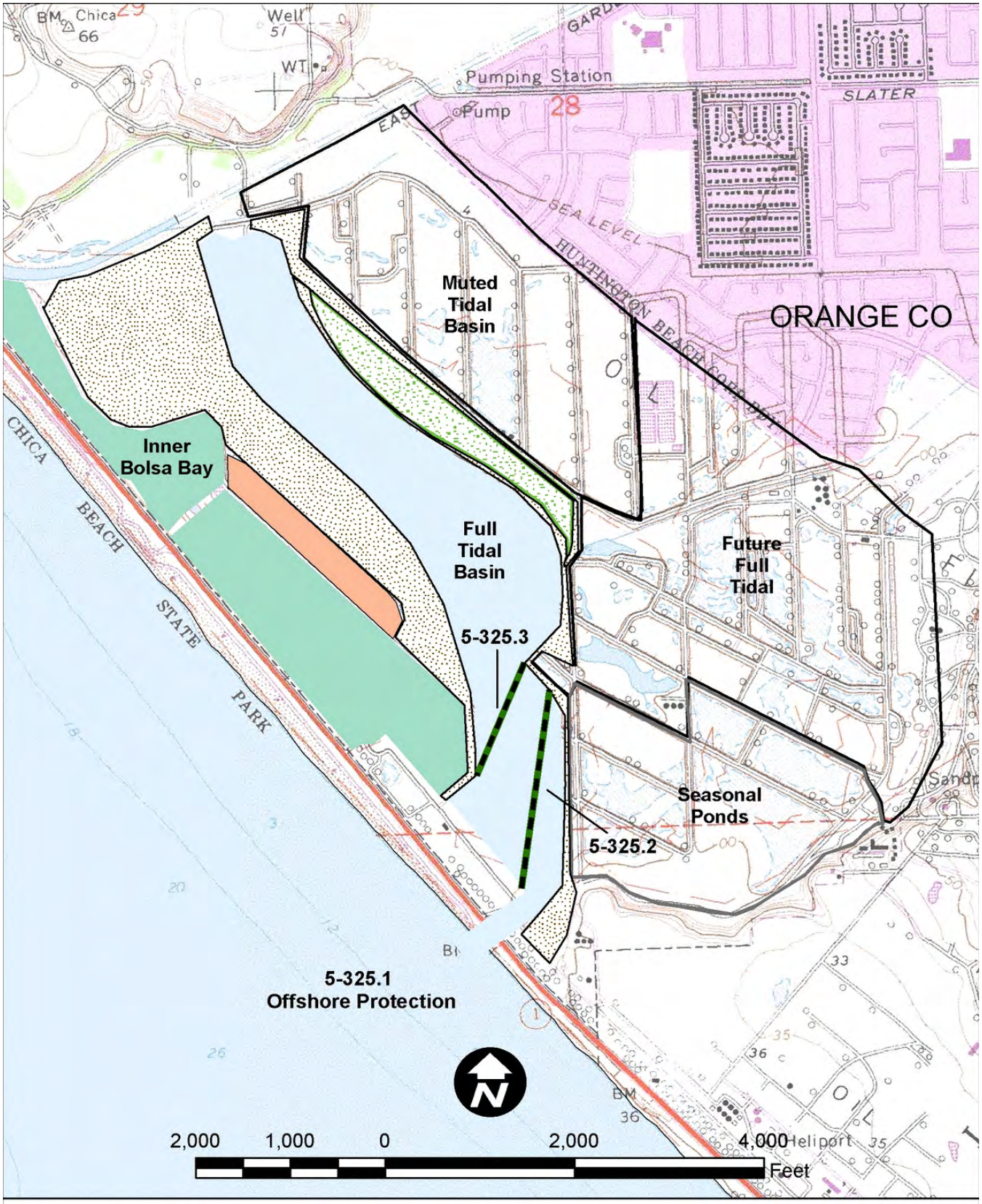
Pre-staged booms stored in containers on the north side of the oil service bridge. This boom was originally purchased for spill response during the construction phase and should not be the first choice for the above strategies. It is in metric units and is not easily deployed since it is not on trailers. Contact the DFG Reserve Manager for use of this boom.

COMMUNICATIONS PROBLEMS: No obstructions or limitations to cell phone or radio usage in the area.

ADDITIONAL OPERATIONAL COMMENTS:

As the bottom profile and currents are ever-changing in the new wetland, other options for additional protection could be considered such as berming the mouth with sand and fast water booming techniques. Additionally, Aera Energy's Bolsa Chica Tactical Response Manual has protection strategies for a spill from the surrounding oil field which could also be beneficial for an offshore spill.

5-325 -A Strategy Diagram- Bolsa Chica - Restored Wetlands 5-325 -A



CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site: 5-325 Site Name: Bolsa Chica Restored Wetland

Corey Kong (OSPR) & Greg Ewing (OSPR)
Date: Feb. 24, 2011

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-330 -A Site Summary- Talbert Marsh 5-330 -A

County: **Orange Co.**
USGS Quad: **Newport Beach**
Thomas Guide Location: **888 D5**
NOAA Chart: **18746**
Latitude N / Longitude W
Decimal Degrees: (b) (7) (5) (b)
ACP Division: **OR-B**
Last Page Update : 2/15/2011

SITE DESCRIPTION:
Coastal lagoon and wetlands complex connected to the ocean by a riprap-lined channel. There is currently no direct connection to the Santa Ana River.

SEASONAL and SPECIAL RESOURCE CONCERNS

Rank A - April to September and when listed species are present; California Least Terns use this area during the summer months. Migratory birds use this area during the winter months.

RESOURCES OF PRIMARY CONCERN

Coastal lagoon and wetlands complex adjacent to California Least Tern nesting site.

California Least Tern (nesting inside and outside fenced area north of the Santa Ana River) (Federal and State endangered species), California Brown Pelican, Belding's Savannah Sparrow (State endangered species) shorebirds, and waterfowl (migratory).

Intertidal mudflat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		AES Power	(714) 374-1401
O		Huntington Beach Police Dept. (24 hr)	(714) 536-5333
O		Huntington Beach Fire Dept. (24 hr)	(714) 536-2501
O		Huntington Beach Lifeguards	(714) 536-2581
O		Orange County Sheriffs Dept. (24 hr)	(714) 288-6742
T		Calif. Dept. of Parks and Recreation (Emergencies)	(916) 358-1300
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	Ellen Farout-Daniels	California Coastal Commission	(415) 904-5285

ADDITIONAL SITE SUMMARY COMMENTS:

5-330 -A Site Strategy - Talbert Marsh 5-330 -A

County: **Orange Co.**
USGS Quad: **Newport Beach**
Thomas Guide Location: **888 D5**
NOAA Chart: **18746**
Latitude N Decimal Degrees: (b) (7) (5) (b)
Longitude W [redacted]
ACP Division: **OR-B**

Last Page Update : 4/21/2005

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-330.1 Objective: Exclusion of oil entry to wetland.

Sand berm (12' high). Borrow sand from north side of Talbert Marsh channel.

Strategy 5-330.2 Objective: Exclusion of oil entry to wetland.

Deflection boom diagonally across channel.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
5-330.1	0	0	0	0	0		0	0			1	Bulldozer	2	
5-330.2	600	0	0	0	0		0	1	0		2	Stakes	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From PCH in Huntington Beach, go south on Magnolia St. for a few yards and you will be at the entrance to Huntington State Beach. Go to the southern end of the parking lot.

LAND ACCESS: Marsh channel is at the southern end of the parking lot.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

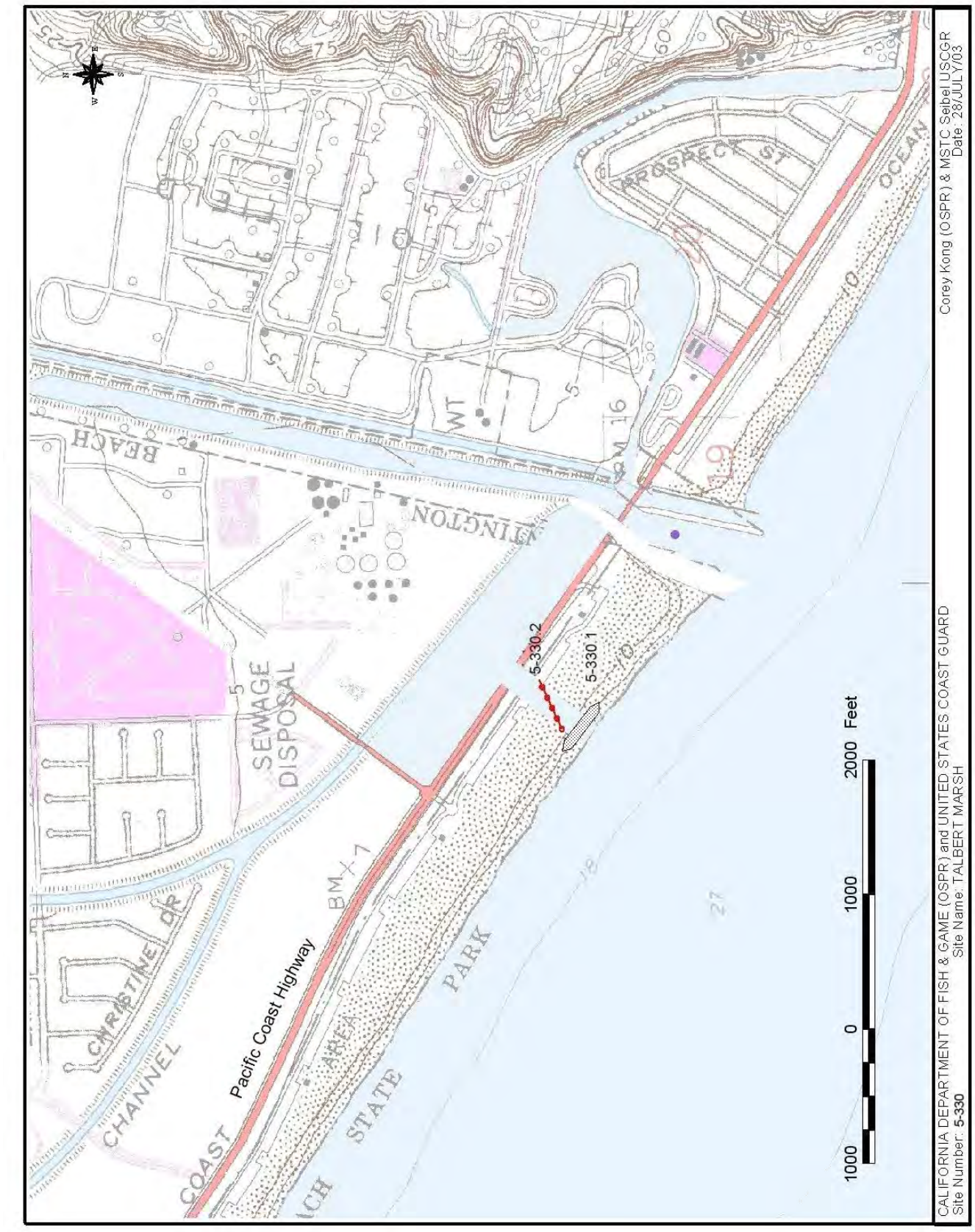
Parking and staging at the southern end of the Huntington State Beach parking lot.

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

Keep all activities to the north side of the Talbert Marsh channel to minimize impacts to the Least Tern nesting site. Notify the California Coastal Commission if a sand berm is required.

5-330 -A Strategy Diagram- Talbert Marsh 5-330 -A



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-340 -A Site Summary- Newport Slough Wetland 5-340 -A

County: **Orange Co.**
USGS Quad: **Newport Beach**
Thomas Guide Location: **888 E5**
NOAA Chart: **18746**
Latitude N Decimal Degrees: (b) (7) (5) (b)
Longitude W [redacted]
ACP Division: **OR-B**
Last Page Update : 2/15/2011

SITE DESCRIPTION:
Coastal lagoon and wetlands complex connected to the Santa Ana River tidal gates.

SEASONAL and SPECIAL RESOURCE CONCERNS
Rank A - Presence of listed species.

RESOURCES OF PRIMARY CONCERN
Coastal lagoon and wetlands complex.

California Least Tern (Federal and State endangered species), California Brown Pelican, Western Snowy Plover (Federal endangered species), Belding's Savannah Sparrow (State endangered species), wading birds, and shorebirds.

Intertidal mudflat.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES
Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		AES Power	(714) 374-1401
T		U.S. Fish and Wildlife Service (8am - 5pm)	(760) 431-9440
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
O		Orange County Sheriffs Dept. (24 hr)	(714) 288-6742
O		Newport Beach Lifegaurds (7am - 6pm)	(949) 644-3177
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
O		Newport Beach Police Dept. (24 hr)	(949) 644-3717
E	OC Watesheds	County of Orange (24 hr)	(877) 897-7455
E	Dept. of Public Works	County of Orange (8am - 5pm)	(714) 955-0200
E	Dept. of Public Works	County of Orange Facility Contact	(714) 448-1884
E	Dept. of Public Works	County of Orange (24 hr)	(714) 628-7008
O		Newport Beach Fire Dept. (24 hr)	(949) 780-0981
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849

ADDITIONAL SITE SUMMARY COMMENTS:

5-340 -A Site Strategy - Newport Slough Wetland 5-340 -A

County: **Orange Co.**
USGS Quad: **Newport Beach**
Thomas Guide Location: **888 E5**
NOAA Chart: **18746**
ACP Division: **OR-B**
Latitude N: (b) (7) (5) (b)
Longitude W: [redacted]

Last Page Update : 3/24/2011

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species and wetland habitat. Responders should watch for and avoid nesting birds and minimize disturbances to vegetation. Avoid the spread of oil into the wetland through response acitivities.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-340.1 Objective: Exclusion of oil entry to wetland.

Close tidal gate 5-340.1a (downstream gate) and 5-340.1b (upstream gate). Call County of Orange, Dept. of Public Works phone numbers listed for assistance with closing gates. Workweek and 24 hr numbers are listed.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	type and gear	Boom boat	Skiffs punts	Skimmers No	Type	No	Special and	Equipment or comment kinds	staff deploy	Staff tend
5-340.1	0	0	0	0	0		0	0	0		0			2	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From northbound PCH in Newport Beach, turn right just before you reach the bridge over the Santa Ana River. There is a small place to park at the gate to the county access road.

LAND ACCESS: From parking area, procede on bicycle path a few yards to gates.

WATER LOGISTICS:
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

There is parking for 2 vehicles.

COMMUNICATIONS PROBLEMS: None.

ADDITIONAL OPERATIONAL COMMENTS:

First responder may need bolt cutters for locks to tidal gates.

5-340 -A Strategy Diagram- Newport Slough Wetland 5-340 -A

CALIFORNIA DEPARTMENT OF FISH & GAME (OSPR) and UNITED STATES COAST GUARD
Site: 5-340 Site Name: Newport Slough

Corey Kong (OSPR) & Greg Ewing (OSPR)
Date: March 16, 2011

Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array

5-350 -A Site Summary- Santa Ana River 5-350 -A

County: **Orange Co.**
USGS Quad: **Newport Beach**
Thomas Guide Location: **888 E5**
NOAA Chart: **18746**
Latitude N / Longitude W
Decimal Degrees: (b) (7) (5) (b) [redacted]
ACP Division: **OR-B**
Last Page Update : 2/15/2011

SITE DESCRIPTION:
Intermittent river mouth connected to coastal wetlands.

SEASONAL and SPECIAL RESOURCE CONCERNS
Rank A - All year.

RESOURCES OF PRIMARY CONCERN
Channel serves as coastal lagoon and wetlands complex.

California Least Tern (Federal and State endangered species), California Brown Pelican, Belding's Savannah Sparrow (State endangered species), Black Skimmer, seabirds, shorebirds, and waterfowl. California Gnatcatcher (Federal threatened species) and Least Bell's Vireo (Federal and State endangered species) are found in the adjoining upland habitat.

Juvenile finfish.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES
Contact the California Dept. of Parks and Recreation - Office of Historical Preservation at (916) 445-7000 and the South Central Coastal Information Center at (657) 278-5395 for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
O		AES Power	(714) 374-1401
O		US Ocean Safety Lifegaurds (24 hr)	(949) 276-5050
O		Newport Beach Police Dept. (24 hr)	(949) 644-3717
O		Newport Beach Fire Dept. (24 hr)	(949) 780-0981
O		Newport Beach Lifegaurds (7am - 6pm)	(949) 644-3177
O		Orange County Sheriffs Dept. (24 hr)	(714) 288-6742
T		Calif. Dept. of Fish and Game (24 hr)	(916) 358-1300
T		U.S. Fish and Wildlife Service (24 hr)	(760) 271-6934
T		U.S. Fish and Wildlife Service (8 am - 5 pm)	(760) 431-9440
T		NOAA/Nat. Mar. Fish. Service	(562) 980-4043
T		Calif. Dept. of Fish and Game (Los Alamitos)	(562) 342-7100
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-2849
T	OSPR Environmental Scientist	Calif. Dept. of Fish and Game OSPR	(562) 598-6203
T	OSPR Technical Specialist	Calif. Dept. of Fish and Game OSPR	(562) 598-4052

ADDITIONAL SITE SUMMARY COMMENTS:

5-350 -A Site Strategy - Santa Ana River 5-350 -A

County: **Orange Co.**
USGS Quad: **Newport Beach**
Thomas Guide Location: **888 E5**
NOAA Chart: **18746**
Latitude N Decimal Degrees: (b) (7) (5) (b)
Longitude W [redacted]
ACP Division: **OR-B**

Last Page Update : 4/21/2005

CONCERNS and ADVICE to RESPONDERS:

To protect endangered and sensitive species nesting and foraging habitat.

HAZARDS and RESTRICTIONS:

SITE STRATEGIES

Strategy 5-350.1 Objective: Exclusion of oil entry to wetland.

Sand berm (12' high).

Strategy 5-350.2 Objective: Exclusion of oil entry to wetland.

Deflection boom diagonally across channel.

Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
5-350.1					0		0	0			1	Bulldozer	2	
5-350.2	600				1	Danforth 40 lb	0	1			2	Stakes	4	

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From PCH in Huntington Beach, go south on Magnolia St. for a few yards and you will be at the entrance to Huntington State Beach. Go to the southern end of the parking lot.

LAND ACCESS: From parking area, go south to the rivermouth.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

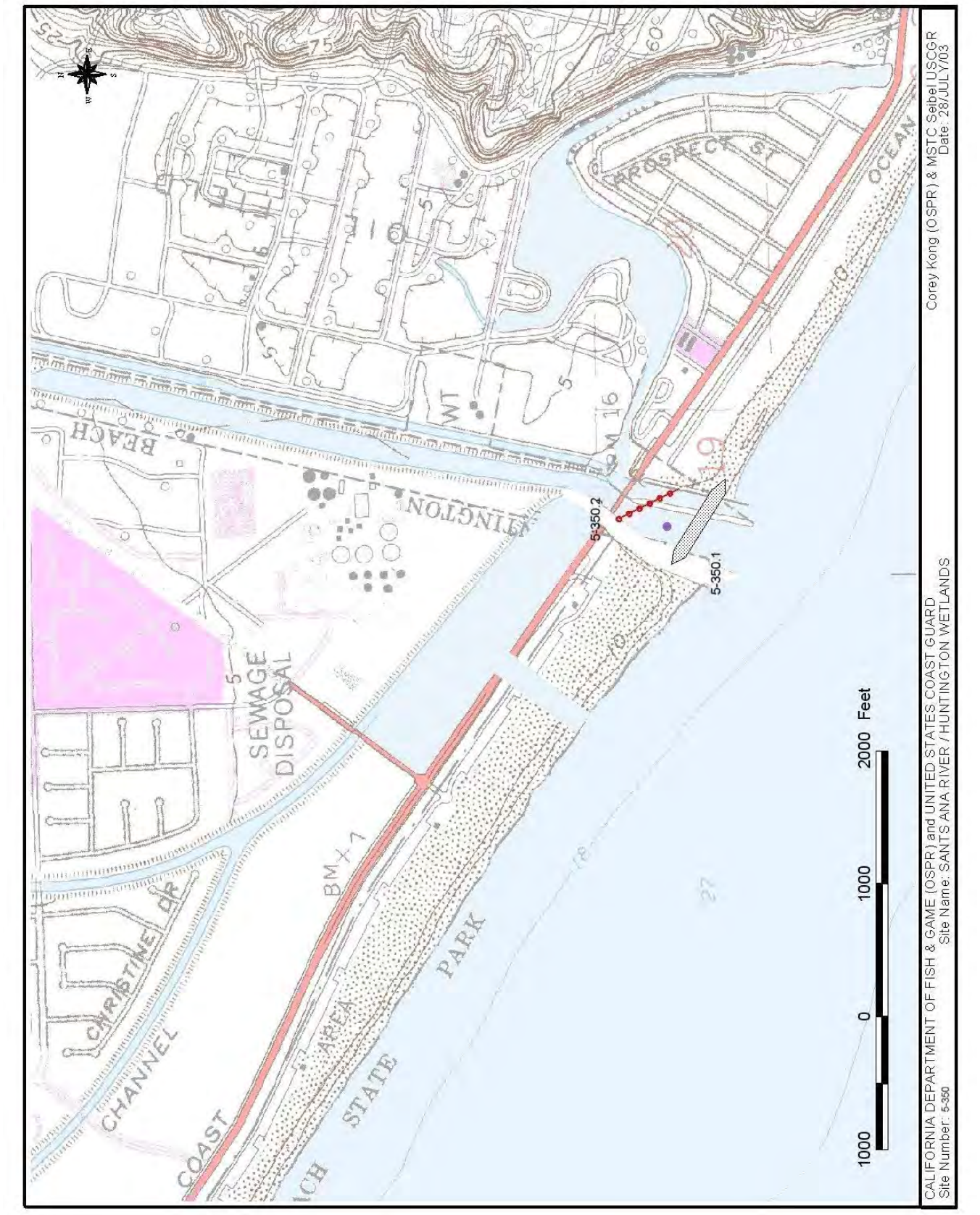
Parking and staging at the southern end of the Huntington State Beach parking lot. Access the south bank from Seashore Drive in Newport Beach.

COMMUNICATIONS PROBLEMS: None.

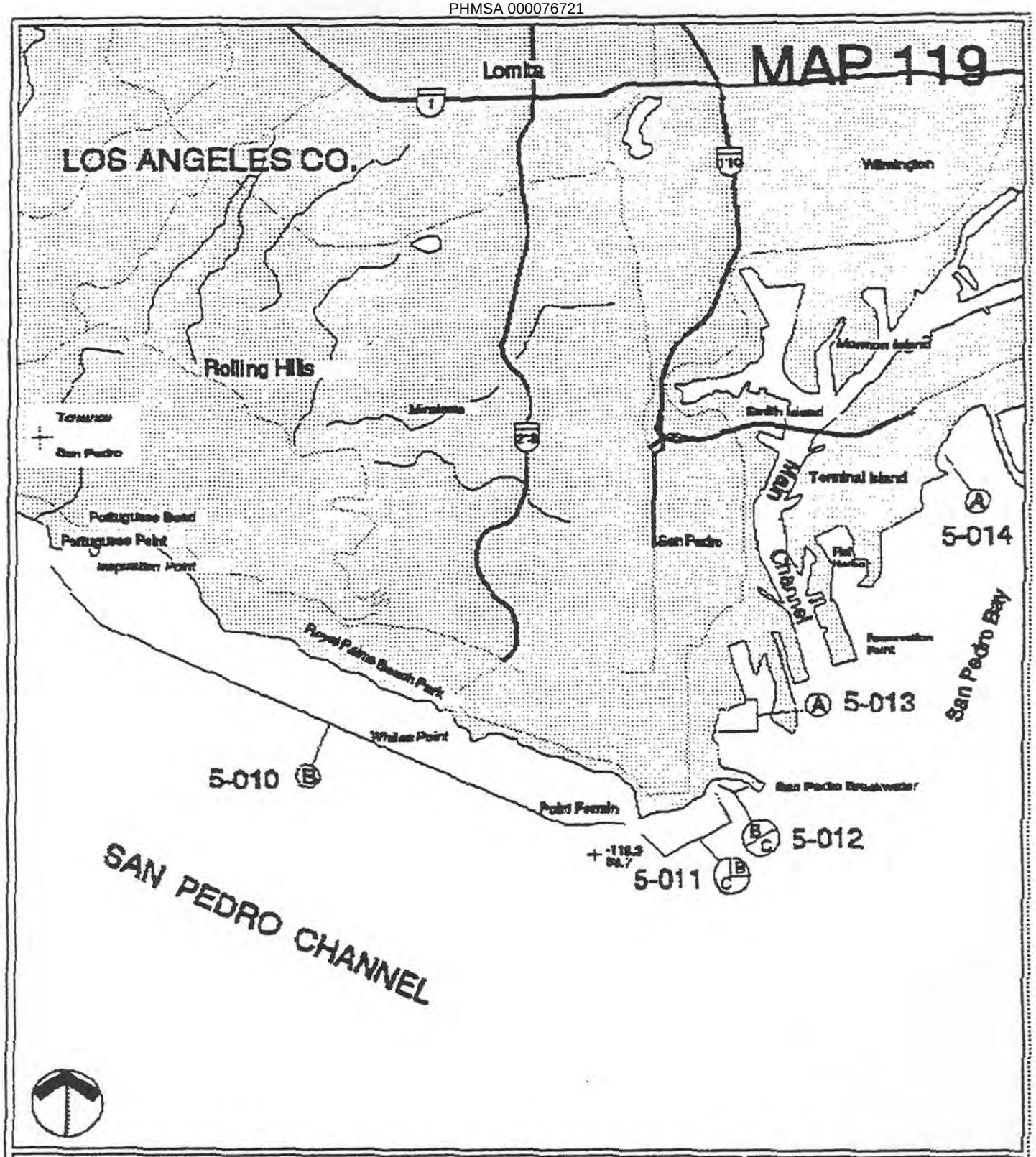
ADDITIONAL OPERATIONAL COMMENTS:

Notify the California Coastal Commission if a sand berm is required.

5-350 -A Strategy Diagram- Santa Ana River 5-350 -A



Harbor / Curtain Boom
Swamp / River Boom
all other boom types
Sorbent boom
Berm, Dam, or Dike
Filter fence
Boom tow
SSS - Shoreside Skimming System
SFS - Stationary Floating Skimmer
SPS - Self Propelled Skimmer
TSA - Towed Skimming Array



ENVIRONMENTAL SENSITIVITY RANKING

Ⓐ - First Priority
Ⓑ - Second Priority
Ⓒ - Third Priority

Last Update July, 1993

SEASONALITY

SCALE = 1:39118

0 1 2 3 MILES

ALBERS PROJECTION - NORTH AMERICAN DATUM OF 1927

INDEX MAP

This map includes USGS quad sheets of San Pedro & Torrance

The corresponding NOAA nautical chart is "San Pedro Bay"

Chart Number: 18720

SITE SUMMARY SHEET

SITE: B/C-5-011
Point Fermin

Topo Map # 119
Lat. (b) (7)(F), (b) (3)
Long

SITE DESCRIPTION:
ESA #1 type rocky intertidal from end of March through November/December.
Some sheltered rocky beach during winter (December to end of March).

SEASONAL CONCERNS:
Area designated by county as a significant environmental area.
Winter sheltered beach, due to the seasonal change in direction of wave energy will permit oil to persist.

RESOURCES OF PRIMARY CONCERN:
Major tidepool, high diversity and abundance
Juvenile fish
Abalone
Peregrine Falcon

TRUSTEE AGENCY/MANAGER/LOCAL EXPERT:
County of LA.

Access: Paseo Del Mar

SITE STRATEGY SHEET

SITE #: B/C-5-011 Point Fermin

PROTECTION STRATEGIES

The topography and surface conditions of the Southern California shoreline will generally dictate the choice of cleanup and restoration procedures to be followed. Containment, exclusion, and diversionary booming in conjunction with recovery techniques in open water, as well as consideration of the early use of A.R.T., are essential options to protect the shoreline as opposed to its cleanup. The cleanup of oil spill impacted shoreline is considerably more difficult, time consuming, expensive, and may result in even more ecological damage.

In the event that the oil spill reach the shoreline peninsula it will be important to determine the scope of the cleanup in order to make best use of motorized equipment and manual labor and boat crews. For beach areas with oiled sand, sand should be picked up during a receding tide from high to low tide mark to prevent incoming tide from washing remaining oil into previously cleaned sections. In areas other than sand tidal zones, oil will adhere to areas that may include; pier piling supports, and rocky techniques, cold water and warm water low/high pressure washing and passive collection (sorbents). Additionally, consider shoreline precleaning, moving debris above the high water line (Reference the Marine Debris study from NPS) and activate the Wildlife Recovery portion of the ACP.

All cleanup operations should be conducted with the advice and cooperation of the California Fish and Game Dept. In addition, the assistance of local city officials, police, and lifeguards for the possible closing of affected shoreline areas and the coordination of traffic control for the staging of motorized equipment as necessary.

EQUIPMENT/SPECIAL CONSIDERATIONS:

* there is an need for approximately 50-750 trained workers to be ready pre-event
* consider the pre-staging of at least 2000 feet of open ocean deflection boom in the event of impact.
* the California Fish and Game Dept. must be consulted before the staging of motorized equipment and heavy traffic are permitted as they may not be contributive during Grunion spawning seasons, in late February to late August.

ACCESS INFORMATION

There are locations along Paseo Del Mar that have access to the beach.

SITE SUMMARY SHEET

SITE: A-5-014
Reeves Field
Terminal Island Shallow Water Habitat

Topo Map # 119
Lat. (b) (7)(F), (b) (3)
Long

Nautical Chart:
San Pedro Channel

SITE DESCRIPTION:
Low sand - scrub habitat surrounded by extensive shallow water. No exposure likely (above high tide line).

SEASONAL CONCERNS:
Rank A - Year round
California Least Tern nesting April through September

RESOURCES OF PRIMARY CONCERN:
California Least Tern - threatened or endangered species
Brown Pelican - threatened or endangered species
Juvenile fish - California Halibut, corbina

TRUSTEE AGENCY/MANAGER/LOCAL EXPERT:
California Dept. of Fish and Game (562) 590-5132

Access: Ferry Street

SITE STRATEGY SHEET

SITE #: A-5-014 Reeves Field Terminal Island Shallow Water Habitat

PROTECTION STRATEGIES

The topography and surface conditions of the Southern California shoreline will generally dictate the choice of cleanup and restoration procedures to be followed. Containment, exclusion, and diversionary booming in conjunction with recovery techniques in open water, as well as consideration of the early use of A.R.T., are essential options to protect the shoreline as opposed to its cleanup. The cleanup of oil spill impacted shallow water habitat is considerably more difficult, time consuming, expensive, and may result in even more ecological damage. A complete booming off of this site and fencing of the Least Tern nesting area may be the best option.

In the event that the oil spill reach the shoreline peninsula it will be important to determine the scope of the cleanup in order to make best use of motorized equipment and manual labor and boat crews. For beach areas with oiled sand, sand should be picked up during a receding tide from high to low tide mark to prevent incoming tide from washing remaining oil into previously cleaned sections. In areas other than sand tidal zones, oil will adhere to areas that may include; pier piling supports, and rocky techniques. Cleanup of these areas could include hand wipe cleaning techniques, cold water and warm water low/high pressure washing and passive collection (sorbents). Additionally, consider shoreline precleaning, moving debris above the high water line (Reference the Marine Debris study from NPS) and activate the Wildlife Recovery portion of the ACP.

All cleanup operations should be conducted with the advice and cooperation of the California Fish and Game Dept. In addition, the assistance of local city officials, police, and lifeguards for the possible closing of affected shoreline areas and the coordination of traffic control for the staging of motorized equipment as necessary.

EQUIPMENT/SPECIAL CONSIDERATIONS:

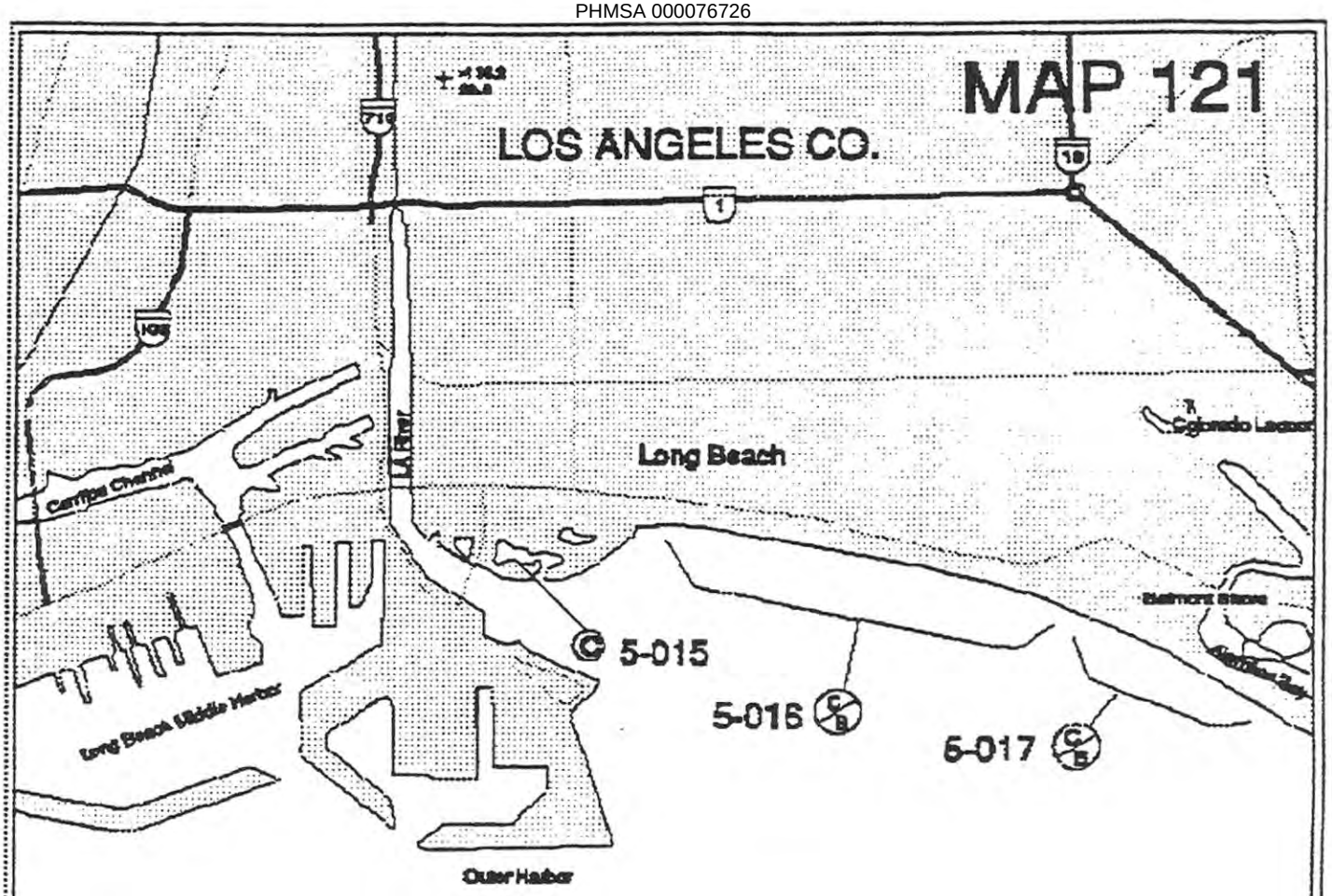
* there is at least 2000 feet of deflection boom and recovery equipment available at site location by Ships Services contractors.

* the California Fish and Game Dept. must be consulted before the staging of motorized equipment and heavy traffic are permitted as they may not be contributive during Grunion spawning and Least Tern nesting seasons.

ACCESS INFORMATION

There is easy access to this area off Seaside Ave. through the facility yard of Ship Services contractors.

MAP 121



San Pedro Bay

ENVIRONMENTAL SENSITIVITY RANKING

- (A) - First Priority
- (B) - Second Priority
- (C) - Third Priority

Last Update July, 1993

SEASONALITY

SCALE = 1:31671

0 1 2 MILES

ALBERS PROJECTION – NORTH AMERICAN DATUM OF 1927

INDEX MAP

This map includes USGS quad sheets of Long Beach

The comparable NOAA nautical chart is "San Pedro Bay"

Chart Number: 18749

SITE SUMMARY SHEET

SITE: C-5-015
Shoreline Lagoon/Downtown Marina

Topo Map #121
Lat. [redacted]
Long

Nautical chart:
San Pedro Channel

SITE DESCRIPTION:
Coastal Lagoon - heavily human influenced - almost completely man-made now. Little vegetation, bottom and sides (banks)

SEASONAL CONCERNS:
Rank C - Year Round

RESOURCES OF PRIMARY CONCERN:
Shorebirds
Waterfowl
mullet

TRUSTEE AGENCY/MANAGER/LOCAL EXPERT:
City of Long Beach
Dept. Fish & Game (Dick Nitsos) (562) 590-5117 or 590-5132

Access: Shoreline Drive

SITE STRATEGY SHEET

SITE #: A-5-015 Shoreline Lagoon

PROTECTION STRATEGIES

The topography and surface conditions of the Southern California shoreline will generally dictate the choice of cleanup and restoration procedures to be followed. Containment, exclusion, and diversionary booming in conjunction with recovery techniques in open water, as well as consideration of the early use of A.R.T., are essential options to protect the shoreline as opposed to its cleanup. The cleanup of Shoreline Lagoon would be considerably more difficult, time consuming, expensive, and may result in even more ecological damage. A complete booming off of Shoreline Lagoon may be the best option.

In the event that the oil spill reach the shoreline peninsula it will be important to determine the scope of the cleanup in order to make best use of motorized equipment and manual labor and boat crews. For beach areas with oiled sand, sand should be picked up during a receding tide from high to low tide mark to prevent incoming tide from washing remaining oil into previously cleaned sections. In areas other than sand tidal zones, oil will adhere to areas that may include; pier piling supports, and rocky techniques. Cleanup of these areas could include hand wipe cleaning techniques, cold water and warm water low/high pressure washing and passive collection (sorbents). Additionally, consider shoreline precleaning, moving debris above the high water line (Reference the Marine Debris study from NPS) and activate the Wildlife Recovery portion of the ACP.

All cleanup operations should be conducted with the advice and cooperation of the California Fish and Game Dept. In addition, the assistance of local city officials, police, and lifeguards for the possible closing of affected shoreline areas and the coordination of traffic control for the staging of motorized equipment as necessary.

EQUIPMENT/SPECIAL CONSIDERATIONS:

* there is a need for approximately 5-10 trained workers to be ready pre-event.
* consider the pre-staging of at least 700 feet of open ocean deflection boom in the event of impact

ACCESS INFORMATION

There are several locations along Shorline Drive that have access to the beach.

SITE SUMMARY SHEET

SITE: B/C-5-016
Long Beach City Beach

Topo Map # 121
Lat. [redacted]
Long (b) (7)(F), (b) (3)

SITE DESCRIPTION:
Sand Beach - midsize grain
Grunion can spawn on any beach in southern California.
The runs are often highest at ends of beach.

SEASONAL CONCERNS:
Rank B - Late February to late August
Rank C - Late August to early February

RESOURCES OF PRIMARY CONCERN:
Grunion spawning at high tide line

TRUSTEE AGENCY/MANAGER/LOCAL EXPERT:

Paul Gregory and John Grant, California Department of Fish and Game, Grunion "experts"	(562) 590-5117
Long Beach Lifeguards	(562) 437-0375

SITE STRATEGY SHEET

SITE #: A/C-5-016 Long Beach

PROTECTION STRATEGIES

The topography and surface conditions of the Southern California shoreline will generally dictate the choice of cleanup and restoration procedures to be followed. Containment, exclusion, and diversionary booming in conjunction with recovery techniques in open water, as well as consideration of the early use of A.R.T., are essential options to protect the shoreline as opposed to its cleanup. The cleanup of oil spill impacted sand beach is considerably more difficult, time consuming, expensive, and may result in even more ecological damage.

In the event that the oil spill reach the shoreline peninsula it will be important to determine the scope of the cleanup in order to make best use of motorized equipment and manual labor and boat crews. For beach areas with oiled sand, sand should be picked up during a receding tide from high to low tide mark to prevent incoming tide from washing remaining oil into previously cleaned sections. In areas other than sand tidal zones, oil will adhere to areas that may include; pier piling supports, and rocky techniques. Cleanup of these areas could include hand wipe cleaning techniques, cold water and warm water low/high pressure washing and passive collection (sorbents). Additionally, consider shoreline precleaning, moving debris above the high water line (Reference the Marine Debris study from NPS) and activate the Wildlife Recovery portion of the ACP.

All cleanup operations should be conducted with the advice and cooperation of the California Fish and Game Dept. In addition, the assistance of local city officials, police, and lifeguards for the possible closing of affected shoreline areas and the coordination of traffic control for the staging of motorized equipment as necessary.

EQUIPMENT/SPECIAL CONSIDERATIONS:

* there is a need for approximately 50-75 trained workers to be ready pre-event.
* consider the pre-staging of at least 2000 feet of open ocean deflection boom in the event of impact.
* the California Fish and Game Dept. must be consulted before the staging of motorized equipment and heavy traffic are permitted as they may not be contributive during Grunion spawning seasons, in late February to late August.

ACCESS INFORMATION

There are several locations along Ocean Blvd. that have access to the beach.

SITE SUMMARY SHEET

SITE: B/C-5-017
Belmont Shore Beach

Topo Map # 121
Lat. (b) (7)(F), (b)
Long (3)

SITE DESCRIPTION:
Sand beach - midsize grain
Grunion can spawn on any beach in southern California.
The runs are often highest at ends of beach.

SEASONAL CONCERNS:
Rank B - Late February to late August
Rank C - August to early February

RESOURCES OF PRIMARY CONCERN:
Critical juvenile halibut habitat (in very shallow waters)
Grunion spawning at high fide line
Many other species of juvenile fish

TRUSTEE AGENCY/MANAGER/LOCAL EXPERT:

Paul Gregory and John Grant, California Department of Fish and Game, Grunion "experts"	(562) 590-5117
City of Long Beach Lifeguards	(562) 437-0375

The following are only examples of potential strategies that could be used if an incident impacts a sensitive area. These strategies are not a guarantee of what will occur or the equipment/resource deployment that will be used. Strategic planning will be tailored to meet the need of the actual circumstance.

3.1 Historical/Archaeological Sites

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a historical / archaeological site. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Historical / Archaeological Sites are areas such as battlefields, homes of historically or culturally significantly individuals, and prehistoric dwellings and burial grounds designated by federal, State and local governments for preservation. Historical / Archaeological Sites may be either remote from, or close to, human habitation. Historical / Archaeological Sites are generally identified and marked as such on maps and at public access points.

1. Public Health and Safety Concerns

   Immediate evacuation of the public from the affected area, and their subsequent health and safety are a major concern. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. Response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel and Company representatives and the regulatory agency's representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbon, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the Natural area.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible. The response contractor will exercise due care to avoid damage to the historical/archaeological site.

3. Property and Environmental Impact

   Property impact of a spill in a historical / archeological site will be a major concern. Major historical / archaeological sites sometimes have considerable commercial value due to tourism. A spill may have adversely affect the commercial value of adjacent public and private property, as well as the historical / archeological site itself.

   Environmental impact on a historical / archeological site will vary depending on the size of undeveloped land and water affected by the spill. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed natural portion of a historical/archaeological site.

4. Potential Logistical Problems

   Logistic support at historical/archaeological sites will vary from site to site. Historical sites typically have good transportation and utility service. Archeological sites are frequently in remote areas lacking both transportation and utilities. It may be necessary to set up support areas, lay-down areas, etc., outside the site itself, in order to minimize disturbance of the site.

   Transportation of personnel, equipment and materials into and out of the area should not require specialized vehicles. Temporary utilities, including potable water, fuel and electricity may be available locally.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the immediate area of the spill and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State and Local regulatory agencies. A Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response contractor's supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats, if needed
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action, a tailgate health and safety meeting, and a briefing by appropriate authorities concerning care to be taken to avoid damage to the historical/archaeological site. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is enroute to the site.

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response team, plus:
   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,

- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 men,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response team should be to minimize the spread of the hydrocarbon on the water and ground surface in order to protect the public, the historical / archeological site features and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms of imported clay on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom/ berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the Site Safety Plan. The Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided in this FRP, inspect the affected area(s) and assess:

   - The nature of the spilled liquid -
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the IC will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager if deemed necessary by the assessment. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area as close as practical to, but outside of, the historical / archeological site will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The contractor's response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The contractor's response team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team. Debris will be inspected by appropriate agency experts for historically or archaeologically important artifacts or other material prior to its disposal.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section and historically or archaeologically important buildings or other structures.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - Special measures to avoid damage to historical/archaeological features, materials and artifacts,
   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing
   .

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies Historical/Archaeological Sites

1. Access on or Through Historical/Archaeological Sites

   Because of the potential for irrecoverable damage to historical/archaeological sites, vehicle and equipment access will be strictly controlled and coordinated with the appropriate government entities and/or custodians. When equipment is permitted to enter or cross a historical/archaeological site. Access routes will be clearly marked and the response crews will be thoroughly briefed on where and where not, they may place and utilize equipment. On this type of site, the probability is high that the amount of laborers will dramatically increase to compensate for equipment not being permitted on the site or equipment usage being limited.

2. Protection of Historical/Archaeological Sites

   Once human health and safety concerns have been addressed, priority will be given to protecting historical/archaeological sites from contamination or to limiting further contamination. Whenever the release is waterborne, booms will typically be deployed as the isolating/protecting mechanism. Because of potential access restrictions, boats used to deploy the boom may have to be landed at some distance from the site and floated to the scene. The first responder should identify potential boat launch sites and communicate this to the response crew prior to their arrival.

   If the release is overland, then protection and isolation of historical/archaeological sites becomes more difficult. Typically, overland releases are contained by digging berms and trenches downstream of the spill. However, in the event that the spill occurs on or near historical/archaeological areas, it is possible that digging of berms and trenches will be severely curtailed or prohibited. Therefore, berms will be constructed either from sorbent materials or from imported fill.

3. Recovery of Product from Water and Treatment of Contaminated Water

   Typically, product is recovered from surface water (i.e., rivers, lakes, and ponds) by a combination of mechanical skimming, vacuum recovery, and the use of sorbent materials. As mentioned above, access of equipment through or near historical/archaeological sites may be restricted or prohibited altogether. It may become necessary for recovery equipment to be launched some distance from the release site. This may have an impact on response time and will be factored accordingly. Temporary storage of recovered product may be accomplished by the use of small barges or other containers.

   The treatment of contaminated water will have several challenges under this scenario. It will most likely not be feasible to store contaminated water in traditional storage containers such as tanks, at least in close proximity to the site. This could be overcome by pumping across or around the site to a place where adequate storage can be staged. The Company Incident Commander or the first responder will have to assess the situation quickly and communicate with the response crew in order to ensure that sufficient quantities of the correct equipment are deployed.

   Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Traditional methods of cleaning structures affected by released product include wiping, hot water, low or high-pressure wash-down, and/or the use of surfactants, emulsifiers, or other agents. Because of the potential for irrecoverable damage to historical/archaeological structures, the method of choice for cleaning structures will be wiping with sorbent pads. Alternative methods will be discussed with the appropriate authorities and used only with their concurrence.

5. Solids Handling/Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the cognizant authorities.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition.

   Because of the nature of historical/archaeological sites, contaminated debris will be removed only with the concurrence and at the direction of the cognizant authorities.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Historical / archaeological site restoration activities will be site-specific and may entail major efforts by a combination of Company and multiple regulatory and preservation agencies. As early as possible, Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.2 Natural Areas

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a natural area. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Natural areas are areas designated by federal, State and local governments to remain in their undeveloped condition. A natural area may include any type of terrain, including sea shore, deserts, streams, lakes, swamps, forests, and mountainous areas. Natural areas are usually remote from human habitation, and are not developed for residential or commercial use. Natural areas are generally identified and marked as such on maps.

1. Public Health and Safety Concerns

   Since natural areas are by definition uninhabited and tourism is not encouraged, the immediate evacuation is not expected to require a major effort. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel and Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the natural area.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Natural areas are not developed and have little commercial value. Environmental impact on a natural area can be immediate and extensive. Petroleum hydrocarbons may have an adverse Environmental impact on a natural area can be immediate and extensive.

Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a natural area. Major natural areas provide habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

4. Potential Logistical Problems

   Very little logistic support can be expected in natural areas. There will be few if any roads into and through such areas, and probably no utilities in the area. Support areas, lay-down areas, etc will be established in available clearings, or land will be cleared for the purpose.

   Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

1. The Company Incident Commander or designee will:

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product,
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action, particularly the contaminated media; i.e., soil, water, or both.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. A response team may consist of:
   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,

- 1 van,
- 2 work boats,
- 2,000 ft of containment boom,
- one foam trailer with applicator and foam to cover 90,000 square feet,
- a seven (7)-day supply of PPE,
- 12 sets of air bottles,
- lights,
- 2 skimmers,
- 1 generator,
- 1 air compressor,
- PID/LEL,
- detector tube specific for benzene (not affected by other hydrocarbons)
- 4 radios, and
- expendable supplies (absorbent booms & pads, PPE)

The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is enroute to the site.

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and should consist of the Tier 1 response team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response team should minimize the spread of the product on water and ground surface in order to protect the public and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the Site Safety Plan Appendix. The Site Safety Officer will complete a Site Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife
   .

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill or by an uncontained spill.

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the IC will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) should mark the limits of the exclusion zone with red tape, using existing trees to support the tape where possible. The support zone will be marked with green tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor, and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay. Construction may require some cleaning of trees and shrubs.

   The response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team. Contaminated trees and shrubs are anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Natural Areas

1. Access on or Through Natural Areas

   Natural areas will probably have few, if any, existing roads. Use of overland or waterborne access will require the approval of the cognizant authorities. The Company Incident Commander will request the cognizant authorities to mark the approved routes and work areas for the use of the response contractor. If overland transportation routes are practical and acceptable to the appropriate authorities, the response contractor may construct temporary roads into the spill area, and construct such staging and laydown areas. The response contractor will minimize the size and number of vehicles used in the response.

   Water-borne transportation may be a practical alternative to roads, in some instances. In such cases, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available watercraft and possible restrictions on the use of powered boats. The response contractor may have to construct a temporary landing to tie up the watercraft and offload the equipment.

   The terrain in some natural area may be so rugged that land and water transportation is impractical. In such cases, the response contractor may have to use helicopters to lift personnel and equipment to the site. Since heavy equipment is not readily air-transportable, most of the response work may have to be done using labor and hand tools, with a limited amount of lightweight equipment. Helicopter landing zones will be located, and if necessary cleared, at the direction of Company and the appropriate government agencies.

   Roads, staging areas, watercraft landings and helicopter landing zones will be restored to their pre-spill conditions as described in the SITE RESTORATION section on the following pages.

2. Protection of Natural Areas

   Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is usually accomplished primarily with containment booms and berms. The Company Incident Commander and the first responder will identify the land areas and/or water bodies threatened by the spill, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   Where a body of water is affected or threatened by the spill, the response contractor will usually deploy containment booms as close downstream of the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and falls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is normally done with ditches and berms, but only with the concurrence at the direction of the cognizant authorities. The response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soils do not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water.

   Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to a closer location is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

   Product spilled onto the ground is usually recovered by excavating the product-laden soils. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. Soils contaminated with product will be excavated only with the concurrence of and as directed by, the appropriate government agencies. Clay soils usually retain the product at or near the surface, and require less excavation than sandy/gravelly soils.

   The methods of temporary storage of the contaminated water will be site-specific, and will be highly dependent on site access. Barges may be practical where contaminated waters are navigable. Tank trailers or frac tanks may be used if roads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas.

   The decision to treat contaminated water onsite or transport it offsite for treatment may be made by Company and the cognizant authorities with consideration of factors such as availability of utilities, suitable land area, and a comparison of the difficulties of getting the treatment equipment to the site versus the difficulties of getting the contaminated water to an offsite treatment facility. The urgency of completing the response and restoration of the spill area may also affect this decision. Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other agents may be prohibited in, or adjacent to, rough water due to the difficulty of recovery of the wash water.

   Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls, and rocky cliffs, may require special safety precautions and special equipment such as safety lines.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence.

   Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. The extent of excavation will probably be limited, since excavation will mar the natural state of the affected area.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site unless the cognizant authorities direct differently. Solids will probably be removed from the site by truck where roads are available or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Natural area restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and other government agencies. Typical efforts may include seeding and mulching with wild grasses, and the planting of shrubs and seedling trees. New seeding and plantings will be similar to those removed during the response. Temporary access roads, shoreline landings, helicopter landing zones and staging/laydown areas will be regraded and returned to a natural state.

   As early as possible, Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.3 National, State and Local Parks

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a national, State or local park. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

National, State and local parks are areas designated by various government agencies for the benefit of the general public. The larger public parks may have a general office with a recreational area and/or a camping ground. Much of a major park may be relatively undeveloped. The smaller public parks could be limited to combination general buildings, rest rooms, recreation areas, playgrounds, swimming pools, camping areas, hiking paths, or undeveloped terrain. A public park maybe located in almost any type of terrain, including shorelines, forests, deserts, and mountainous areas. Parks are usually, but not always, populated by administrative personnel, campers and hikers, with a variety of mammals, reptiles, birds, fish and insects. Public parks are identified and marked as such on maps and sometimes along their boundaries.

1. Public Health and Safety Concerns

   Many National, State and local parks are close to centers of human habitation, where a spill is likely to have a major, direct effect on public safety and health. A major priority will be evacuation of the public in the affected area. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel and Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbon, and heat stress and cold exposure. Contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife will be a concern in some remote parks.

Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a public park will depend on the extent to which it has been improved or developed. Public parks are frequently well developed and have considerable commercial value; a spill may have a serious impact on the commercial value of public property.

   Environmental impact on a public park will vary depending on the size of undeveloped land and water affected by the spill. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed natural portion of a public park.

4. Potential Logistical Problems

   Availability of roads and utilities are site-specific and may vary from place to place within a single large park. It may be necessary to close existing public and private roads for the duration of the response activities. There may be insufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc.

   Transportation of personnel, equipment and materials into and out of some parks may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available at some parks and absent at others. If not available, they must be brought in by the contractor's response team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product,
   - Order immediate deployment of the contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone.

The response supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor’s supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,

- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and the vegetation and wildlife in the refuge. The team should place a containment boom / berm as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials, or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit burning of timber and vegetation under some circumstances, but this is unlikely within the boundaries of the public park itself.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
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   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

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   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for National, State and Local Parks

1. Access on or Through National, State and Local Parks

   Response activities, particularly movement of vehicles and equipment into and out of the area may temporarily inconvenience or disrupt the public's use of the park facilities. The Company Incident Commander and the response contractor will coordinate response activity traffic control with the authorities responsible for the park.

   The response contractor will use existing roads into the spill area wherever possible and where permitted by the cognizant authorities. The response contractor will construct staging and laydown areas, in locations approved by the appropriate authorities responsible for the park, taking into consideration any ongoing use of the park, and nearby habitations if any are present. Where roads do not exist but a practical and approved route is available, the response contractor may construct temporary roads to the spill site, and staging/laydown areas. The response contractor will utilize the minimum size and number of vehicles in the response activities.

   Where the cognizant authorities approve and navigable waterways are convenient to the site, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available boats and barges. It may be necessary to construct a temporary landing to tie up the watercraft and offload the equipment.

   If the spill occurs in a park area so rugged that land and water transportation is impractical, the response contractor may have to use helicopters to lift personnel and equipment to the site. Since heavy equipment is not readily air-transportable, most of the response work in such areas may have to be done using labor and hand tools, with a limited amount of lightweight powered equipment. Helicopter landing zones may be located, and if necessary cleared, at the direction of Company and the appropriate government agencies.

   Roads, staging areas, watercraft landings and helicopter landing zones will be restored to their pre-spill conditions as described in the SITE RESTORATION section on the following pages.

2. Protection of National, State and Local Parks

   Once human health and safety have been addressed, priority will be given to protecting the park features from contamination, and limiting further spread of the spilled product. Natural areas, playground equipment, swimming pools, and pavilions used for public gatherings will be given special attention. Containment booms and) berms are usually used to contain and direct the spilled product. The cognizant authority, Company Incident Commander and the first responder will identify the park features, land areas and water bodies threatened by the spill, prioritize the features to be protected, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

Where a body of water is affected or threatened by the spill, the response contractor will normally deploy containment booms as close downstream of the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and waterfalls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is usually done with ditches and berms. With the approval at the direction of the cognizant authorities, the response contractor will dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The preferred point of recovery is normally be as close as practical downstream of the spill site. Access for personnel and equipment will be a major factor in selecting the equipment and where it will be used.

Product spilled onto the ground is usually recovered by excavating the product-laden soils. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use may be excavated more completely than at spill sites in less-used areas of parks. Clay soils usually retain the product at or near the surface, and require less excavation than sandy/gravelly soils.

If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in the park, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down, and use of surfactants, emulsifiers or other agents. Swimming pools and playground equipment will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

   Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls, and rocky cliffs, may require special safety precautions and special equipment such as safety lines.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence.

   Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. The extent of excavation may be limited in some park areas, since excavation will mar their natural state. Heavy equipment, such as tracked excavators and dump trucks, will probably be used wherever their use is not prohibited by the cognizant authorities or impractical due to access restrictions.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site unless the cognizant authorities concur with or direct other disposition. Solids may be removed by s trucks where roads are available, or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Public Park restoration activities will vary considerably from site to site and may involve park officials. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.4 Protected Waterways

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a protected waterway. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Protected waterways are those designated by the U.S. Department of the Interior as part of the Wild and Scenic Rivers System. By their nature, they are in remote areas and/or areas of rugged terrain.

1. Public Health and Safety Concerns

   Most major protected waterways are remote from human habitation, where a spill is unlikely to have a direct effect on the public safety and health except for small numbers of tourists and hikers, white-water rafters and other sportsmen.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, falling rocks, drowning, and contact with or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the protected waterways.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill in a protected waterway will depend on its proximity to inhabited or improved property. Major protected waterways are generally undeveloped; the primary commercial value derives from tourism. A spill is expected to have minimal impact on the commercial value of public or private property.

Environmental impact on a protected waterway can be severe. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy vegetation along the banks of the protected waterway.

4. Potential Logistical Problems

   Protected waterways are frequently remote from major transportation networks and utility services. Roads into such areas may be seasonal and intermittent, and should be considered generally unreliable. There may be insufficient cleared space on which to set up support areas and lay-down areas adjacent to the protected waterway, since they are frequently in canyons and gorges or similar rough terrain, or have heavily wooded shorelines. Temporary berms or dams cannot interrupt the flow of the waterway.

   Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, cranes, hoists and repelling gear. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

The deployment of containment booms may be impractical in reaches of the waterway in which the water flow is fast and turbulent. It may be necessary to deploy the booms and recover the spilled liquids some distance downstream of the spill, where water conditions are favorable. The recovery point may be downstream of the protected waterway itself.

1. The Company Incident Commander will;

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product into the protected waterway. The team should place sorbent pads as close as possible to the point of origin of the spill. The team may then place one or more containment booms downstream of the spill source, if residual liquids continue to spill from the source.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Dams, rapids or other river features downstream.
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials and foam.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees or rocks to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if the contaminated water is shallow (10 feet or less) and flowing gently. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipe. A siphon dam will not be practiced or effective in confined waterways with rapidly moving, turbulent water.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Protected Waterways

1. Access to and on a Protected Waterway

   Getting personnel, equipment and materials to the response site will be a major problem in this scenario. Nature, as well as the cognizant authorities, may limit the sizes and weights to what can be carried by hand. Protected waterways are typically not navigable by any watercraft large enough to transport heavy equipment, and the cognizant authorities may restrict or prohibit the use of powered boats in the protected waterway itself. Rapids and waterfalls in some protected waterways may make water-borne transportation both difficult and dangerous. Shoreline access may be restricted in some protected waterways by high cliffs, and may in some cases be heavily wooded with no nearby roads. These conditions would severely limit the use of heavy equipment in the response.

   Where roads or railroad lines are available in the vicinity, and the heavy equipment can approach the shoreline, it may be mobilized and used. Routes and work areas will be subject to approval and onsite directions of the cognizant authorities. Construction of temporary road extensions or access road spurs may be necessary. When mobilization or use of heavy equipment is impractical, the response contractor may have to mobilize additional labor and perform the work using hand tools with a limited amount of lightweight powered equipment. In very remote areas it may be necessary for the response crew to approach the spill site on foot. It may be practical to use helicopters to deliver personnel and light equipment and materials to a remote site in rugged terrain.

   In some cases, the spill containment may actually be deployed downstream of the protected waterway, due to the impracticality of getting sufficient equipment and personnel into the immediate area of the spill. The Company Incident Commander will coordinate with the owners of the affected property downstream of the protected waterway if this becomes necessary.

2. Protection of Protected Waterways

   Once human health and safety concerns have been addressed, priority will be given to preventing contamination of the protected waterway, or to limiting further contamination if it has already occurred. This is usually accomplished primarily with containment booms and berms. The Company Incident Commander and the first responder will select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   The Company Incident Commander and the response contractor will attempt to contain the spilled product on land before it reaches the waterway, if it has not already done so. Time will be critical. With the approval of and at the direction of the cognizant authorities, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product and prevent it from entering the protected waterway. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

To contain the spilled product once it has contaminated the protected waterway, the response contractor will probably deploy containment booms as close downstream of the spill site as may be safe and practical. The impacted area may include rough water, such as rapids and falls, in which case the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream. The location of the containment boom is critical and will require the approval of the cognizant authorities.

3. Recovery of Product from Water and Treatment of Contaminated Water.

   Product is typically recovered from the surface water by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to closer sites is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

   The methods of temporary storage of the contaminated water will be site-specific, and will be highly dependent on site access and approval by the cognizant authorities. Railroad tank cars, tank trailers or frac tanks may be used if roads/railroads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas.

   The decision to treat contaminated water onsite or to transport it offsite for treatment will be made by Company and the cognizant authorities with consideration of factors such as availability of utilities, suitable land area, and a comparison of the difficulties of getting the treatment equipment to the site versus the difficulties of getting the contaminated water to an offsite treatment facility. Once the contaminated waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Manmade structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down and use of surfactants, emulsifiers or other agents.

   Affected natural structures may include large rocks and boulders, which can usually be cleaned by the same methods as man-made structures. Cleaning rocky shorelines along rapids and near waterfalls will probably be done with sorbent pads since recovery of wash-down water surfactants emulsifiers and other agents may be impractical near rough water. Cleaning activities near rough water may also require special safety precautions and equipment such as safety lines.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Wash down water and other liquids from cleaning activities onshore should be contained by the ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. Excavation may be limited to manual labor activities by the exclusion of heavy equipment due to restricted access.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site unless the cognizant authorities direct otherwise. Solids may be removed from the site by truck where roads are available or by barges where navigable waterways are reasonably close. In areas so remote that the only access is by aircraft, removal of solids from the site may be impractical. In this event, the Company Incident Commander and the appropriate authorities will determine if onsite containment or disposal is acceptable, and if it is, the best methods of doing so consistent with protection of the environment and the public health and safety.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Restoration activities will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.5 Recreational Sites

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a recreational site. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Recreational sites are areas designated by federal, State and local governments for public use. A recreational site may include any type of terrain, including beaches, streams, lakes, forests, and mountainous areas. Recreational sites may be either remote from, or close to, human habitation, and are frequently developed for residential use and commercial enterprises related to recreation activities.

Recreational sites are generally identified and marked as such on maps.

1. Public Health and Safety Concerns

   Immediate evacuation of the public, and their subsequent health and safety, are a major concern. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the recreational site.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a recreational site will depend on the degree of private, commercial and public development in the affected area. Major recreational sites are generally well developed and have considerable commercial value; a spill may be expected to have a major impact on the commercial value of public and private property.

   Environmental impact on a recreational site can be immediate and extensive. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a recreational site. Major recreational sites provide habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

4. Potential Logistical Problems

   Logistic support at recreational sites will vary from site to site, but typically includes access to major transportation networks and utility services. Roads into and through such areas may be considered generally reliable. Sufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc should be available.

   Transportation of personnel, equipment and materials into and out of some recreation sites may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available at some recreation areas and absent at others. If not available, they must be brought in by the contractor's response team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the immediate area of the spill and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas downstream of the spill. The team should place a containment boom on water or construct earthen berms on land as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom / berm will also be based on personnel safety considerations for the personnel setting up the containment boom / berm. The team may then place one or more secondary booms / berms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom / berm system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms / berms or relocation of existing booms / berms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms / berms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if contaminated surface water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipe.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Contaminated lumber from marine facilities is anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Recreational Sites

1. Access on and through Recreational Sites

   Response activities, particularly movement of vehicles and equipment into and out of the area may temporarily inconvenience or disrupt the public's use of the recreational site facilities. The Company Incident Commander and the response contractor will coordinate access routes and response activity traffic control with the authorities responsible for the recreational site.

   The response contractor may use existing roads into the spill area wherever possible and where permitted by the cognizant authorities. The response contractor will construct staging and laydown areas in locations approved by the appropriate authorities responsible for the recreational site, taking into consideration all ongoing public activities, and any nearby habitations. Where roads do not exist but a practical and approved route is available, the response contractor may construct temporary roads to the spill site, and staging/laydown areas. The response contractor will utilize the minimum size and number of vehicles in the response activities.

   Where navigable waterways are convenient to the site and the cognizant authorities approve waterborne access, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Response equipment sizes may be limited by the capacity of available boats and barges. The response contractor may use existing boat landings/docks or construct a temporary landing to tie up the watercraft and offload the equipment.

   Roads, staging areas and watercraft landings will be restored to their pre-spill conditions as described in the SITE RESTORATION section on the following pages.

2. Protection of Recreational Sites

   One of the major concerns in this scenario is the removal of contamination to levels acceptable for the protection of the public using the park.

   Once immediate human health and safety have been addressed, priority will be given to protecting the recreational site features from contamination, and limiting further spread of the spilled product. Playground equipment, swimming pools, and pavilions used for public gatherings will be given special attention. Containment booms and berms may be used to contain and direct the spilled product. The cognizant authority, the Company Incident Commander and the first responder will identify the recreational site features, land areas and water bodies threatened by the spill, prioritize the features to be protected, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

   Where a body of water is affected or threatened by the spill, the response contractor will usually deploy containment booms as the isolating/protecting mechanism. The booms will be deployed downstream of the spill if the water is moving, as in a stream or river. The boom will be deployed to surround the spill if it is on a pond or lake where the water is relatively stagnant.

Containment of an overland spill is typically done with ditches and berms. With the concurrence of and at the direction of the cognizant authority, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

   Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery will be as close as practical downstream of the spill site.

   Product spilled onto the ground is usually recovered by excavating the product-laden soils. Excavation of contaminated soils will be performed only with the concurrence of and at the direction of the cognizant authorities. Other methods such as soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan. Porous soils, such as sands and gravels may permit the product to soak in to a depth of several feet or more, usually until it is stopped by a layer of clay, solid rock or a water table. Clay soils usually retain the product at or near the surface, and require less excavation. Collection of product for treatment or disposal will easier in clay soils than in sandy/gravelly soils.

   Selection of storage and treatment locations will depend on patterns of public use of the site, proximity of the public using the recreational site, and approvals and/or preferences of the responsible authorities. If space is available and if the cognizant agency permits, the response contractor may construct the water storage and treatment system in or adjacent to the recreational site, near the site of the spill, at a safe distance from any feature subject to human occupation or usage. If space is not available for practical reasons, or if onsite treatment would be a continuing hazard to the public safety and health, the contained water may have to be transported offsite for treatment or disposal.

   Once the contaminated waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Man-made structures can be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. Swimming pools, playground equipment, pavilions and similar structures will receive special attention during cleaning. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

   Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

   Product-laden soils will be removed to the satisfaction of, and at the direction of, the appropriate authorities. It is expected that product-contaminated soils in playgrounds and other areas of frequent and intense human use at recreational sites will be excavated more completely than at spill sites in more remote areas. Heavy equipment, such as tracked excavators and dump trucks, may be used wherever their use is not prohibited by the cognizant authority, or is impractical due to access restrictions.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site. Solids will be removed by trucks where roads are available, or by barges where navigable waterways are reasonably close and the volume of contaminated soils justifies their use.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Recreational site restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and municipal, county or state agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.6 Water Supply Intakes

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a water supply intake. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Water supply intakes generally include lakes, reservoirs, rivers, streams, springs, and similar bodies of water near the inhabited areas that are served by the intake.

1. Public Health and Safety Concerns

   The most serious impact on public health and safety is contamination of the drinking water, followed by danger of fire or explosion, and inhalation of toxic vapors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure. Contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife will be a concern in some remote parks.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on a Water Supply Intake will depend on its proximity to inhabited or improved property and whether the water purification equipment is contaminated by the spill. Major Water Supply Intakes are frequently developed as recreational areas and have considerable commercial value.

Environmental impact on vegetation and wildlife in a Water Supply Intake can be severe if not removed immediately, but this will be secondary to the potential affects on the public health and welfare.

4. Other Impacts

   The intake may be rendered unfit as a source of public drinking water for a prolonged time. It may become necessary to locate, and activate or enlarge alternate sources of drinking water. These may be artisan wells or surface water sources such as lakes or rivers not ordinarily used for drinking water. Purification facilities may be required to treat the water from such sources, to make it suitable for public use.

5. Potential Logistical Problems

   Water Supply Intakes are typically close to the population centers that they serve. Major transportation networks and utility services are usually available in the general vicinity. Roads to such areas are generally reliable, but public and/or private roads may need to be closed for the duration of the cleanup.

   Transportation of personnel, equipment and materials within the area may require specialized vehicles such as UTVs, workboats, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity may be available; if not, the response contractor's team must bring them in.

Initial Response Strategies

1. The Company Incident Commander will

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Alert appropriate health authorities to warn the public of possibly tainted water supply, and initiate analysis of the water for potability.
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.
   - Initiate measures to locate or develop temporary alternate water supply if the spill or the response activities will render the intake unusable. The temporary supply will be provided until the intake is judged by the appropriate health agency to be acceptable.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be en route within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained Personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas. One of the first tasks of the Tier 1 response contractor's team should be to double, and if possible, triple the containment boom system to minimize the possibility of boom failure or product bypassing the boom system and/or entering the intake. It may be necessary for the Tier 1 response contractor's team to work extended hours, using lights after nightfall.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

- 12 HAZWOPER-trained Personnel,
- 4 work boats,
- 4,000 feet of containment boom,
- 2 skimmers,
- 2 vans,
- 2 pick-up trucks,
- 2 vacuum trucks,
- 1 skid unit (1,500 gallon capacity),
- 8 radios, and
- 24 air bottles

The Tier 1 response contractor's team should work 24 hours per day, in shifts.

The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

- 23 HAZWOPER-trained Personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Relative position of the intake,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, and pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response contractor's team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response contractor's teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team will construct a siphon dam to contain the spilled product if the contaminated water is flowing, and the water is shallow enough for this to be practical; i.e., if the water depth is less than 10 feet. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Timber debris may result from demolition of docks, piers and similar marina structures contaminated too badly for decontamination to be practical

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, and public and private marine structures, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Water Supply Intakes

1. Access to, at and on Water Supply Intakes

   Access to the site will probably be by road or navigable waterway, subject to approval and oversight by the cognizant authority. Personnel and equipment may be mobilized by truck or boat/barge. Once the floating equipment reaches the water supply intake, the booms can be deployed and moved by boat. Personnel can be landed on the shoreline as required to anchor containment booms, clean shoreside structures and excavate small volumes of contaminated soil. Tracked or wheeled heavy equipment may be used along the shoreline for major excavation where the shore can be approached from the landward side.

   The response contractor will construct temporary roads, staging and laydown areas in locations approved by the appropriate authorities responsible for the intake, taking into consideration the need to avoid interfering with the operation of the intake wherever possible.

   Where navigable waterways are convenient to the site and the cognizant authorities approve the use of waterborne equipment, the response contractor may use workboats and/or barges to mobilize the response equipment to the site. Equipment sizes may be limited by the capacity of available boats and barges. The response contractor may use existing boat landings/docks or construct a temporary landing to tie up the watercraft and offload the equipment.

   Roads, staging areas, and watercraft landings will be restored to their pre-spill conditions as described in the SITE RESTORATION section on the following pages.

2. Protection of Water Supply Intakes

   Protection of the water supply intake from contamination by the spilled product is the crucial aspect of this scenario. Once human health and safety concerns have been addressed, priority will be given to protecting the intake from contamination. Whenever the release is waterborne, booms will be typically deployed as the isolating/protecting mechanism. Boats will probably be used to deploy the booms. The cognizant authority, the Company Incident Commander and the first responder should identify potential boat launch sites and communicate this to the response crew prior to their arrival.

   If the release is overland, then priority should be given to preventing the spilled product from reaching the water body. Containment of an overland spill is typically done with ditches and berms. With the approval of and at the direction of the cognizant authorities, the response contractor may dig ditches and build berms downslope of the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point downslope of the spill. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water

   Typically, product is recovered from surface water like a water supply intake by a combination of mechanical skimming, vacuum recovery, and manual application of sorbent materials. Temporary storage of recovered product may be accomplished by the use of tank trailers, small barges or other containers. All recovery and storage plans, techniques, equipment and materials will be subject to the approval and direction of the cognizant authorities.

   Prolonged storage of contaminated water in close proximity to the intake may be inadvisable due to the continued danger of leaks from the tanks and pipefittings. If the cognizant authorities concur, the storage tanks or barges may be moved offsite as soon as practical to reduce this hazard. The Company Incident Commander or the first responder will have to assess the situation quickly and communicate with the response crew in order to ensure that sufficient quantities of the correct storage and transfer equipment are deployed.

   Once the contaminated waters have been stored, treatment options can be explored. Although onsite storage and treatment is generally preferred by regulatory agencies, offsite water treatment should be considered as an alternative in order to remove the hazard of recontaminating the water body. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies.

4. Cleaning of Affected Structures

   Traditional methods of cleaning structures affected by released product include wiping, hot water, low or high-pressure washdown, and/or the use of surfactants, emulsifiers or other agents. Because improper or misapplied materials and procedures may do more harm than good, and because of the potential for irrecoverable damage to the intake structure and the water purification process system downstream of it, the method of choice for cleaning an intake structure contaminated with product will require the approval and direction of the cognizant authority. Alternative methods, including the use of detergents or emulsifiers, will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

5. Solids Handling and Removal

   Product-laden soils on the shore of the water supply body will be removed to the satisfaction of, and at the direction of, the appropriate authorities. Heavy equipment, such as tracked excavators and dump trucks, will be used wherever their use is not prohibited by the cognizant authority or impractical due to access restrictions.

   Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

   Contaminated soils and other solids will be removed from the site as approved by and at the direction of the cognizant authority. Trucks may remove solids where roads are available. Barges may be used for removal of large volumes of contaminated solids where navigable waterways connect to the water supply body, provided caution is exercised to avoid recontamination by spillage.

Site Restoration

1. Sampling and Analysis to Verify Cleanup
   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements. This effort may be prolonged in order to ensure that the public is not endangered by residual spill-related contaminants in the drinking water supply.

2. Rebuild/Reconstruct Affected Structures/Areas
   Restoration requirements will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report
   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.7 Wetlands

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to wetlands. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Wetlands are described in 40 CFR 230.3(t) as "...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas" Wetlands are frequently, but not always, remote from human habitation, and are generally undeveloped. Wetlands are not always identified and marked as such.

1. Public Health and Safety Concerns

   Most major wetlands are remote from human habitation, where a spill is unlikely to have a direct effect on public safety and health. However, some small wetlands may be found in or near metropolitan areas, where public safety and health will be a major and immediate concern, primarily due to danger of fire or explosion, or due to inhalation of toxic vapors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the wetlands.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

   Property impact of a spill on wetlands will depend on its proximity to inhabited or improved property. Major wetlands are generally undeveloped and have little or no commercial value; a spill is expected to have minimal property impact.

   Environmental impact on wetlands can be severe. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of wetlands. Wetlands perform a valuable filtering action for the waters that pass through them, removing solids and organic materials. Wetlands also provide a habitat for wildlife and are a source of oxygen for the atmosphere.

4. Potential Logistical Problems

   Wetlands are typically remote from major transportation networks and utility services. Roads into and through such areas may be seasonal, intermittent, and should be considered generally unreliable. There may be insufficient solid ground on which to set up support areas, lay-down areas, etc.

   Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or barges. The response contractor should possess, or have ready access to, the minimum required equipment.

   Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response team.

Initial Response Strategies

1. The Company Incident Commander will

   - Initiate evacuation of the public from the affected areas and from the area in which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. A local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response team while the response contractor's supervisor is en route to the site. The Tier 1 response team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

   The Tier 1 team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response teams once the Tier 1 team is en route to the site.

   The Tier 2 response team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

The Tier 3 response team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response teams, plus:

- 23 HAZWOPER-trained personnel,
- 2 pick-up trucks,
- 4 vans,
- 1 supply trailer,
- 4 work boats,
- 6,000 feet of containment boom,
- 3 vacuum trucks,
- 3 skimmers,
- 12 radios, and
- 48 air bottles

5. The first task of the Tier 1 response team should be to minimize the spread of the product on the water and ground surface in order to protect the public and environmentally sensitive areas. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.
   If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam, and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, reptiles and mammals affected by the spill, for transportation by the wildlife agencies to treatment facilities.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response team will construct a siphon dam to contain the spilled product if the contaminated water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response team.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a weekly report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Wetlands

1. Access on and Through Wetlands

   Access on and through wetlands may probably be severely restricted by the regulatory agencies due to the severe and long-lasting damage that could result. Routes for temporary roads and laydown areas will be coordinated with the appropriate authorities with due consideration for critical and sensitive vegetation and animal habitats. The cognizant authorities will be requested to assist the Company Incident Commander and the response contractor by directing the layout of temporary roads and work areas, and the marking of areas in which personnel and equipment are prohibited. Response personnel will be briefed on the approved and prohibited areas on their arrival and at the daily tailgate safety briefings.

Boats and/or barges may prove practical and less disruptive to the wetlands than vehicles and tracked equipment in some cases. The response contractor may have to construct a temporary landing to tie up the watercraft and offload some personnel, equipment and materials. The response contractor will minimize the size and number of heavy equipment used in the response, to the minimum necessary to do the work.

All access roads, boat landings, etc. will be restored to their pre-spill conditions as described in the SITE RESTORATION section on the following pages.

2. Protection of Wetlands

Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is usually done with containment booms and berms. The cognizant authorities, the Company Incident Commander and the first responder will identify the areas threatened by the spill, and select the boom and berm locations. The Company Incident Commander will advise the contractor's response team of special or additional equipment and material needs.

Booms typically protect swamps and ponds that are contaminated or threatened by a spill. Booms will be deployed by boat if possible, provided that the cognizant authorities approve their use. Where the water is too shallow for workboats, the response contractor may have to deploy the boom manually, by workers wading in the water or mud.

Ditches and berms typically protect a spill on solid ground. With the concurrence and at the direction of the cognizant authorities, the response contractor may dig ditches and/or build berms around the spill site to stop the overland flow of the spilled product. Tracked excavators and/or bulldozers may be used for this where there is solid enough ground to support heavy equipment and the regulatory agencies permit its use. In some cases it may be possible to use this ditch/berm system as the product collection system or to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. Sandy or gravelly soil does not make good barrier berm material. Clay dug from other onsite areas may be used only with the approval of, and at the direction of, the cognizant authorities. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from lakes, ponds and rivers associated with wetlands by a combination of mechanical skimming, vacuum recovery, and sorbent materials. Boats may be used to move personnel, booms and materials where water depth is adequate and if the cognizant authorities concur.

Product spilled onto the ground of a wetland does not normally soak very far into the soil, due to the saturated nature of the soil. The spilled product will probably collect as pools in low spots of the ground surface. Vacuum pumps and sorbent pads may be used to remove the majority of the product. Excavation of remaining contaminated soils will be done only with the concurrence and at the direction of the appropriate authorities. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of a long-term plan. Free product will probably be pumped to temporary storage, and used sorbent materials will be collected and handled as solid wastes.

The methods of temporary storage of the contaminated water will be site-specific, and will depend on suitable onsite ground space, distance to a suitable offsite storage area, and agency approvals. Barges may be practical storage containers where navigable waters are conveniently close and the cognizant authority approves their use. Tank trailers or frac tanks may be used if roads are closer than barge access to the wetlands spill site. In any case, the regulatory agencies may require that product and contaminated water be transported offsite as quickly as possible.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies. It is expected that the water treatment facility will be installed outside the wetlands.

4. Cleaning of Affected Structures

Wetlands typically do not include many man-made structures. However such man-made structures as are contaminated by the spilled product can be cleaned by traditional methods that include wiping, hot water, low or high-pressure wash down, and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other agents may be prohibited by the regulatory or other cognizant authorities in some areas. Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction.

Wash down water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Removal of product-laden soils will be conducted only with the concurrence and at the direction of the appropriate authorities. Heavy equipment such as excavators will be used where the cognizant authorities permit it. Otherwise contaminated soils will be excavated manually using shovels and other hand tools.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

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Contaminated soils and other solids will be removed from the site unless the regulatory authorities dictate that they remain onsite. Transportation plans, including routes, vehicle types and loading methods may require the approval of the cognizant authorities. Trucks may be used where roads are available. Barges may be more practical where navigable waterways are reasonably close. Where vehicle and barge use is impractical or prohibited by regulatory agencies, solids from the site may have to be removed manually.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Wetlands restoration activities will vary considerably from site to site. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

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3.8 Wildlife Refuges

Environmental Response Scenario

The following scenario provides probable, effective response actions in the event of a spill to a wildlife refuge. Depending on the site-specific conditions, Company may choose to respond in a manner different from that described below. The manpower, equipment, and recovery rates are all dependent upon site-specific conditions and Company will respond in an appropriate manner.

Description of the Affected Area

Wildlife refuges are areas designated by the federal government to remain in a natural or underdeveloped condition for the benefit of wild animals, particularly game species and those that are endangered. The vegetation and water supply generally support a wide variety of insects, fish, reptiles, mammals and birds, some of which may be endangered or otherwise protected by law. A wildlife refuge may include any type of terrain, including shorelines, swamps, forests, deserts, and mountainous areas. Wildlife refuges are frequently, but not always, remote from human habitation, and are generally undeveloped. Wildlife refuges are usually identified and marked as such on maps and along their boundaries.

1. Public Health and Safety Concerns

   Most major wildlife refuges are remote from human habitation, where a spill may affect the health and safety of a relatively small number of forest rangers, fish and wildlife agents and visitors. The danger zone for the public will generally be downwind of the point of discharge and the resulting plume.

2. Project Personnel Safety Concerns

   The greatest safety concern for project personnel is fire and explosion. The response contractor's team personnel will conduct continuous air monitoring for flammable vapors with a combustible gas meter and will suspend operations when readings exceed 10 percent of the lower explosive limit (LEL). Response contractor's team personnel will use non-sparking equipment whenever monitoring indicates explosion/fire potential. Smoking paraphernalia, including lighters, will not be permitted in the work areas under any circumstances.

   Other safety concerns for project personnel, Company representatives and the regulatory agencies' representatives are inhalation of hydrocarbon vapors (specifically benzene vapors), skin contact with liquid hydrocarbons, heat stress and cold exposure, and contact with, or bites from, poisonous plants, insects, snakes, rodents and large wildlife indigenous to the wildlife refuge.

   Air monitoring analysis will dictate the level of PPE utilized by workers in the exclusion zone. The support area, including break and eating areas, will be located in a safe area, and upwind of the exclusion zone wherever possible.

3. Property and Environmental Impact

Property impact of a spill on a wildlife refuge will depend on its proximity to inhabited or improved property. Major wildlife refuges are generally undeveloped but may have potential commercial value; a spill may have serious impact on the commercial value of public or private property.

Environmental impact of a spill on a wildlife refuge can be immediate and extensive. Petroleum hydrocarbons may have an adverse impact on most forms of plant and animal life, and can destroy the exposed portion of a wildlife refuge. Wildlife refuges provide crucial habitats and food supplies for wildlife and are sources of oxygen for the atmosphere.

The more tender vegetation, such as grasses, may be destroyed by direct contact with the spilled product. Hardier vegetation such as shrubs and trees contaminated by the spilled product may be removed as part of the response activities. The loss of habitat and food supply is expected to have a serious impact on wildlife in the refuge.

Wildlife may be threatened by direct contact with the spilled product, eating product-contaminated vegetation, and hunger if large areas are cleared of contaminated vegetation during the response activities. The times of greatest danger to wildlife will be during migrations, when large numbers of birds depend on the refuges for food and safety. Even temporary loss of part of a major refuge could have a serious impact on some species. Loss of part of a key breeding ground for an endangered species could contribute to its extinction.

4. Potential Logistical Problems

Wildlife refuges differ from site to site, but typically they are remote from major transportation networks and utility services. Roads into and through such areas may be seasonal, intermittent, and should be considered generally unreliable. There may be insufficient solid level ground or a wide enough clearing in which to set up support areas, lay-down areas, etc.

Transportation of personnel, equipment and materials into and out of the area may require specialized vehicles such as UTVs, swamp buggies, airboats or helicopters. The response contractor should possess, or have ready access to, the minimum required equipment.

Temporary utilities, including potable water, fuel and electricity will probably be absent and must be brought in by the response contractor's team.

Initial Response Strategies

1. The Company Incident Commander will:

   - Initiate evacuation of the public from the affected areas and from the area toward which the plume is moving,
   - Initiate appropriate actions to isolate the pipeline or any other source of the spill; i.e., turn off the nearest block valves and shut down the flow of product.
   - Order immediate deployment of the response contractor's oil containment boom (minimum 200 ft long), complete with anchors,
   - Notify the response contractor's program manager that a spill is in progress and
   - Notify the appropriate Federal, State, and local regulatory agencies. Local, State and Federal agency notification is listed in this FRP.

2. The response contractor's program manager should dispatch a response supervisor to the location of the spill by the fastest means practical. The response contractor's supervisor should be equipped with a one-day supply of PPE to include supplied air, and a radio or mobile telephone. The response contractor's supervisor should contact the Company Incident Commander immediately on arrival at the site and jointly assess the magnitude of the problem, noting any special considerations that may affect selection of resources required to complete the response action.

3. The response contractor's program manager should mobilize the Tier 1 response contractor's team while the response contractor's supervisor is en route to the site. The Tier 1 response contractor's team should be capable of removing 1,500 BBL of product per day, should be enroute within 2 hours of notification, and should arrive on-site within 12 hours of notification. This response team may consist of:

   - 8 HAZWOPER-trained personnel (including a supervisors and a site safety officer),
   - 2 pick-up trucks,
   - 1 one-ton box truck/associated supplies,
   - 2 vacuum trucks,
   - 1 van,
   - 2 work boats,
   - 2,000 ft of containment boom,
   - one foam trailer with applicator and foam to cover 90,000 square feet,
   - a seven (7)-day supply of PPE,
   - 12 sets of air bottles,
   - lights,
   - 2 skimmers,
   - 1 generator,
   - 1 air compressor,
   - PID/LEL,
   - detector tube specific for benzene (not affected by other hydrocarbons)
   - 4 radios, and
   - expendable supplies (absorbent booms & pads, PPE)

The Tier 1 response contractor's team should immediately report to the response contractor's supervisor for a briefing on the response action and a tailgate health and safety meeting. The response contractor's supervisor should direct the team's activities from this point on, including setting up laydown areas and support areas.

4. The response contractor's program manager should begin mobilizing the Tier 2 and Tier 3 response contractor's teams once the Tier 1 team is enroute to the site.

   The Tier 2 response contractor's team should be capable of removing 3,000 BBL per day, should be on-site within 36 hours of notification, and may consist of the Tier 1 response contractor's team, plus:

   - 12 HAZWOPER-trained personnel,
   - 4 work boats,
   - 4,000 feet of containment boom,
   - 2 skimmers,
   - 2 vans,
   - 2 pick-up trucks,
   - 2 vacuum trucks,
   - 1 skid unit (1,500 gallon capacity),
   - 8 radios, and
   - 24 air bottles

   The Tier 3 response contractor's team should be capable of removing 6,000 BBL per day, should be on-site within 60 hours of notification, and may consist of the Tier 1 and Tier 2 response contractor's teams, plus:

   - 23 HAZWOPER-trained personnel,
   - 2 pick-up trucks,
   - 4 vans,
   - 1 supply trailer,
   - 4 work boats,
   - 6,000 feet of containment boom,
   - 3 vacuum trucks,
   - 3 skimmers,
   - 12 radios, and
   - 48 air bottles

5. The first task of the Tier 1 response contractor's team should be to minimize the spread of the product on the water and ground surface in order to protect the public and the vegetation and wildlife in the refuge. The team should place a containment boom as close as possible to the point of origin of the spill to minimize the area of most severe contamination. The placement of the containment boom will also be based on personnel safety considerations for the personnel setting up the containment boom. The team may then place one or more secondary booms farther away, in the path(s) of the plumes deemed by the Company Incident Commander and the response contractor's supervisor to be the most dangerous to the public or to the environment.

6. Health and Safety Plan

   Initial health and safety response actions will be in accordance with the standard operating procedure. The response contractor's Site Safety Officer will complete a Site-Specific Health and Safety Plan after the initial hazard assessment is conducted.

7. Implementation of Air Monitoring Program

   Company's Incident Commander will assign a Site Safety Officer (SSO) who will begin monitoring activities (using a PID, an LEL meter and benzene-specific detection tubes) in the area of the spill immediately on arrival, to assess the danger from fire and explosion in the work area, determine potential exposure to benzene, delineate the exclusion zone, and establish the support zone. Instruments, frequency of readings, records and responses to action levels will conform to the Health and Safety Plan. The SSO will pay particular attention to LEL readings.

   As soon as possible after the SSO completes his initial air monitoring for the spill site hazard assessment and delineates the work zones, he/she will begin a perimeter air-monitoring program to confirm that the exclusion zone is properly sized and to document potential offsite migration of vapors that could impact the unprotected public or wildlife.

8. Contingency Planning

   The Company Incident Commander, the SSO and the response contractor's supervisor will identify evacuation routes of egress and procedures, safe distances and places of refuge, and emergency alerting procedures to be used in the event of an uncontrollable situation such as fire or explosion.

9. Assessment of Affected Area(s)

   The Company Incident Commander and the response contractor's supervisor will jointly review the maps provided and inspect the affected area(s) and assess:

   - The nature of the spilled liquid,
   - Source of the spill,
   - Direction(s) of spill migration,
   - Apparent or otherwise known subsurface geophysical feature that might impact the work; i.e., subsurface sand layers, water table elevation,
   - Overhead and buried utility lines, pipelines, etc.,
   - Nearby population, property or environmental features that might be affected by the contained spill, or by an uncontained spill.
   - Closest concentration of wildlife and breeding areas

   The Tiers 1, 2, and 3 response team resources in personnel, equipment and material will be assessed to determine if they are adequate to effectively perform the work.

If the Company Incident Commander determines that additional resources are required, the response contractor's supervisor will request additional resources for the Tier 2 and 3 response teams from the response contractor's program manager. Additional equipment may include backhoes, dump trucks, watercraft, generators, light sets, bulldozers and front-end loaders. Equipment operators, laborers, and engineers may be mobilized as necessary. Additional material may include more spill booms, absorbent materials, foam and imported clay for berms.

10. Delineation of Exclusion and Support Zones

    The Site Safety Officer (SSO) will mark the limits of the exclusion zone with red plastic tape, using existing trees to support the tape where possible. The support zone will be marked with green plastic tape if in the SSO's judgment such marking is necessary to avoid confusion with a contaminated area. If the exclusion zone cannot be physically marked, the SSO will annotate a site map or layout sketch and brief all personnel on the zone layout prior to site entry.

11. Protection of Downstream Sensitive Areas

    Company's Incident Commander, the response contractor's supervisor and SSO will inspect the boom system to ensure that it is effectively protecting the public and environmentally sensitive areas downstream of the spill. The response contractor's supervisor will direct placement of additional booms or relocation of existing booms if ongoing measures are judged to be ineffective.

Ongoing Response

1. Recovering Wildlife for Transfer to Treatment Facilities

   The response contractor will cooperate with Company and local wildlife assistance agencies to recover birds, fish, small and large animals affected by the spill, for transportation by the appropriate wildlife agencies to treatment facilities. The response contractor will take extreme care to minimize the disruption or displacement of wildlife, with particular attention to the breeding areas of protected species.

2. Recovery and Transfer of Free Product

   Construction of the free product temporary storage area will start after the containment booms are in place and judged effective in limiting the spread of the plume. The storage will consist of frac tanks or rubber bladders. The tanks or bladders will be surrounded by a berm built up from on-site materials or imported clay.

   The response contractor's team will recover free product with vacuum trucks, sorbent booms and pads, oil skimmers and vacuum pumps.

3. Install Siphon Dams, Etc.

   The response contractor's team may construct a siphon dam to contain the spilled product if the contaminated water is flowing. A siphon dam is built of earth with steel or plastic pipes embedded through it at a vertical angle such that the lighter, floating product is trapped behind the dam while the water below it is permitted to flow through the pipes.

4. Debris Removal

   Debris will consist of steel, concrete, timber and vegetation contaminated by the spilled product, plus product-soaked sorbent materials and trash generated by the response contractor's team. Contaminated vegetation is anticipated to make up the majority of the debris.

   Company will remove and dispose of debris or may direct the response contractor to do so. Ultimate disposal may depend on the degree of contamination and is subject to approval by the regulating agencies.

   Typically, steel and concrete will be transported to a landfill. Timber and vegetation will be either landfilled or incinerated off-site. The regulatory agencies may permit on-site burning of timber and vegetation under some circumstances, but this is unlikely within the boundaries of the wildlife refuge itself.

5. Stabilize Damaged or Affected Structures

   The response contractor will construct temporary bracing and shoring as necessary to prevent collapse of structures and foundations that might impede or endanger the response work. This may include timber shoring as temporary replacements for sleepers under a damaged pipeline section.

   Company will stabilize damaged major pipeline bridges and pipeline river crossings, if needed.

6. Initial Response and Draft Work Plan

   The response contractor will prepare a draft work plan and submit it to Company. The work plan will include:

   - A summary of initial response actions and results,
   - Subsequent planned activities,
   - Water and soil removal and treatment and/or disposal,
   - Air monitoring program,
   - Sampling and Analysis Plan,
   - Restoration and repairs, and
   - A schedule for the work.

7. Debriefing/Dissemination of Information and Data

   The Company Incident Commander will interface with the regulatory agencies and news media. The response contractor will not disseminate any information or data without approval of the Company Incident Commander. The response contractor may furnish personnel to assist the Company Incident Commander in debriefing.

8. Documentation of Cleanup Efforts and Progress

   The response contractor will prepare and maintain records, including photos and/or video, documenting the response. Records and documents will include the supervisor's daily notes, personnel time sheets, equipment usage logs, material delivery tickets, daily air monitoring logs, and soil and water analysis reports.

   The response contractor's program manager will submit to the Company Incident Commander a report summarizing the accomplishments of the preceding week, the cost status and the response activity schedule.

9. Public Relations/Agency Liaison

   The Company Incident Commander will provide all direct contact with the news media and with regulatory agencies.

Cleanup Strategies for Wildlife Refuges

1. Access on and Through Wildlife Refuges

   Access on and through wildlife refuges may be severely restricted by the regulatory agencies during the mating /nesting seasons of some animal species. The regulatory agencies are expected to judge whether the response activities may cause more harm than good, or they may elect to postpone some or all of the response activities to a later time. Routes for temporary roads and laydown areas should be established by the appropriate authorities with due consideration to critical and sensitive vegetation and animal habitats. Boats and/or barges may prove practical and less disruptive to the wildlife than vehicles and tracked equipment in some cases. The response contractor may have to construct a temporary landing to tie up the watercraft and offload personnel, equipment and materials. The response contractor will minimize the size and number of heavy equipment used in the response. In all cases the cognizant authorities will participate in and approve all plans, routes, equipment, materials, and methods.

   All work areas, to include access roads, laydown areas, boat landings, etc. will be restored to their pre-spill conditions as described in the SITE RESTORATION section on the following pages.

2. Protection of Wildlife Refuges

Once human health and safety issues have been addressed, the next priority will be given to limiting the spread of spilled product and further contamination of plant and animal life. This is typically done with containment booms and earthen berms. The cognizant authorities, Company Incident Commander and the first responder will have to quickly identify the areas threatened by the spill, and select the boom and berm locations. The Company Incident Commander will communicate special or additional equipment and material needs to the contractor's response team.

Where a body of water is affected or threatened by the spill, the response contractor will normally deploy containment booms as close downstream of, or around, the spill site as may be safe and practical. If the impacted area includes rough water, such as rapids and falls, the boom may have to be installed at a distance downstream, where the water is calm enough for the boom to be effective. This may increase the volume of contaminated water to be collected and treated. If use of the nearest effective deployment site is denied by the cognizant authorities, or if lack of roads, cliffs, heavy forests etc. make its use impractical, it may be necessary to deploy the boom at another site even further downstream.

Containment of an overland spill is typically done with ditches and berms. With the approval of, and at the direction of, the cognizant authorities, the response contractor may dig ditches and/or build berms downslope of, or around, the spill site to stop the overland flow of the spilled product. In some cases it may be possible to use this ditch/berm system to divert the product to a collection point. If the soil dug from the ditches is clay, it may be used to build the berms. The cognizant authority may prefer that clay for berms be obtained at an alternative clay source, offsite. Sandy and gravelly soils are not good barrier berm materials. If importing clay from offsite is impractical and no clay is available onsite, the response contractor may have to use sorbent materials, i.e., sorbent booms and pads, to construct the berm.

The Company Incident Commander and the response contractor will cooperate with the cognizant authorities to assist in the recovery of animals affected by the spilled product. The refuge staff, park rangers and/or wildlife rescue specialists will probably handle the animals, with some transportation provided by Company and the response contractor.

3. Recovery of Product from Water and Treatment of Contaminated Water.

Product is typically recovered from water bodies such as lakes, ponds and rivers by a combination of mechanical skimming, vacuum recovery, and sorbent materials. The point of recovery may be some distance downstream of the spill site, if access to closer sites is denied or is impractical. This may increase the response time, the amount of contaminated water, and the length of shoreline to be cleaned and restored. The size and capacity of skimming equipment, pumps, piping, and tankage may be limited by access restrictions, as described above.

Excavation of soil to recover product spilled onto the ground may be strictly controlled by the cognizant authorities, or even prohibited altogether. Other methods such as by soil/vapor extraction, or pumping from recovery wells may be considered as part of the long-term plan for some refuges, but these may be judged to be too intrusive for others.

The methods of temporary storage of the contaminated water will be dependent on site access and approval by the cognizant authorities. Barges may be practical where navigable waters are nearby. Tank trailers or frac tanks may be used if roads are accessible or constructible. Rubber bladder tanks may be used, but require cleared, relatively smooth laydown areas. It may be necessary to pump the contaminated water/product a considerable distance to a storage area outside the refuge itself. The response contractor should be sensitive to noise control and to leaks from fittings and pumps in the transfer system.

Once the contained waters have been stored, treatment options can be explored. Possible treatment options include steam or air stripping, oil/water separation, carbon adsorption, or other methodologies or combinations of methodologies. It is expected that the water treatment facility may be installed outside the refuge. Planning for the treatment technology and the location of the equipment will require approval of the cognizant authority.

4. Cleaning of Affected Structures

Wildlife refuges typically do not include many man-made structures. However, there may be visitor centers, viewing platforms and water-control equipment at some refuges. These structures contaminated by the spilled product may be cleaned by traditional methods that include wiping, hot water, low or high-pressure washdown, and use of surfactants, emulsifiers or other agents. The use of surfactants, emulsifiers and other chemical agents may be prohibited by the regulatory or other cognizant authorities in some areas of the wildlife refuge. Cleaning methods and materials to be used at a spill will be discussed with the appropriate authorities and used only with their concurrence and at their direction. Some wooden structures that cannot be adequately cleaned may have to be removed and/or replaced.

Washdown water and other liquids from cleaning activities should be contained by the boom or ditch/berm system, then collected and treated with the contaminated ground and surface waters.

5. Solids Handling and Removal

Removal of product-laden soils will be conducted only with the concurrence of, and at the direction of, the appropriate authorities. Where the noise and exhaust fumes from heavy equipment such as tracked excavators may disturb mating or nesting animals such equipment will be used only if the cognizant authorities permit it. Otherwise contaminated soils may have to be excavated manually using shovels and other hand tools.

Sorbent materials and other solid residue will be placed in trash bags and removed from the site for disposition. The response contractor will take particular care to remove all his site-generated wastes from the area, and will conduct a final walking inspection of the entire area with the Company Incident Commander to confirm that this has been done prior to departure.

Excavated contaminated soils and other solids will be removed from the site unless the regulatory authorities dictate that they remain onsite. Trucks may be used where roads are available. Barges may be more practical where navigable waterways are reasonably close. Where vehicle and barge use is impractical or prohibited by regulatory agencies, solids from the site may have to be removed manually.

Site Restoration

1. Sampling and Analysis to Verify Cleanup

   Sampling and analysis of the remaining soils and water will be coordinated with local, State and federal agencies to verify that the cleanup meets their requirements.

2. Rebuild/Reconstruct Affected Structures/Areas

   Wildlife refuge restoration activities will vary considerably from site to site and may entail major efforts by a combination of Company and multiple regulatory and wildlife agencies. As early as possible, the Company should determine the feasibility and practicality of restoration in consultation with the appropriate authorities so that detailed, deliberate plans, specifications, and costs can be prepared.

3. Final Report

   The response contractor will prepare a Final Report for Company, summarizing the actions taken during the response activities, with particular attention to restoration and verification of cleanup.

3.9 Natural Resource Damage Assessments

Under the provision of CERCLA, the Oil Pollution Act of 1990 (OPA '90), and numerous state statutes, cost recovery can be obtained from industry for natural resource damage caused by the release of oil or hazardous substances to the environment. Natural resources are defined as land, air, biota, groundwater and surface water. A federal or state government entity, an Indian tribe or another nation acting as a public trustee of a natural resource may file claims for damages to natural resources.

A Natural Resource Damage Assessment (NRDA) is used to determine the damages owed to a public Trustee for residual natural resource injuries. This assessment is often conducted by the public Trustee, the potential responsible party or both. During the NRDA study, the injured natural resources are identified, the extent of the injury is quantified and the extent of the economic damage resulting from the loss of services provided by the resources is determined. In addition, the assessment also determines the cost of restoration or replacement of the injured natural resource.

A NRDA study is not conducted in all cases. HSE will work closely with the Trustees on a case-by-case basis to determine if a NRDA study is required. Company may choose to conduct a parallel study if the trustee determines that a NRDA will be conducted. The Environmental Coordinator should be contacted immediately if a Trustee contacts any member of the Company response team. HSE will provide assistance in conducting NRDA studies.

If a spill occurs that could potentially result in a NRDA, steps should be taken to assist the Trustees and to help protect Company interests throughout the assessment process. The following sampling procedures describe the steps that might be taken if the spill enters a stream. Sampling events would be modified appropriately if the spill only impacts land. To fully characterize the impact of the spill, several sampling events may be required. The initial round of samples should be collected as soon as possible following the spill event. Follow up sampling events will be scheduled to document the site restoration.

1. Formulate a sampling plan. Observe the site conditions and determine the best locations to collect samples. Contact a local lab and obtain the proper sampling containers, sampling equipment and documentation. The sample collection may be delegated to the lab or to response contractor personnel.

2. Contact the State Environmental Representative and inform them that samples are to be collected and offer to split the samples. If the State representative is not immediately available, do not wait, go ahead and collect the samples and inform them later. Time is a critical factor.

3. In any spill event, data collection and documentation are key factors to minimizing adverse financial and public perception impact to Company. The increased use of NRDA and lawsuits by local, county and state agencies following a spill, regardless of the efficiency of the response, requires an increased awareness and documentation of our response actions. Any sample collection event and all types of documentation may be utilized in a legal setting, therefore utilizing proper data collection techniques and detailed documentation are important.

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a. Photo Documentation: Photograph and/or Video Tape the event as thoroughly as possible. A photo record of the event should be maintained. All major events and response efforts should be photographed to establish a record of the events as they occur.

b. Written Documentation: A written log should be maintained that outlines the following information: 1) Major response events (i.e. time of the spill, time of the response, when valves were shut in, estimated volume of product. etc.) most of this information is documented on the Release Report Form in this FRP; 2) instructions or guidance provided to Company by State or Trustee representatives; 3) amount of product recovered; 4) amount of hazardous waste or special wastes generated as a result of the spill; 5) a sample collection location map that outlines the date, time, and type of samples collected, and; 6) date of project completion.

4. Sample Parameters/Collection: In the event of a product spill, review the State cleanup criteria for the individual state and sample accordingly, your Environmental Coordinator can assist in determining the proper sampling methodology and clean-up standards. If this information is not readily available instruct the lab to analyze for the following parameters: BTEX, (EPA Test Method 8020), and PAH (EPA Test Method 8270). BTEX analysis requires three 40 ml vials for liquid and one 4 oz glass jar for solids. PAH analysis requires a l liter glass jar for liquids, and one 8 oz. glass jar for solids. Properly labeling and chain of custody must be employed when collecting samples. All sample containers should be laboratory quality, glass containers. Use clean stainless steel or Teflon sample spoons and use proper decontamination techniques between samples. All samples should be placed in an ice chest, cooled and transported to the lab as soon as possible. You may choose to delegate the sampling duties to the lab or to the response contractor. Consult your Environmental Coordinator if you have questions concerning proper sample containers or equipment.

Sample Location #1: Background Samples
1 Sediment Sample -- BTEX, PAH
1 Water Sample -- BTEX, PAH

As soon as possible following the spill event, collect a background sample. This sample should be upstream of the spill event in an area that has not been impacted by the spill.

Sample #2: Spilled Product Sample
Collect a sample of the product that has been spilled. This sample is not to be analyzed but should be stored on ice for the next few weeks. The material may be useful in the future in the event that fingerprint analysis is required. Collect approximately 2 quarts of the material if possible.

Sample Location #3: Midpoint Sample
1 Water Sample -- BTEX, PAH
1 Sediment Sample -- BTEX, PAH

Collect a sample of the water and sediment in the area that has been impacted by the release event. This sample will help determine the impact of the spill on the environment.

Sample Location #4: Downstream Sample
1 Water Sample -- BTEX, PAH
1 Sediment Sample -- BTEX, PAH

Collect a sample downstream of the area that has been impacted. This should be downstream of the last containment dike or boom. If the release has not been contained attempt to get ahead of the plume to collect the samples.

5. Air Samples Surveys should be conducted near the release site. Initially, a simple benzene draeger tube may be used. Your Environmental Coordinator will assist in establishing a sampling program if more sophisticated air sampling is required. Follow the same basic approach that is applied to the water sampling. Collect at least one air sample from an upwind location and two samples from a downwind location. Always take precautions collecting the samples and do not put yourself at risk when collecting the samples.

Sampling Procedures

1. Always wear latex or rubber gloves when taking samples. This protects the sample from your hands and your hands from the sample.

2. It is best to use a clean, clear glass jar for sampling. Four- or six-ounce jars are sufficient. Dip or lower the jar (using string if necessary) into the oil or oily water at about a 30° angle. This may allow more oil and less water to flow over the lip of the jar. Do not fill the jar more than 2/3 full.

3. If sampling a small amount of light oil, such as a sheen, the oil can be collected more easily using a Teflon strip or sorbent pad that is transferred to a sample jar. Do not use anything containing organic fibers such as rag, cotton, cheesecloth, etc.; these may contaminate the sample, thus, giving improper analysis results.

4. Decanting the water may be necessary to get enough oil for analysis. To decant, fasten the lid on securely and turn the jar over allowing the water to settle towards the lid. Then unscrew the lid just enough to allow the excess water to slowly escape.

5. Fasten the lid after lining it with aluminum foil or Teflon to obtain a good seal.

6. Affix the documentation label to the jar after wiping it clean and dry for the label to adhere. The label should identify the following information:

    - Date and time of sampling
    - Source/location of sample (be specific)
    - Name of person who took the sample
    - Sample designation using a sequential numbering or lettering system

    a. Samples should be delivered to a laboratory immediately for analysis. If samples cannot be delivered immediately, they should be temporarily stored in a refrigerator or a cool dark place since exposure to heat and light could affect the analysis. Samples should be transported in waterproof containers or wrapped in enough sorbent material to soak up the entire contents of the jar in case of leakage or breakage.

Annex 4 – Table of Contents

4.0 DOT 49 CFR 194

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.105	**Brief Description**	**Location**
(a)	Each operator shall determine the worst case discharge for each of its response zones and provide the methodology, including calculations, used to arrive at the volume.	Annex 1A.7, 1A.11 & 1A.13
§ 194.107		
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	Annex 1A.7, 1A.9, 1A.10, 1A.11 & 1A.13
(b)	An operator must certify in the response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP as follows:	Sec. I-2.1, I-5 Annex 1A.4
§ 194.107	**Brief Description**	
(c)	Each response plan must include:	--
(c)(1)	A core plan consisting of --	--
(c)(1)(i)	An information summary as required in § 194.113,	Annex 1A.6, 1A.10, 1A.12
(c)(1)(ii)	Immediate notification procedures,	Sec. II-3 Annex 2
(c)(1)(iii)	Spill detection and mitigation procedures,	Sec. II-5
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate,	Annex 2
(c)(1)(v)	Response activities and response resources,	Sec. II-5 2.4 & 2.5
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support,	Annex 2.3, ERAP
(c)(1)(vii)	Training procedures,	Sec. III
(c)(1)(viii)	Equipment testing,	Sec. II-7
(c)(1)(ix)	Drill program – an operator will satisfy the requirement for a drill program by following the National Preparedness for Response Exercise Program (PREP) guidelines. An operator choosing not to follow PREP guidelines must have a drill program that is equivalent to PREP. The operator must describe the drill program in the response plan and OPS will determine if the program is equivalent to PREP.	Sec. III-4
(c)(1)(x)	Plan review and update procedures;	Sec. I-5
(c)(2)	An appendix for each response zone that includes the information required in paragraph (c)(1)(i)-(ix) of this section and the worst case discharge calculations that are specific to that response zone. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in § 194.113.7; and.	Annex 1A & 1B
(c)(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.	Sec. II-4

4.0 DOT 49 CFR 194 (Cont'd)

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.111		
(a)	Each operator shall maintain relevant portions of its response plan at the operator's headquarters and at other locations from which response activities may be conducted, for example, in field offices, supervisor's vehicles, or spill response trailers.	Sec. I
§ 194.113	**Brief Description**	
(a)	The information summary for the core plan, required by § 194.107, must include:	--
(a)(1)	The name and address of the operator.	Annex 1A.0, 1A.6, 1A.10, 1A.12 & 1B.1.0
(a)(2)	For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in § 194.103, a listing and description of the response zones, including county(s) and state(s).	Annex 1A.6.2, 1A.10.2, 1A.12.2
(b)	The information summary for the response zone appendix, required in § 194.107, must include:	--
(b)(1)	The information summary for the core plan.	Annex 1A.0, 1A.6, 1A.10, 1A.12 & 1B.1.0
(b)(2)	The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);	Annex 2.3
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Annex 1A.6.2, 1A.10.2, 1A.12.2
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Annex 1A.6.2, 1A.10.2, 1A.12.2
§ 194.115		
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Annex 1A.7.2, 1A.11.1, 1A.13.1
(b)(6)	The type of oil and volume of the worst case discharge.	Annex 1A.7, 1A.11 & 1A.13
(a)	Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge.	Annex 2.4 & 2.5
(b)	An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.	Annex 1A.7, 1A.9, 1A.10, 1A.11, 1A.13 Annex 2.4 & 2.5

4.0 DOT 49 CFR 194 (Cont'd)

DOT/PHMSA 49 CFR PART 194 CROSS REFERENCE		
§ 194.117	**Brief Description**	
(a)	Each operator shall conduct training to ensure that:	--
(a)(1)	All personnel know --	--
(a)(1)(I)	Their responsibilities under the response plan	Sec. III-2 & III-3 Annex 2
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	Sec. III-2 & III-3 Annex 2, ERAP
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	Sec. III-2 & III-3 Annex 2, ERAP
(a)(2)	Reporting personnel know --	
(a)(2)(I)	The content of the information summary of the response plan.	Sec. III-2 & III-3 Annex 2
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Sec. III-2 & III-3 Annex 2
(a)(2)(iii)	The notification process	Sec. III-2 & III-3 Annex 2
(a)(3)	Personnel engaged in response activities know --	--
(a)(3)(I)	The characteristics and hazards of the oil discharged	Sec. III-2 & III-3 Annex 1
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	Sec. III-2 & III-3 Annex 1
(a)(3)(iii)	The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage	Sec. III-2 & III-3 Annex 1
(a)(3)(iv)	The proper firefighting procedures and use of equipment, fire suits, and breathing apparatus	Sec. III-2 & III-3 Annex 1
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan	Sec. III-3.9
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	Sec. III-3.9
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	Sec. III-3.9
(c)	Nothing in this section relieves an operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120 ...	Sec. III.3

4.1 CCR 815-817

14 CCR 815-817		
Reg.	**Description**	**Location**
816.02	**PLAN FORMAT** …Each plan shall be organized into separate volumes: a response manual and a principal volume or volumes with related appendices…	--
816.02(a)	A simplified response manual suitable for on-scene use in the event of a spill…	ERAP
816.02(b)(1)	The principal volume shall include all the required information including a summary of the conclusions of all studies, calculations and analyses.	Entire Plan
816.04	**PLAN IMPLEMENTATION AND USE**	--
816.04(a)(1)	Availability – Marine Facility Plans	--
816.04(a)(1)(A)	A complete copy of the marine facility's approved plan must be maintained on-site if the facility is staffed, or at the nearest field office if the facility is not staffed.	Annex 5.0
816.04(a)(1)(B)	A copy of the response manual must be maintained at all sites covered by the plan.	Annex 5.0
816.04(a)(1)(C)	Response manuals for pipeline facilities shall be maintained at all sites covered by the plan or where operations and maintenance activities are conducted.	Annex 5.0
816.04(c)	Coordination With Other Plans	--
816.04(b)(1)	Each plan shall be consistent with the State Oil Spill Contingency Plan and not in conflict with the National Contingency Plan.	Sec. I-2.1, I-5 Annex 1A.4
816.04(b)(2)	Beginning with the first review and resubmission, each plan submitted shall be consistent with the appropriate Area Contingency Plan(s) completed by the Coast Guard, State Agencies and Local Governments as required by the Oil Pollution Act of 1990 that are in effect on January 15 of the year in which the contingency plan update is required.	Sec. I-2.1, I-5 Annex 1A.4
817.02	**MARINE FACILITY PLAN CONTENT**	
817.02(a)	Introductory Material	--
817.02(a)(1)	Each plan shall provide the following information:	--
817.02(a)(1)(A)	Name and address of the marine facility, and mailing address if different;	Annex 1A.6, 1A.10, 1A.12
817.02(a)(1)(B)	Name, address, phone number, fax number and e-mail address, if available, of the owner and/or operator of the marine facility;	Annex 1A.6, 1A.10, 1A.12
817.02(a)(1)(C)	Name, address and phone number, fax number and e-mail address, if available, of the person to whom correspondence should be sent;	Annex 1A.6, 1A.10, 1A.12
817.02(a)(1)(D)	A certification statement signed under penalty of perjury by an executive within the plan holder's management who is authorized to fully implement the oil spill contingency plan, who shall review the plan for accuracy, feasibility, and executability.	Annex 1.4
817.02(a)(1)(E)	The California Certificate of Financial Responsibility number for the marine facility.	Annex 5.4

14 CCR 815-817		
Reg.	**Description**	**Location**
817.02	**MARINE FACILITY PLAN CONTENT**	
817.02(a)(2)	Qualified Individual Information	Annex 2.3
817.02(a)(3)	Name, address, telephone and fax number of individual authorized to received legal documents/correspondence	Annex 5.0
817.02(a)(4)	Spill Management Team Information	Annex 2.3
817.02(a)(5)	Contract(s) verifying that the OSRO(s) named in the plan will provide the requisite equipment and personnel in the event of an oil spill.	Annex 2.4 & 2.5
817.02(b)	Marine Facility Description	--
817.02(b)(1)	Each plan shall describe the marine facility's design and operations with specific attention to those areas from which an oil spill could occur. This description shall include, at a minimum, the following information:	--
817.02(b)(1)(A)	Piping and instrumentation diagrams, tank diagrams, range of oil products normally stored, presence or absence of any containment structures/equipment; location of any mooring areas, oil transfer locations, control stations, safety equipment, drip pans and drainage for drip pans.	Annex 1A.6, 1A.7, 1A.8, 1A.9, 1A.10, 1A.11, 1A.13 Annex 1B.10, 1B.15
817.02(b)(1)(B)	Description of the types, physical properties, health and safety hazards, maximum storage or handing capacity and currently normal daily throughput of oil handled. An MSDS or equivalent will meet some of these requirements and can be maintained separately, providing the plan identifies the location;	Sec. II-6.16 Annex 1A.6, 1A.10, 1A.12
817.02(b)(1)(C)	Description of the normal procedures for transferring oil from or to a pipeline, tanker, barge or other vessel, or storage tank and the amount, frequency and duration of oil transfers;	Annex 1A.6, 1A.10, 1A.12
817.02(b)(1)(D)	Normal hours of operations	Annex 1A.6, 1A.10, 1A.12
817.02(b)(1)(E)	For an exploration or production facility, a complete description of those sections of the oil or gas lease field, gathering lines, storage tanks and processing facilities	N/A
817.02(b)(2)	Description of the marine facility site and surrounding area	Annex 1A.6, 1A.10, 1A.12
817.02(c)	Prevention Measures: Each plan shall address prevention measures in order to reduce the possibility of an oil spill occurring as a result of the operations of the marine facility. The prevention measures must eliminate or mitigate all the hazards identified in the Risk and Hazard Analysis.	Annex 1A.7, 1A.11, 1A.13
817.02(c)(1)	Risk and Hazard Analysis	Annex 1A.7, 1A.11, 1A.13
817.02(c)(2)	Off-Site Consequence Analysis	Annex 1A.7, 1A.11, 1A.13
817.02(c)(3)	Resources at Risk from Oil Spills	Annex 3
817.02(c)(4)	Required Prevention Measures. Each marine facility shall take all prevention measures to reduce or mitigate the potential hazards identified in the Risk and Hazard Analysis, and the potential impact those hazards pose to the resources at risk. Each plan shall include the following:	Annex 1A.7, 1A.11, 1A.13

14 CCR 815-817		
Reg.	**Description**	**Location**
817.02(c)(4)(A)	Schedules, methods and procedures for testing, maintaining and inspecting pipelines and other structure within or appurtenant to the marine facility that contain or handle oil which may impact marine waters if a failure occurs.	Annex 1A.7, 1A.11, 1A.13
817.02(c)(4)(B)	Methods to reduce spills during transfer and storage operations, including overfill prevention measures and immediate spill containment provisions.	Annex 1A.7, 1A.11, 1A.13
817.02(c)(4)(C)	Procedures to assure clear communication among all the parties involved during transfer operations.	Annex 1A.6, 1A.10, 1A.12
817.02(c)(4)(D)	Protection measures for areas within the marine facility are subject to flooding	Annex 1A.7, 1A.11, 1A.13
817.02(d)	Containment Booming and On-water Recovery. Each plan holder must have a contract or other approved means for containment booming and on-water recovery response resources up to their Response Planning volume for all potential oil spills from the marine facility.	Annex 2.4 & 2.5
817.02(d)(1)	Reasonable Worst Case Spill	Annex 1A.7, 1A.11 & 1A.13
817.02(d)(5)	On-Water Response Equipment and Services. Each plan shall demonstrate that the marine facility owner/operator has under contract or other approved means, access to all the necessary response resources to comply with the Response Capability Standards.	Annex 2.4 & 2.5
817.02(d)(5)(B)(10)	Each plan shall describe the personnel available to respond to an oil spill, including:	--
817.02(d)(5)(B)(10)(i)	A list by job category including a job description for each type of spill response position needed as indicated in the spill response organization scheme;	Sec. II-4 Annex 2.3
817.02(d)(5)(B)(10)(ii)	A match between personnel by job category, and the equipment proposed for use including the plan for mobilization of such personnel;	Sec. II-4 Annex 2.3
817.02(d)(5)(B)(10)(iii)	Sufficient personnel to maintain a response effort of at least 14 days	Sec. II-4 Annex 2.3
817.02(d)(5)(B)(11)	Each plan shall describe procedures for the transport of required equipment, personnel and other resources to the spill site.	Sec. II-7 Annex 2.3, 2.4
817.02(d)(5)(C)	A list of the marine facility's spill management personnel and their spill response qualifications including a discussion of spill response training and experience, regulatory awareness and compliance and supervision.	Sec. III-3 Annex 2.3
817.02(e)	Shoreline Protection. Each plan must provide for shoreline protection of all potential spills from the marine facility.	Annex 1A.7, 1A.11, 1A.13
817.02(e)(1)	Shoreline Response Planning Volume. Each plan shall demonstrate that the marine facility has access to all necessary equipment and services to address the response strategies appropriate to each shoreline that could potentially be impacted by a spill from the facility.	Annex 1A.7, 1A.11, 1A.13
817.02(e)(2)	Shoreline Protection Equipment and Services. Each plan must identify, and ensure availability through a contract or other approved means, the capability of effecting shoreline protection strategies.	Annex 1A.7, 1A.11, 1A.13

14 CCR 815-817		
Reg.	**Description**	**Location**
817.02(e)(4)	Shoreline Clean-Up. Utilizing the equipment that must be under contract, each plan shall describe the methods that will be used to contain spilled oil and remove it from the environment.	Annex 1A.7, 1A.11, 1A.13
817.02(f)	Response Procedures. Each plan shall describe the organization of the marine facility's spill response system and management team. An organizational diagram depicting the chain of command shall also be included. Additionally, the plan shall describe the method to be used to interface the plan holder's organization into the State Incident Command System and/or the Unified Command Structure.	Sec. II-4
817.02(f)(1)(B)	Each plan shall describe the organization of the plan holder's public information office, as it relates to an oil spill incident and the method by which the Information Officer will be integrated into the State Incident Command System.	Sec. II-4.4.3
817.02(f)(1)(C)	Each plan shall describe the plan holder's safety program as it relates to an oil spill incident and the method by which their Safety Officer will be integrated into the State Incident Command System	Sec. II-4.4.2 Sec. II-16
817.02(f)(2)	Each plan shall identify potential sites needed for spill response operations including location(s) for:	--
817.02(f)(2)(A)	A central command post sufficient to accommodate the State Incident Command or Unified Command as well as the plan holder's response organization;	Annex 2.6
817.02(f)(2)(B)	A central communications post if located away from the command post;	Annex 2.6
817.02(f)(2)(C)	Equipment and personnel staging areas.	Annex 2.6
817.02(f)(3)	Each plan shall include a checklist, flowchart or decision tree depicting the procession of each major stage of spill response operations from spill discovery to completion of clean up. The checklist, flowchart or decision tree shall describe the general order and priority in which key spill response activities are performed.	Sec. II-3
817.02(f)(4)	Each plan shall describe how the plan holder will provide emergency services before the arrival or local, state or federal authorities on the scene, including:	Sec. II-5
817.02(f)(4)(A)	Procedures to control fires and explosions, and to rescue people or property threatened by fire or explosion;	Sec. II-5.14
817.02(f)(4)(B)	Procedures for emergency medical treatment and first aid;	Sec. II-5.6
817.02(f)(4)(C)	Procedures to control ground, marine and air traffic which may interfere with spill response operations;	Annex 2.0
817.02(f)(4)(D)	Procedures to manage access to the spill response site and the designation of exclusion, decontamination and safe zones; and	Sec. II-15
817.02(f)(4)(E)	Procedures to provide the required personnel protective gear for responders.	Sec. II-17
817.02(f)(5)	Each plan shall describe equipment and procedures to be used by marine facility personnel to minimize the magnitude of a spill and minimize structural damage which may increase the quantity of oil spilled.	Sec. II-10

14 CCR 815-817		
Reg.	**Description**	**Location**
817.02(f)(5)(A)	Spill mitigation procedures shall include immediate containment strategies, methods to stop the spill at the source, methods to slow or stop leaks, and methods to achieve immediate emergency shutdown.	Sec. II-10
817.02(f)(5)(B)	For spill mitigation procedures the plan shall include prioritized procedures for marine facility personnel including specific procedures to shut down affected operations. Responsibilities of facility personnel should be identified by job title. A copy of these procedures should be maintained at the facility operations center. These procedures should address the following equipment and scenarios: 1. Failure of manifold and mechanical loading arm, other transfer equipment, or hoses, as appropriate; 2. Tank overfill; 3. Tank failure; 4. Pipe rupture; 5. Pipe leak, both under pressure and not under pressure, if applicable; 6. Explosion and/or fire; and 7. Other equipment failure	1. Sec. II-5.9 2. Sec. II-5.10 3. Sec. II-5.11 4. Sec. II-5.8 5. Sec. II-5.8 6. Sec. II-5.14 & 15 7. Sec. II-5
817.02(f)(6)	Each plan shall detail the lines of communications between the responsible party, the QI and the on-scene coordinators, response teams, and local, state, and federal emergency and disaster responders, including; A. Communication procedures; B. The communication function (e.g., ground-to-air) assigned to each channel or frequency used; C. The maximum broadcast range for each channel or frequency used; and D. Redundant and back-up systems.	Sec. II-3 Annex 1.9 Annex 1.11
817.02(f)(7)	Each plan shall describe the procedures to manage access to the spill response site, the designation of exclusion, decontamination and safe zones, and the decontamination of equipment and personnel during and after oil spill response operations.	Sec. II-15
817.02(g)	Notification Procedures.	--
817.02(g)(1)	Each plan shall include a list of contacts to call in the event of a drill, threatened discharge of oil, or discharge of oil. The plan shall:	Sec. II-3 Annex 2
817.02(g)(1)(A)	Detail the procedures for reporting oil spills to all appropriate local, state, and federal agencies;	Sec. II-3
817.02(g)(1)(B)	Identify a central reporting office or individual who is responsible for initiating the notification process and is available on a 24-hour basis.	Sec. II-3
817.02(g)(1)(C)	Establish a clear order of priority for notification	Sec. II-3
817.02(g)(2)	Immediate Notification	--
817.02(g)(2)(A)	Each plan shall include a procedure for contacting the OSRO, or other initial response resources if an OSRO is not being used, immediate, but no longer than 30 minutes, after discovery of a discharge of oil or threatened discharge of oil.	Sec. II-3 Annex. 2.4

14 CCR 815-817		
Reg.	**Description**	**Location**
817.02(g)(2)(B)	Each plan shall include a procedure that ensures that the owner/operator or his/her designee will initiate contact with the QI, the CA Emergency Management Agency and national Response Center immediately, but no longer than 30 minutes, after discovery of a discharge of oil or threatened discharge of oil.	Sec. II-3 Annex 2.3
817.02(g)(2)(C)	All phone numbers necessary to complete the immediate notification procedures must be included in the response manual.	Sec. II-3 Annex 2
817.02(g)(3)	Each plan shall identify a call-out procedure to acquire the resources necessary to address spills that cannot be addressed by the equipment that the owner/operator is required to have under contract.	Sec. II-3
817.02(g)(4)	Each plan shall provide a checklist of the information to be reported in the notification procedures.	Annex 2.1
817.02(h)	Temporary Storage and Waste Management.	--
817.02(h)(1)	Each plan shall identify sufficient temporary storage for all recovered oil or all oily waste, and identify facilities that would be able to accept the recovered oil or oily waste for recycling or other mean of waste management.	Sec. II-8
817.02(h)(2)	Each plan shall identify the party that shall maintain responsibility for recovered oil and oily waste for the purposes of temporary storage.	Sec. II-8
817.02(h)(3)	Each plan shall describe site criteria and methods used for temporary storage of recovered oil and oily wastes generated during response and clean-up operations, including sties available within the marine facility, or near the spill area.	Sec. II-8
817.02(h)(4)	Each plan shall identify all applicable permits, and all federal, state and local agencies responsible for issuing those permits for transit, temporary storage and ultimate waste management of all wastes likely to result from an oil spill.	Sec. II-8
817.02(h)(5)	Each plan shall include information which could expedite the state approval process for the use of temporary waste storage sites, including a list of appropriate contacts and a description of procedures to be followed for each approval process.	Sec. II-8
817.02(i)	Oiled Wildlife Care Requirements. Each plan shall describe how oiled wildlife care will be provided by one of the following approved means:	Sec. II-3 Annex 3
817.02(i)(1)	Utilize the California Oiled Wildlife Care Network (OWCN) to meet oiled wildlife care requirements; or	Annex 3
817.02(i)(2)	Describe procedures that clearly outline how oiled wildlife care will be provided.	Sec. II-3 Annex 3
817.02(j)	Training	--
817.02(j)(1)	Each plan shall provide that all appropriate personnel employed by the marine facility shall receive training in the use and operation of oil spill response and clean-up equipment. The plan shall describe:	Sec. III
817.02(j)(1)(A)	The type and frequency of training that each individual in a spill response position receives to achieve the level of qualification demanded by their job description.	Sec. III-3

14 CCR 815-817		
Reg.	**Description**	**Location**
817.02(j)(1)(B)	The procedures, in any, to train and use volunteers or other additional personnel in spill response operations as necessary for the size of the spill.	Sec. III-3.7.4
817.02(j)(2)	Each plan shall describe the type and frequency of personnel training on methods to reduce operational risks.	Sec. III-3
817.02(j)(3)	Each plan shall provide for safety training as required by state and federal health and safety laws for all personnel likely to be engaged in oil spill response, including a program for training non-permanent responders such as volunteers or temporary help.	Sec. III-3
817.02(j)(4)	The marine facility owner/operator shall ensure that training records are maintained for 3 years.	Sec. III-3
817.02(k)	Drills and Exercises	--
817.02(k)(1)	Each plan shall describe the marine facility's drill and exercise program that meets the requirements of Section 820.01(a), to ensure that the elements of the plan will function in an emergency.	Sec. III-4
817.02(k)(3)	A marine facility owner/operator shall ensure that all of the response resources identified in the plan participate in equipment deployment exercises at least once every three years.	Sec. III-4

Annex 5 – Table of Contents

5.0 Distribution List

Recipient	Address	Plan Type Held		
		Hard Copy		CD
		CA-RZ (Vol.1)	Santa Barbara (Vol. 2)	
DOT / PHMSA	Melanie Barber US DOT Office of Pipeline Safety 1200 New Jersey Ave SE East Building E22-210 Washington, DC 20590	**0**	**0**	**2**
California OSPR, Administrator	Mark McCaleb 425G Executive Court North Fairfield, CA 94534	**1**	**0**	**1**
California State Lands Commission	200 Oceangate, 12th Floor Long Beach, CA 90802	**1**	**0**	**1**
County of Santa Barbara	Attn: David S. Flamm, Emergency Mgr. Office of Emergency Management 4408 Cathedral Oaks Road Santa Barbara, CA 93110	**1**	**1**	**2**
Santa Barbara County (Energy Department)	c/o Susan Curtis 123 E. Anapamu Street Santa Barbara, CA 93101-2010	**1**	**1**	**1**
Santa Barbara County Fire Department	Attn: Capt. Steven Link 168 W. Highway 246 Beullton, CA 93427	**1**	**1**	**1**
El Segundo Fire Dept.	Steve Tsmura 314 Main Street El Segundo, CA 90245	**1** (Folder of S. Lines data only)	**0**	**1**
Northern Lines Valley Area	Jerry J. Keeney, Facility Supervisor (Tracy, Coalinga & Junction) 256 East Polk Street (P.O. Box 1133) Coalinga, CA 93210	**1**	**0**	**1**
	Ken Willey, Area Supervisor (Tracy, L-200, Coalinga & Junction) 7551 Carmelo Avenue Tracy, CA 95304-9547	**1**	**0**	**1**

Recipient	Address	Plan Type Held		
		Hard Copy		CD
		CA-RZ (Vol. 1)	Santa Barbara (Vol. 2)	
Northern Lines Valley Area	Jon Cornell, Area Supervisor (Taft & L-100) and Val Flores, Operations Supervisor 1441 Wade Avenue Taft, CA 93268	**2**	**0**	**2**
Northern Lines Coast Area	Mark Mitchell, Area Supervisor (Santa Margarita & L-400) and Daniel A. French, Tech. 18781 El Camino Real Atascadero, CA 93422	**2**	**0**	**2**
	Butch Lemos, Area Supervisor (Santa Maria & L-300) 1580 East Battles Road Santa Maria, CA 93454	**1**	**1**	**1**
Southern Lines Area	Hal Dingee, Operations Supervisor (LA Basin) & Dennis Doherty, Area Supervisor (Torrance) 2650 Lomita Drive Torrance, CA 90505	**1**	**0**	**1**
Director, EPR&S	Mr. Rob Yarbrough c/o EPR&S Coordinator 3010 Briarpark Drive Houston, TX 77042	**1**	**1**	**1**
Manager, West Coast Pipelines Division	Mr. Travis Wilke 3900 Kilroy Airport Way, Ste 210 Long Beach, CA 90806	**1**	**1**	**1**
Manager, West Coast Terminals Division	Mr. Gabe Munoz 3900 Kilroy Airport Way, Suite 210 Long Beach, CA 90806	**1**	**0**	**1**

5.1 Record of Revisions

REVISION DATE	Sections		REASON FOR REVISION
	REMOVED	REPLACED	
May 2012	ConocoPhillips ERP	Phillips 66 ICP	New Phillips 66 ICP implemented
June 2013	Annex A1-1 Annex A1-6 Annex A1-127 Annex A1-255	Annex A1-1 Annex A1-6 Annex A1-127 Annex A1-255	Updated EPR&S physical address
June 2013	Annex A1-98	Annex A1-98	Updated portable fire equipment information
June 2013	Annex A1-128 - 129	Annex A1-128 - 129	Updated pipeline description
June 2013	Annex A1B-1	Annex A1B-1	Updated EPR&S physical address
June 2013	Annex 5-1 and 2	Annex 5-1 and 2	Updated Distribution List
June 2013	SBC ERP – Section 3, page 16	SBC ERP – Section 3, page 16	Updated EPR&S physical address
June 2013	SBC ERP – Section 4, page 10	SBC ERP – Section 4, page 10	Updated EPR&S physical address
June 2013	N/A	Annex 6 – ERAP	Added new ERAP
July 2013	Entire	Entire	Updated formatting throughout; incorporate revised Core Plan
Nov 2013	Annex 1	Annex 1	Updated WCD Calculations and Planning Volumes
Nov 2013	Annex 2	Annex 2	Added in additional contact information

Update Notice

California Response Zone Integrated Contingency Plan (ICP)

To all holders of the ICP

Date: May 2012
Revision: Initial Version

Enclosed is the new Phillips 66 ICP that replaces the ConocoPhillips Emergency Response Plan effective May 1, 2012. Phillips 66 personnel should retain the ConocoPhillips Emergency Response Plan version and tag as a "Reference Copy" until further notice. No further review or revisions will be made to the ConocoPhillips ERP.

All other plan holders, please follow the below instructions upon receipt:

Section/Annex	Remove Pages	Replacement Pages
Entire Plan	Entire Old Plan	New Plan
California ERP CD	Destroy all previously dated California CDs.	New California ICP Dated 5/12
Update Notice	Replace the Revision Log at the beginning of the "Administration" Section and Insert this Update Notice at the end of the "Record of Revisions" Section.	

Update Notice

California Response Zone Integrated Contingency Plan (ICP)

To all holders of the ICP

Date: July 2013
Revision: Initial Version

Enclosed is the new Phillips 66 ICP that replaces the current Emergency Response Plan effective 1 Aug 2013.

All other plan holders, please follow the below instructions upon receipt:

Section/Annex	Remove Pages	Replacement Pages
Entire Plan	Entire Old Plan	New Plan
California ERP CD	Destroy all previously dated California CDs.	New California ICP Dated 07/13
Update Notice	Replace the Revision Log at the beginning of the "Administration" Section and Insert this Update Notice at the end of the "Record of Revisions" Section.	

Update Notice

California Response Zone Integrated Contingency Plan (ICP)

To all holders of the ICP

Date: November 2013
Revision: Initial Version

Enclosed is the new Phillips 66 ICP that replaces the current Emergency Response Plan effective 1 Aug 2013.

All other plan holders, please follow the below instructions upon receipt:

Section/Annex	Remove Pages	Replacement Pages
Annex 1	Entire Annex	Entire Annex
Annex 2	Entire Annex	Entire Annex
California ERP CD	Destroy all previously dated California CDs.	New California ICP Dated 11/13
Update Notice	Replace the Revision Log at the beginning of the "Administration" Section and Insert this Update Notice at the end of the "Record of Revisions" Section.	

5.2 Agency Plan Approval and Correspondence

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Office of Spill Prevention and Response
425G Executive Court N
Fairfield, California 94534
Telephone: (707) 864-4900
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

March 11, 2013

Ms. Michela Moreland
Phillips 66
7330-35 Pinnacle
3010 Briarpark Drive
Houston, Texas 77042

Dear Ms. Moreland:

Your California Facility Oil Spill Contingency Plan has been reviewed for compliance with the California Code of Regulations Title 14, Subchapter 3, Sections 815, 816, and 817. Based on this review the following plan is approved:

Phillips 66 P5-19-1695

A copy of this letter should be kept on the facility covered by this contingency plan. **This approval expires on March 31, 2018.**

Your California Facility Oil Spill Contingency Plan must be kept current at all times. Promptly send plan revisions to all plan recipients. When submitting plan revisions to OSPR, use the letterhead address, with "attention: Marine Safety Branch."

The current California regulations regarding Oil Spill Contingency Plans can be located through the internet at:

http://www.wildlife.ca.gov

We appreciate your efforts to improve the safety of California's marine environment. If you have any questions regarding this approval, contact Mark McCaleb, Oil Spill Prevention Specialist, at 707-864-4907 or by e-mail at mark.mccaleb@wildlife.ca.gov.

Sincerely,

Roy Mathur
Field Supervisor, Marine Safety Branch
Office of Spill Prevention and Response

cc: Mark McCaleb, OSPS
Mr. Ted Mar

5.3 Alcohol and Drug Policy

Alcohol and Drug Testing

The Company has a drug and alcohol program in effect for all personnel. Included in this section is an excerpt from the Administrative Procedures Manual of the Drug and Alcohol Misuse Prevention Program. Highlights of the program include:

- Mandatory drug and alcohol screening for safety sensitive and DOT-covered positions
- Employee Assistance Program
- Supervisor/Employee Training

This anti-drug plan is intended to achieve the following:

- A drug-free workplace for Company employees
- Compliance with the DOT drug testing regulations for the three different Administrations by which the Company's workforce is affected:

    - Federal Highway (FHWA)
      49 CFR Parts 391 and 394
    - Pipelines and Hazardous Materials Safety Administration
      49 CFR Parts 199 and 40
    - United States Coast Guard
      46 CFR Parts 4, 5 and 16

A summary of the Company's drug and alcohol policy follows:

Possession, Sale, Use or Distribution of Alcohol or Drugs

Company is committed to a safe, healthy, and productive workplace for all employees. The Company recognizes that alcohol, drugs or other substance abuse by employees will impair their ability to perform properly and will have serious adverse effects on the safety, efficiency and productivity of other employees and the Company as a whole. Possession, use, distribution, or sale of alcoholic beverages on Company premises, the misuse of legitimate drugs, or the use, possession, distribution, or sale of illicit or non-prescribed controlled drugs on Company business or premises is strictly prohibited and is grounds for termination of employment.

Rehabilitation

The Company recognizes alcohol or drug dependency as a treatable condition. Employees who suspect that they have an alcohol or drug dependency are encouraged to seek advice and to follow appropriate treatment promptly before it results in job performance problems. The Medical Advisor will assist in securing treatment. Those employees who follow approved treatment will receive benefits in accordance with the provisions of established benefit plans. Any employee returning from rehabilitation will be required to participate in a Company-approved after-care program. If an employee violates provisions of this Policy, appropriate disciplinary action will be taken. Such action cannot be avoided by a request at that time for treatment or rehabilitation.

If employee suffering from alcohol or drug dependency refuses rehabilitation or fails respond to treatment of fails to meet satisfactory standards of effective work performance, appropriate disciplinary action, up to and including termination, will taken. This Policy does not require and should not result in any special regulations, privileges or exemptions from normal job performance requirements.

Testing

Applicants for employment shall be subject to drug and alcohol testing when applying for employment. Employees occupying or performing the duties of a safety-sensitive position or a position that requires random testing under Coast Guard regulations, or be subject to random drug testing. Employees shall also be subject to drug and alcohol testing when involved in an accident or environmental incident on Company business or premises, when returning to duty from drug or alcohol rehabilitation, when there reasonable cause to suspect alcohol or drug use, or when an employee is otherwise violation of this Policy. A positive test result or refusal to submit to a drug or alcohol test shall constitute cause for discharge. Employees who test positive on a random test \ be given one opportunity for rehabilitation.

Searches

The Company may conduct unannounced searches on owned or controlled property.

5.4 Certificates of Financial Responsibility

CALIFORNIA CERTIFICATE OF FINANCIAL RESPONSIBILITY (CA COFR)

OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
PIER "T" PIPELINE, 42 INCH

LOCATION:
PORT OF LONG BEACH BERTH 121 TO LOS ANGELES REFINERY

CERTIFICATE: 2-2483-00-005 **CONTROL #:** FA470

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

The holder of this document named above is subject to the provisions of California Code of Regulations, Title 14, Sections 791-797, implementing the financial responsibility requirements set forth in the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Act). This certificate holder has provided the necessary evidence of financial responsibility mandated by these requirements.

For the purpose of determining liability pursuant to the Act, this Certificate of Financial Responsibility is conclusive evidence that the person or entity holding the certificate is the party responsible for the specific Marine Facility.

No alterations of this certificate are permitted after issuance by the Administrator of OSPR. If there is a change in the name or ownership of the Marine Facility, the certificate holder must notify the Office of Spill Prevention and Response (OSPR) immediately. If the certificate expires, a new certificate will be required.

This certificate remains valid as long as the current method for demonstrating financial responsibility is maintained (eg. insurance). Any changes in this status must be reported to OSPR immediately.

It is the owner or operator's responsibility to ensure that this certificate number is also included in the owner or operator's marine oil spill contingency plan, which must be submitted to this office for approval, before operating in a location where a spill could impact California marine waters.

If you have any questions, please contact
Farina A. Khan
916-327-9937

Sincerely,
Farina A. Khan

Financial Analyst
Office of Spill Prevention and Response
cacofr-facilities@ospr.dfg.ca.gov

CALIFORNIA CERTIFICATE OF FINANCIAL RESPONSIBILITY (CA COFR)

OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
SFAR Products Line

LOCATION:
11 Miles,Avon Refinery to Tosco's Collier Meter Station,Martinez,Los Angeles CA

CERTIFICATE: 2-2483-00-016 **CONTROL #:** FA481

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

The holder of this document named above is subject to the provisions of California Code of Regulations, Title 14, Sections 791-797, implementing the financial responsibility requirements set forth in the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Act). This certificate holder has provided the necessary evidence of financial responsibility mandated by these requirements.

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 200-JUNCTION STATION TO SFR, ALAMEDA, FRESNO,

LOCATION:
MERCED, STANISLAUS, SAN JOAQUIN, CONTRA COSTA AND KINGS COUNTIES

CERTIFICATE: 2-2483-00-006 **CONTROL #:** FA471

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
6" RICHMOND PRODUCTS LINE SFR (RODEO, CA) TO RICHMOND TERMINAL

LOCATION:
CONTRA COSTA COUNTY

CERTIFICATE: 2-2483-00-007 **CONTROL #:** FA472

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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CALIFORNIA CERTIFICATE OF FINANCIAL RESPONSIBILITY (CA COFR)

OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 300-ORCUTT PUMP STATION TO SUEY JUNCTION PUMP STATION

LOCATION:
8" ORCUT LINE, SAN LUIS OBISPO AND SANTA BARBARA COUNTIES

CERTIFICATE: 2-2483-00-008 **CONTROL #:** FA473

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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CALIFORNIA CERTIFICATE OF FINANCIAL RESPONSIBILITY (CA COFR)

OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 300-SUMMIT PUMP STATION TO SANTA MARIA REFINERY

LOCATION:
10" SANTA MARIA REFINERY LINE, SAN LUIS OBISPO COUNTY

CERTIFICATE: 2-2483-00-010 **CONTROL #:** FA475

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 300-SANTA MARIA PUMP STATION TO SUMMIT PUMP STATION

LOCATION:
10/12" SANTA MARIA LINE, SAN LUIS OBISPO AND SANTA BARBARA COUNTIES

CERTIFICATE: 2-2483-00-009 **CONTROL #:** FA474

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 300-SISQUOC PUMP STATION TO SANTA MARIA PUMP STATION

LOCATION:
12" SISQUOC LINE, SANTA BARBARA

CERTIFICATE: 2-2483-00-011 **CONTROL #:** FA476

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 300-LOMPOC HS & P TO ORCUTT PUMP STATION

LOCATION:
12" LOMPOC-ORCUTT LINE, SANTA BARBARA COUNTY

CERTIFICATE: 2-2483-00-014 **CONTROL #:** FA479

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
Line 300-Summit Pump Station to Avila Pump Station

LOCATION:
12" Summit Line; San Luis Obispo County

CERTIFICATE: 2-2483-00-017 **CONTROL #:** FA482

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

The holder of this document named above is subject to the provisions of California Code of Regulations, Title 14, Sections 791-797, implementing the financial responsibility requirements set forth in the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Act). This certificate holder has provided the necessary evidence of financial responsibility mandated by these requirements.

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Financial Analyst
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cacofr-facilities@ospr.dfg.ca.gov

CALIFORNIA CERTIFICATE OF FINANCIAL RESPONSIBILITY (CA COFR)

OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
Line 400-SLO X-Over to Santa Margarita Station

LOCATION:
8" No. 2 Main Line; San Luis Obispo County

CERTIFICATE: 2-2483-00-018 **CONTROL #:** FA483

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
meets the financial responsibility requirements set forth in the Government Code Sections 8670.37.53 as it applies to the operation of

NAME:
LINE 400-SANTA MARGARITA STATION TO SHANDON,

LOCATION:
8" NO. 1 MAIN LINE, SAN LUIS OBISPO COUNTY

CERTIFICATE: 2-2483-00-015 **CONTROL #:** FA480

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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NAME:
LINE 400-SANTA MARGARITA STATION TO SHANDON,

LOCATION:
8" NO. 2 MAIN LINE, SAN LUIS OBISPO COUNTY

CERTIFICATE: 2-2483-00-013 **CONTROL #:** FA478

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
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NAME:
LINE 400-SANTA MARIA REFINERY TO CROSSOVER AT HWY 101

LOCATION:
8"/10" PRODUCTS LINE, SAN LUIS OBISPO COUNTY

CERTIFICATE: 2-2483-00-012 **CONTROL #:** FA477

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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OWNER OR OPERATOR:
PHILLIPS 66
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NAME:
Line 400-SLO X-Over to Santa Margarita Station

LOCATION:
8" / 10" No. 1 Main Line; San Luis Obispo County

CERTIFICATE: 2-2483-00-019 **CONTROL #:** FA484

ISSUED DATE: May 01, 2012 **EXPIRATION DATE:** April 30, 2014

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EMERGENCY RESPONSE ACTION PLAN

CALIFORNIA PIPELINE RESPONSE ZONE

Agency Plan Reference Numbers:
DOT/PHMSA: 1277
OSPR Number: P5-19-1695

Owner/Operator:

Phillips 66
3010 Briarpark Drive
Houston, TX 77042

24-Hour Number

(800) 231-2551 or (877) 267-2290

VOLUME 1 OF 1

Prepared by: The Response Group, Inc. • 13939 Telge Road • Cypress, Texas 77429

Annex 6 – Table of Contents

The purpose of this Emergency Response Action Plan (ERAP) is to provide quick access to key types of information that are often required in the initial stage of a spill response. The information provided in this ERAP is presented in greater detail in other sections of the plan.

6.0 Area Information

Northern Lines Area- Coast Area

Maintenance Group Name	California – Northern Lines Coast				
Response Zone Location	California				
Line Section	Northern Lines Coast Area				
Maintenance Contact	Contact Area Supervisor of affected area; see Notifications				
Address	3900 Kilroy Airport Way, Suite 210, Long Beach, CA 90806				
County	Los Angeles				
Operator	Phillips 66 Company				
Operator Location (street)	3010 Briarpark Drive				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77042
County	Harris	Telephone	281-293-3891		

Response Zone Description

Coast Area

The Coast Area operations contains line sections which meet the PHMSA criteria for identifying pipeline facilities which could reasonably be expected to cause "significant and substantial harm" (49 CFR 194.103). The Coast Area Response Zone contains line sections that:

- Have experienced a release greater than 1,000 barrels within the previous five years [194.103(c)(1)];
- Have experienced two or more reportable releases (49 CFR 195.50) within the previous five year period [194.103(c)(2)];
- Are located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes [194.103(c)(4)]; and/or
- Are located within a one-mile radius of environmentally sensitive areas, and could reasonably be expected to reach these areas [194.103(c)(5)].

Coast Area Scope

The Coast Area on-shore pipeline system is operated by Company from the Santa Maria District and the San Luis Obispo District offices. The Coast Area system is situated in San Luis Obispo and Santa Barbara Counties, and includes the following pipelines:

- Santa Maria Trunk pipelines (Line 300)
- 12" Lompoc to Orcutt (crude oil pipeline)
- 8" Orcutt to Summit (crude oil pipeline)
- 10"/12" Santa Maria to Summit (crude oil pipeline)
- 10" Summit to Santa Maria Refinery (crude oil pipeline)
- 12" Summit to Avila Terminal (crude oil pipeline) (out of service)
- 12" Sisquoc to Santa Maria Station (crude oil pipeline)
- Orcutt Gathering pipeline (Line 353)
- 4"/6" CalCoast/Newlove/Pinal to Orcutt (crude oil pipelines)
- Bell pipeline (Line 352) (Abandoned)
- 10"/12" Bell / Hopkins to Santa Maria Station (crude oil pipelines) (Abandoned)
- Products pipeline (Line 355) (out of service)
- 8" Miossi Line to Avila Terminal (crude oil pipeline)
- Coast-Valley Trunk pipelines (Line 400)
- 8"/12" Santa Maria Refinery to San Luis Obispo Crossover (gas oil and petroleum distillate
- 8" Summit to Santa Maria Refinery (crude oil pipeline)
- 8" Summit to Avila Terminal (crude oil pipeline)
- 8"/12" Avila Terminal to Santa Margarita (gas oil and petroleum distillate)
- 8" Santa Margarita to Shandon (gas oil and petroleum distillate)
- Associated Coast Area pumping stations, metering facilities and breakout tanks
- Avila Pump Station
- Orcutt Pump Station
- Santa Maria Pump Station
- Summit Pump Station
- Bell Pump Station (out of service)
- Sisquoc Meter Facility (at the All American Pipeline Sisquoc Pump Station)
- Cuesta Pump Station
- Santa Margarita Pump Station
- Creston Pump Station
- Shandon Pump Station

The Coast Area on-shore pipeline system consists of facilities between the coastal areas in Santa Barbara and San Luis Obispo Counties up to Shandon Pump Station. The on-shore pipeline system continues from Shandon Station through the Central Valley of California to the San Francisco Bay Area.

The Coast Area of pipeline operations is shown in this Section in relation to the entire system. Section numbers and block valves identify pipeline sections in this Plan. Block valve locations are identified in the pipeline system drawings included in Annex 1.

The Company has supplied a copy of transparent overlays to all local/county responding agencies as required by California State Fire Marshal regulations. This mapping system is used by all utilities and local/county emergency agencies for location purposes.

Line	Size	Controlled by	Contact (1)
Santa Maria Area			
Santa Maria – Summit	12"	Controller (6)	Controller
Orcutt – Summit	8"	Controller (6)	Controller
Bell - Santa Maria	10/12"	Santa Maria Refinery (3)	Controller
LOGP – Orcutt	12"	TOC LOGP/ Ponca City	TOC LOGP/ Ponca City
Cal-Coast/Newlove/Pinal	4"/6"	Gauger / LACT Unit	Foreman
Sisquoc - Santa Maria	12"	Controller (6)	Controller
Santa Margarita Area			
Summit-Santa Maria Refinery Oil	10"	Controller (6)	Controller
Santa Maria Refinery-Summit Gasoil	8"	Santa Maria Refinery (3)	Controller
Santa Maria Refinery Miossi Products	8"	Santa Maria Refinery (3)	Controller
Miossi – SLO Products	12"	Santa Maria Refinery	Controller
SLO – Junction #1	8/10"	Controller (6)/SMR	Controller
SLO – Junction #2	8"	Controller (6)/SMR	Controller
Summit - Avila	12"	Controller (6)	Controller
Summit - Avila	8"	Controller (6)	Controller
Avila – Shandon #1	8"	Controller (6)	Controller
Avila – Shandon #2	8"	Controller (6)	Controller
Miossi – Avila	8"	Controller (6)	Controller

Pipeline Information

The Northern Pipelines system is responsible for gathering crude oil from the oil fields in Santa Barbara, San Luis Obispo, Kern, Kings, and Fresno Counties and transporting these crudes to the Santa Maria Refinery (SMR), San Francisco Area Refineries (SFR), and Ultramar-Diamond Shamrock's Avon Plan for processing into petroleum products. Also semi-refined products from the Santa Maria Refinery are delivered to SFR through the pipeline system. The system consists of over 800 miles of 4" to 16" diameter pipe. Semi-refined and refined products moved in the system include those listed in this Plan. Refined products are transported from the Rodeo Refinery to Richmond Terminal and natural gas is transported from Union Island gas field to Rodeo Refinery and UDS's Avon Refinery.

The system has a total of (b) (7)(F), (b) (3) . The system is set up with two working areas. The Coast Area is comprised of the Santa Maria and Santa Margarita Areas. The Valley Area is comprised of the Taft, Coalinga and Tracy Areas. The pipeline system operates 24 hours per day except for periodic maintenance and emergencies, such as seismic or other failure.

The Coast Area is comprised of about 290 miles of active 4" to 12" diameter pipeline and 9 active pump stations. One station (Santa Margarita) is manned. Sisquoc, Bell, Santa Maria Orcutt, Summit, Cuesta, Creston, Shandon, and Antelope stations are unattended and remotely operated. The Valley Area is comprised of about 500 miles of active 4" to 16" diameter pipelines, and 9 pump stations. There is one manned station (Junction) and eight unattended, remotely operated stations in the Valley Area. The associated SFR is also manned; although it is not part of the pipeline system.

The Northern Pipelines operation is headquartered in Long Beach, California. The Pipeline District Director's office is located at the Bakersfield, CA office. The Pipeline District Director is responsible for both the Coast and Valley Areas.

The flow of oil in the pipeline system begins in the oil fields near Santa Maria and Taft, flowing north in both systems from the various leases. Oil is also received from the PXP Operating Company LOGP and the All American Pipeline via Sisquoc. In the Santa Maria System, delivery is made to the Santa Maria Refinery from Santa Maria and Orcutt Pump Stations by way of Summit Station. In the Taft District, oil flows north from the fields in Kern County through Sunset, Midway, Shale, McKittrick, Middlewater and Junction Pump Stations.

At Junction begins primarily a mainline operation north on the 12" Junction line. Stations from Sunset on through the system to SMR are hot oil pump stations, and heating equipment is used or is available at each pump station.

At SMR, the heavy crude from the Santa Maria Area is processed into semi-refined products of light and heavy gas oil and petroleum distillate (P.D.). These commodities are pipelined in the No. 2 Line system back over to Junction Pump Station through Cuesta, Santa Margarita and Shandon Pump Stations. At Junction Station, the gas oil products are pumped north to Coalinga Station on the 12" Junction Line to Coalinga, and then north from Coalinga on the 16" Oleum line to Patterson Pump Station and to SFR. Also, at Junction, the major portion of the P.D. stream is blended into the remainder of the heavy oil, which is received from the valley area. The blending operation results in a crude oil stream of about 20 degrees to 22 degrees API gravity.

This blended crude oil pumps quite readily, allowing the 12" Junction and 16" Oleum Pipeline System north to SFR to be "ambient temperature" (unheated) systems.

The Santa Maria Area and Santa Margarita Area operations within the Coast Area are discussed below.

Santa Maria Area Operations

The Santa Maria Area is located in Santa Barbara and San Luis Obispo Counties in the central coast area of California, and has about 100 miles of 4" to 12" diameter pipeline. The Area is a gathering and mainline operation, with four unattended, remotely operated pump stations and one manned station. Crude is gathered from the Point Pedernales offshore (Platform Irene), Point Arguello offshore (via All American Pipeline and Sisquoc), Lompoc, Orcutt Hill and Santa Maria Valley oil fields. The majority of this crude is delivered to SMR via the pipeline system.

The flow of crude oil is generally from south to north in the Santa Maria District area. Point Pedernales crude oil flows to the onshore dehydration facility (LOGP) at Lompoc, and is blended with a small amount of Lompoc field crude. Lompoc pumps this crude to Orcutt station where Orcutt crude is blended into the stream. Orcutt pumps it to SMR through Summit Station.

Santa Maria Area has a truck unloading rack at Santa Maria Pump Station for receiving crude by truck from the various oil field areas not served by pipeline. Crude oil from Price Canyon field is trucked into Santa Maria Pump Station and commingled with crude from Santa Maria Valley field, also known as Cat Canyon. Santa Maria Station moves the crude oil to SMR via Summit Pump Station. Trucks are also received from the Bakersfield Area.

The Santa Maria Area has two pipelines from Suey Junction to Summit Station. There is one 8" pipeline from Orcutt Station and one 10"/12" pipeline from Santa Maria Station, both lines flow to Summit where the stream is combined and pumped to SMR by Summit.

Santa Maria operates a 6” natural gas line to SM Refinery.

Santa Margarita Area Operations

The Santa Margarita Area is located in San Luis Obispo County and northwestern Kern County. The Santa Margarita Area has about 190 miles of 4" to 12" diameter pipelines. The Area contains four unmanned, remotely operated pump stations with one individual covering the maintenance of these stations eight hours a day, five days a week. Logistics Control Center remotely controls these stations.

The Santa Margarita Area is responsible for storing and boosting semi-refined product.

The Santa Margarita Area operates and maintains two 6” diameter natural gas pipelines. These lines supply fuel gas for Santa Margarita Station and Shandon Station.

The flow of the semi-refined product in the Santa Margarita Area begins at Santa Maria Refinery and is boosted along the pipeline to Junction Station.

The product line begins at Santa Maria Refinery, where various semi-refined products are pumped. Logistics Control Center directs the product movement. The product is pumped eastward on the 8”/12” products line to the San Luis Obispo Crossover. At the crossover, two 8” lines (No. 1 and No. 2) can be used separately or parallel for product movement to Santa Margarita Station. At Cuesta Station, Logistics Control Center has remote control. Cuesta Station can be used to boost the product or bypass the station on to Santa Margarita Station. At Santa Margarita, the product can either be boosted on to Junction Station or the product stream directed into the products storage tanks, to be pumped at a later date. Shandon Station is another booster station that can be used to boost the product between Santa Margarita and Junction Stations. Shandon Station is remotely controlled by Logistic Control Center.

Although the No. 1 Line is a bi-directional line between Santa Margarita and Junction Station, it is primarily designated for gas oil east. The No. 2 Line can be used for both products but is primarily used for PD service.

The Santa Margarita Area is also responsible for the maintenance of the Summit to Avila 8” line, which is idle at this time.

Pipeline Description – Santa Margarita Area

The following pages list information related to the pipeline sections in the Santa Margarita Area. This information is used to develop oil spill scenarios for response planning, as required by DOT regulations (49 CFR Part 194). Information related to the pump stations is listed in this Plan. The information shown in the following tables includes:

- Pipeline name, size and maximum flow rate
- Pipeline section number (shown on the pipeline system drawings that follow)
- Block valves associated with the pipeline section
- Volume of product contained in the line section (barrels)
- Maximum amount of product that could potentially drain from the line section (barrels)
- Maximum amount of product that could potentially be lost through a rupture in the pipeline, assumed to be the volume resulting from the maximum pipeline flow rate for a five minute period (barrels)
- Largest foreseeable discharge (LFD) for the line section calculated as described in this Plan
- Sensitive aquatic areas in the vicinity of the pipeline section that could be impacted by a product spill

Pipeline System Description

SANTA MARIA TRUNK LINE (Line 300)						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
” Lompoc to Orcutt – Crude Oil (40,000 bpd max.)						
1	(b) (7)(F), (b) (3)	2,100	1,050	140	1,190	(b) (7)(F), (b) (3)
2		110	20	140	160	
3		1,490	700	140	840	
4		1,420	1,400	140	1,540	
5		2,400	1,700	140	1,840	
8” Orcutt to Summit – Crude Oil (36,000 bpd max.)						
6	(b) (7)(F), (b) (3)	820	800	120	920	(b) (7)(F), (b) (3)
7		620	80	120	200	
8		1,080	460	120	580	
9		460	160	120	280	
10		2,460	2,20	120	2,320	
10”, 12” SMS to Summit – Crude oil (48,000 bpd max.)						
11	(b) (7)(F), (b) (3)	1,030	130	170	300	(b) (7)(F), (b) (3)
12		2,070	1,040	170	1,210	
13		890	360	170	530	
14		2,400	2,400	170	2,570	
15		2,440	1,850	170	2,020	
10” Summit to SMR – Crude oil (52,000 bpd max.)						
17	(b) (7)(F), (b) (3)	3,530	2,200	120	2,320	(b) (7)(F), (b) (3)
18		220	200	120	320	
19		2,720	1,250	120	1,370	
20		1,250	520	120	640	
21		4,120	1,040	120	1,160	
ORCUTT GATHERING LINE (Line 353)						
6”, 8” Lompoc to Orcutt – Crude Oil (5,000 bid max./1,000 bbl lease tank)						
23	(b) (7)(F), (b) (3)	1,760	1,380	N/A	2,390	
24		440	350	N/A	1,350	
25		220	180	N/A	1,180	

Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
SISQUOC LINE (Line 300)						
12" Sisquoc to SMS – Crude Oil (84,000 bpd max.)						
42	(b) (7)(F), (b) (3)	1,560	1,560	140	1,700	(b) (7)(F), (b) (3)
43		3,260	2,890	140	3,030	
44		2,600	2,600	140	2,740	
MIOSSI LINE (Line 355)						
8" SMR Products Line Junction to Avila Terminal – Products (24,000 bpd max.)						
46	(b) (7)(F), (b) (3)	1,450	1,040	80	580	(b) (7)(F), (b) (3)
COAST-VALLEY TRUNK LINE (Line 400)						
8", 12" SMR to San Luis Obispo Tank Farm – Products (36,000 bpd)						
47	(b) (7)(F), (b) (3)	520	420	120	540	(b) (7)(F), (b) (3)
48		70	60	120	180	
49		1,180	600	120	720	
50		20	20	120	140	
51		1,180	600	120	720	
52		1,480	700	120	820	
53		20	20	120	140	
54		520	420	120	540	
55		4,210	2,100	120	2,220	
56		410	330	120	450	
8"Summit to SMR – Crude Oil (20,000 bpd max.)						
57	(b) (7)(F), (b) (3)	1,400	470	70	540	(b) (7)(F), (b) (3)
8" Summit to Avila – Crude Oil, Gasoil (20,000 bpd max.)						
58	(b) (7)(F), (b) (3)	1,570	2,200	70	2,270	(b) (7)(F), (b) (3)
59		100	200	70	370	
60		620	560	70	630	
61		590	460	70	530	
62		560	230	70	300	
63		1,840	460	70	530	

COAST-VALLEY TRUNK LINE (Line 400) - *Continued*						
Sec. No.	**Block Valves**	**Line Volume**	**Max. Drainage**	**Max. Pumping Loss**	**LFD**	**Sensitive Areas**
8" Avila Terminal to Santa Margarita – No. 1 and No. 2 Oil (24,000 and 28,800 bpd max)						
64	(b) (7)(F), (b) (3)	850	620	100	720	(b) (7)(F), (b) (3)
65		1,510	820	100	920	
66		460	750	100	850	
67		560	390	100	490	
68		330	260	100	360	
69		750	720	100	820	
70		2,430	1,050	100	1,150	
8" Santa Margarita to Shandon – No. 1 and No.2 Oil (24,000 and 28,800 bpd max.)						
71	(b) (7)(F), (b) (3)	230	160	100	260	(b) (7)(F), (b) (3)
72		3,600	1,330	100	1,430	
73		3,600	1,160	100	1,260	
74		130	30	100	130	
75		1,250	720	100	820	
8" Shandon to Antelope – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
1	(b) (7)(F), (b) (3)	1,480	490	100	590	(b) (7)(F), (b) (3)
2		2,390	1,250	100	1,350	
8" Antelope to Junction – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
3	(b) (7)(F), (b) (3)	4,100	3,500	100	3,600	

Santa Margarita Station

Internal Communication Systems

The station is normally manned approximately eight hours per day, five days per week. Company and contractor personnel are sometimes on site to perform maintenance work. The primary mode of internal communication is with Nextel cellular phones that are equipped with the Talk About System.

External Communication Systems

The Station is also equipped with two commercial telephone lines and phones. The telephone numbers are (805) 438-5368 and (805) 438-4365. This is the primary means of notifying the local emergency response center. A sign is posted on the entrance to the Station stating that the Company is the operator of the facility and providing the Company's 24-hour emergency number (800-448-7676) and a notice to call 9-1-1 in the event of an emergency.

Fire Control Equipment

Santa Margarita Station is equipped with fire hoses, portable handheld dry chemical fire extinguishers, fire cannons, fix foam nozzles and portable fire equipment as listed below.

Hose Reel	Size	Length of Hose	Location
1 Fig. 8	1"	100'	Southwest of #1 Line Pump canopy
1 Fig. 8	1"	100'	East of #1 Line Pump canopy
1 Fig. 8	1"	100'	North East of #2 Line pump house
1 Fig. 8	1"	100'	East of boiler house

Location	Type	Size	Quantity
Enterprise Pump House	Ansul	20 lb.	3
Fire Pump House	Ansul	20 lb.	1
Office	Halon	20 lb.	1
Office	Ansul	20 lb.	1
Back Office	Ansul	20 lb.	1
Back Office	Ansul	20 lb.	1
#1 Line Pump Canopy	Ansul	30 lb.	4
Boiler House	Ansul	30 lb.	1
Boiler House	Halon	20 lb.	1
Diesel Fuel Tank	Ansul	30 lb.	1
Shop	Ansul	30 lb.	2
Welding Shop	Ansul	30 lb.	1

The pump house is protected by an overhead fog system that is activated automatically by heat sensors located in the rafters, or by manual operation. There are also six UV/IR fire detectors strategically placed around the station.

Portable Fire Equipment

Type	Size	Quantity	Location
Pump/Hand Carried	3 x 3	2	Santa Margarita
Pump/Trailer Mounted	3 x 3	1	Santa Margarita
Pump/Trailer Mounted	6 x 4	1	Santa Margarita
Spare Foam	1,200 gal 3/6% AFFF Foam	1	Santa Margarita

Fixed Foam System for Tank

Type	GPM's	Quantity	Location
Fire Pump	1750	1	Santa Margarita
Backup Fire Pump	1500	1	Santa Margarita
Fixed Foam Tank	500	1	Santa Margarita

Spare Foam

Type	Containers	Quantity	Location
3%/6% AFFF	55-gal drums	500 gal	Santa Margarita

Water and Foam

The water supply is provided by a 750 bbl tank and a 5,000 bbl tank for a total of 5,750 bbls of water for fire protection. There is one electric motor driven Jockey which maintains 45-70 psig on the fire line system. The Main fire pump is a diesel fired engine controlled by system pressure that will start if pressure falls below 44 psig. A standby fire pump is manually controlled.

The fixed foam system consists of a 500-gallon foam atmospheric storage tank, a manifold to direct foam solution to any of the four floating roof tanks, piping connected to and around the wind girder of the tanks, the foam makers which are located around the circumference of the tank wind girders and the fire pump supplying water to the system.

Evacuation Plan

Notification for evacuation will be given verbally. Company employees receive training in evacuation procedures. All contractors working at the station for the first time are given training including Material Safety Data Sheet (MSDS) familiarization and evacuation. A Company employee is present when contractors are present. This employee will provide evacuation notification and directions. One entry gate to the station is left unlocked whenever anyone is present.

All the entry gates are chain locked with two locks in series. Company employees have keys to one set of locks and the fire department has keys to the other lock.

Shandon Station

Internal Communications Systems

The station is normally manned approximately four hours per week. Company and contractor personnel are sometimes onsite to perform maintenance work. Thus, the primary mode of internal communications is verbal.

External Communications Systems

The station is equipped with one commercial telephone lines. The telephone number is (805) 238-4989. This is the primary means of notifying the local emergency response center. In addition, Company vehicles are equipped with cellular phones that can be utilized to communicate with various Company facilities and offices. A sign is posted on the entrance to the station stating that the Company is the operator of the facility and provides the Company's 24- hour emergency number, and a notice to call 9-1-1 in the event of an emergency.

Fire Control Equipment

The station is equipped with fire hoses and portable hand-held dry chemical fire extinguishers, UV/IR fire detectors, fire hydrants, and fire monitors as shown in this Section.

Water and Foam

An aboveground steel tank connected to a utility water system provides the water supply. The tank supplies water to fire hydrants as shown in this Section.

Evacuation Plan

Notification for evacuation will be given verbally. Company employees receive training in evacuation procedures. All contractors working at the station for the first time are given training including Material Safety Data Sheet (MSDS) familiarization and evacuation. A Company employee is present when contractors are present. This employee will provide evacuation notification and directions. One entry gate to the station is left unlocked whenever anyone is present.

All the entry gates are chain locked with two locks in series. Company employees have keys to one set of locks and the fire department has keys to the other lock.

Northern Lines- Valley Area

Area Information Summary

Maintenance Group Name	California				
Response Zone Location	California				
Line Section	Northern Lines Valley Area				
Maintenance Contact	Contact Area Supervisor of affected area; see Notifications				
Address	3900 Kilroy Airport Way, Suite 210, Long Beach, CA 90806				
County	Los Angeles				
Operator	Phillips 66 Transportation Company				
Operator Location (street)	3010 Briarpark Drive				
Emergency Telephone	800-231-2551 or 877-267-2290				
City	Houston	State	TX	Zip	77042
County	Harris	Telephone	281-293-3891		

Pipeline Description

The Valley Area of operations contains line sections that meet the PHMSA criteria for identifying pipeline facilities that could reasonably be expected to cause "significant and substantial harm" (49 CFR 194.103). The Valley Area contains line sections that:

- have experienced a release greater than 1,000 barrels within the previous five years [194.103(3)(1)];
- have experienced two or more reportable releases (49 CFR 195.50) within the previous five year period [194.103(c)(2)];
- are located within a five-mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes [194.103(c)(4)]; and/or
- are located within a one-mile radius of environmentally sensitive areas, and could reasonably be expected to reach these areas [194.103(c)(5)].
-

The Company operates the Valley Area onshore pipeline system from the Coalinga Area, Tracy Area and Taft Area offices. The Valley Area system is situated in Alameda, Contra Costa, Fresno, Kern, Kings, Merced, San Joaquin and Stanislaus Counties and includes the following pipelines and pump stations:

Kern Line	(out of service)
Rio Bravo Line	(out of service)
Line 100 Mainline Trunk Pipeline	
	Sunset to Midway (crude oil)
	Midway to Shale (crude oil)
	Shale to McKittrick (crude oil)
	McKittrick to Middlewater (No. 1 and No. 2 crude oil pipelines)
	Middlewater to Junction (No. 1 and No. 2 crude oil pipelines)
Elk Hills Lines	
	PN10 – 10G to 18g (crude oil)
	PN18 – 18G to McKittrick (crude oil)

Line 100 Gathering System, including:	
Line 151	Sunset Field to San Joaquin Valley Trunk (crude oil) (idle)
Line 152	Gathering to Sunset (crude oil) (idle)
Line 153	Gathering to Sunset (crude oil) (idle)
Line 154	Gathering to Sunset (crude oil)
Line 155	Gathering to Midway (crude oil)
Line 156	Gathering to Shale (crude oil)
Line 157	Gathering to Line 100 Mainline Trunk (crude oil)
Line 158	Gathering to Line 100 Mainline Trunk (crude oil)
Line 159	Gathering to McKittrick (crude oil)
Line 160	Gathering to McKittrick (crude oil)
Line 161	Gathering to Line 100 Mainline Trunk (crude oil)
Line 162	Gathering to Line 100 Mainline Trunk (crude oil)
Line 163	Petro Lewis Tie-in to Line 100 Mainline Trunk (crude oil) (idle)
Line 164	Gathering to Middlewater (crude oil)
Line 2004	Gathering to Tulare Line (crude oil)
Line 2017	Gathering to Gibson Line (crude oil)
Kern Gathering System including: (idle)	
	Arvin
	Bellevue
	Gosford
	Paloma
	Line 166
Line 200 Mainline Trunk	
	12” Junction to Tar Canyon (crude oil and semi-refined products)
	12” Tar Canyon to Coalinga (crude oil and semi-refined products)
	16” Coalinga to Panoche (crude oil and semi-refined products)
	16” Panoche to Patterson (crude oil and semi-refined products)
	16” Patterson to Byron (crude oil and semi-refined products)
	16” Byron to San Francisco Refinery (crude oil and semi-refined products)
Richmond Products Line	6” San Francisco Refinery to Richmond (products)
Associated Valley Area pumping stations, metering facilities and breakout tanks:	
Sunset Pump Station	
Midway Pump Station	
Shale Pump Station	
McKittrick Pump Station	
Middlewater Pump Station	
Kern Pump Station (inactive)	
Junction Pump Station	
Tar Canyon Pump Station	(inactive)
Coalinga Pump Station	
Patterson Pump Station	
Byron Pump Station	
18G Station	
Panoche Pump Station	(inactive)
Rio Bravo Pump Station	(inactive)
10G Station	

The Valley Area onshore pipeline system consists of the trunk and gathering pipelines from Kern County in the southern Central Valley to the San Francisco Refinery at Rodeo. It also includes the products pipeline between the San Francisco Refinery and Richmond in Contra Costa County. The onshore pipeline system continues from Junction Station to the coastal areas of San Luis Obispo and Santa Barbara Counties.

Southern Lines Area

Area Information Summary

Maintenance Group Name	California				
Response Zone Location	California				
Line Section	Southern Lines Area				
Address	2650 Lomita Blvd., Torrance, CA 90505 Phone: 310-326-8777				
County	Los Angeles				
Operator	Phillips 66 Transportation Company				
Operator Location (street)	3010 Briarpark Drive				
Emergency Telephone	800-231-2551				
City	Houston	State	TX	Zip	77042
County	Harris	Telephone	281-293-3891		

LA Basin Area

The LA Basin Area includes crude oil and petroleum product pipelines in Los Angeles County that have the potential of spilling petroleum products into the Los Angeles River and the Dominguez and Cerritos Channels.

The Area is in the West Coast Pipelines Division. The pipeline system consists of gathering lines, trunk lines and product lines ranging from 6 to 42-inches in diameter.

Santa Barbara County

Sisquoc Pipeline Project

The pipeline system is approximately 10.5 miles in length between Sisquoc Station and Santa Maria Station, and approximately 13.5 miles in length between Santa Maria Station and Summit Station. It transports Point Arguello and Santa Ynez (Las Flores Canyon) pipeline quality oil (less than 3 percent water and sediment) from the All American Pipeline (AAPL) Sisquoc Pump Station to the Company Santa Maria Refinery, via the Santa Maria and Summit Pump Stations.

Pipeline alignment maps show the location of the buried pipeline, pump stations, and access roads. The alignment of the Sisquoc to Santa Maria segment of the pipeline system is shown in Figure 2-1. The alignment of the Santa Maria to Summit segment of the pipeline system is shown in Figure 2-2.

The 12-inch oil line from Sisquoc to Santa Maria is pigged as needed. Pigs are transported to the AAPL Sisquoc Pump Station by one of the Pipeline Department employees during routine maintenance visits. Wax removed by a pipeline scraper remains in the oil line and ultimately reaches the Company Santa Maria Refinery where it is processed.

Oil is metered into the line at Sisquoc and metered again when it reaches Santa Maria. At Santa Maria, crude oil from the Sisquoc Pipeline is commingled with Santa Maria Valley crude oil and transported by pipeline to Summit Station. The Santa Maria Valley crude oil stream is metered at Santa Maria and the commingled oil stream is metered again at Summit Station. All readings are transmitted to the Company Control Center, which monitors and controls pipeline operations. These readings are continuously checked and compared by computer for any indication of volume imbalance. The Company Control Center can detect discrepancies in the event of an accidental spill or release of oil and remotely shut in the pipeline valves from Sisquoc to Santa Maria Station to isolate a problem.

Pipeline System Alignment

Santa Maria Trunk Line (Line 300)						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
12" Lompoc to Orcutt – Crude Oil (40,000 bpd max.)						
1	(b) (7)(F), (b) (3)	2,100	1,050	140	1,190	(b) (7)(F), (b) (3)
2		110	20	140	160	
3		1,490	700	140	840	
4		1,420	1,400	140	1,540	
5		2,400	1,700	140	1,840	
8" Orcutt to Summit – Crude Oil (36,000 bpd max.)						
6	(b) (7)(F), (b) (3)	820	800	120	920	(b) (7)(F), (b) (3)
7		620	80	120	200	
8		1,080	460	120	580	
9		460	160	120	280	
10		2,460	2,20	120	2,320	
10", 12" SMS to Summit – Crude oil (48,000 bpd max.)						
11	(b) (7)(F), (b) (3)	1,030	130	170	300	(b) (7)(F), (b) (3)
12		2,070	1,040	170	1,210	
13		890	360	170	530	
14		2,400	2,400	170	2,570	
15		2,440	1,850	170	2,020	

Santa Maria Trunk Line (Line 300) Continued						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
10" Summit to SMR – Crude oil (52,000 bpd max.)						
17	(b) (7)(F), (b) (3)	3,530	2,200	120	2,320	(b) (7)(F), (b) (3)
18		220	200	120	320	
19		2,720	1,250	120	1,370	
20		1,250	520	120	640	
21		4,120	1,040	120	1,160	
Orcutt Gathering Line (Line 353)						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
6", 8" Lompoc to Orcutt – Crude Oil (5,000 bid max./1,000 bbl lease tank)						
23	(b) (7)(F), (b) (3)	1,760	1,380	N/A	2,390	(b) (7)(F), (b) (3)
24		440	350	N/A	1,350	
25		220	180	N/A	1,180	
Sisquoc Line (Line 300)						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
12" Sisquoc to SMS – Crude Oil (84,000 bpd max.)						
42	(b) (7)(F), (b) (3)	1,560	1,560	140	1,700	(b) (7)(F), (b) (3)
43		3,260	2,890	140	3,030	
44		2,600	2,600	140	2,740	
Miossi Line (Line 355)						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
8" SMR Products Line Junction to Avila Terminal – Products (24,000 bpd max.)						
46	(b) (7)(F), (b) (3)	1,450	1,040	80	580	(b) (7)(F), (b) (3)
COAST-VALLEY TRUNK LINE (Line 400)						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas

Coast-Valley Trunk Line (Line 400) Continued						
Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
8", 12" SMR to San Luis Obispo Tank Farm – Products (36,000 bpd)						
47	(b) (7)(F)	520	420	120	540	(b) (7)(F), (b) (3)
48		70	60	120	180	
49		1,180	600	120	720	
50		20	20	120	140	
51		1,180	600	120	720	
52		1,480	700	120	820	
53		20	20	120	140	
54		520	420	120	540	
55		4,210	2,100	120	2,220	
56		410	330	120	450	
8"Summit to SMR – Crude Oil (20,000 bpd max.)						
57	(b) (7)(F), (b) (3)	1,400	470	70	540	(b) (7)(F), (b) (3)
8" Summit to Avila – Crude Oil, Gasoil (20,000 bpd max.)						
58	(b) (7)(F), (b) (3)	1,570	2,200	70	2,270	(b) (7)(F), (b) (3)
59		100	200	70	370	
60		620	560	70	630	
61		590	460	70	530	
62		560	230	70	300	
63		1,840	460	70	530	
8" Avila Terminal to Santa Margarita – No. 1 and No. 2 Oil (24,000 and 28,800 bpd max)						
64	(b) (7)(F), (b) (3)	850	620	100	720	(b) (7)(F), (b) (3)
65		1,510	820	100	920	
66		460	750	100	850	
67		560	390	100	490	
68		330	260	100	360	
69		750	720	100	820	
70		2,430	1,050	100	1,150	

8" Santa Margarita to Shandon – No. 1 and No.2 Oil (24,000 and 28,800 bpd max.)						
71	(b) (7)(F), (b) (3)	230	160	100	260	(b) (7)(F), (b) (3)
72		3,600	1,330	100	1,430	
73		3,600	1,160	100	1,260	
74		130	30	100	130	
75		1,250	720	100	820	
8" Shandon to Antelope – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
1	(b) (3), (b) (7)(F)	1,480	490	100	590	
2		2,390	1,250	100	1,350	
8" Antelope to Junction – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
3	(b) (7)(F), (b) (3)	4,100	3,500	100	3,600	

Sisquoc Pipeline System Description

Sisquoc to Santa Maria Pipeline

The Sisquoc to Santa Maria pipeline has an outside diameter of 12.75 inches with a wall thickness of 0.250 inches. The steel grade is 5LX60, and the pipeline is covered with a polyethylene/butyl wrap and cathodic protection is applied to help protect from the pipe external corrosion. The pipeline is designed for an average throughput of 84,000 BPD. The temperature of the oil in the pipeline does not exceed 165° F. The maximum (b) (7)(F), (b) (3) [redacted]. The line was buried to a minimum cover depth of 48 inches and located a minimum of one foot from any existing lines in the corridor. At the Sisquoc River crossing, the line is buried beneath the riverbed.

(b) (7)(F), (b) (3) [redacted]

Santa Maria to Summit Pipeline

The Santa Maria to Summit pipeline is a 10 and 12 inch underground pipeline, coated and cathodic protection is applied to help protect the pipe from external corrosion. The pipeline is designed for an average throughput of 84,000 BPD. The temperature of the oil in the pipeline does not exceed 165°F. The actual operating pressure ranges from approximately 600 to 800 psig. The line was buried to a minimum cover depth of 42 inches and located a minimum of one foot from any existing lines in the corridor.

(b) (7)(F), (b) (3) [redacted]

(b) (7)(F), (b) (3)

[redacted]

Santa Maria Basin Project

Oil and gas produced at Platform Irene (OCS Block 0441) is shipped by subsea and buried onshore pipelines to the NEC Oil & Gas Plant (LOGP) facility about four miles north of the City of Lompoc. After the water is removed at this dehydration facility, the dry oil is shipped via a Company 12-inch pipeline to the Company pump station at Orcutt, and then by pipeline to the Company Santa Maria Refinery in San Luis Obispo County. The oil may contain up to five percent Sulfur and ten parts per million Hydrogen Sulfide. The gas is reinjected into a reservoir at the LOGP.

The system is designed to transport a maximum of 40,000 barrels per day of oil and 13 million cubic feet per day of gas. Pipeline capacities and facility growth provisions are included in the system to allow for future development of the Santa Maria Basin by other oil companies, with the products handled in a consolidated manner by NEC.

LOGP to Orcutt

Pipeline System Description

The LOGP to Orcutt pipeline system is approximately 10.5 miles in length. It transports pipeline quality oil (less than three percent water and sediment) from the LOGP facility to the Orcutt Pump Station. The pipeline has an outside diameter of 12¾ inches, with a wall thickness of 0.250 inches (0.375 inches across San Antonio Creek). The steel grade is 5LX42. The pipeline alignment between the LOGP and the Orcutt Pump Station is shown on Figure 2-6, with references to the applicable Thomas Guide maps along the pipeline route.

The pipeline is designed for a maximum throughput of 80,000 bpd, with a normal operating throughput of 20,000 bpd. The pipeline oil temperature is maintained between 150° F and 180° F. Maximum allowable working pressure is 800 psig, and the actual operating pressure is 660 psig. The line is buried to a minimum cover of 36 inches, and located approximately five feet from

(b) (7)(F), (b) (3)

[redacted]

The line can be pigged if necessary, to clear the line of contaminants or debris, or for inspection by an instrumented pig.

Oil is metered into the line at Lompoc, and metered again at Orcutt. All readings are transmitted to the Company Control Center, which monitors and controls pipeline operations. These readings are continuously checked and compared by computer for any indication of leaks.

Orcutt Pump Station Description

(b) (7)(F), (b) (3)

[redacted]

Orcutt to Summit Pipeline System Description

The Orcutt to Summit Pipeline is approximately 16 miles in length. It transports crude oil from the Orcutt Pump Station to the Summit Station. The oil transported is normally a blend of Pt. Pedernales oil from the LOGP and area production. The pipeline has an outside diameter of 8.625 inches, with a wall thickness of 0.277 inches. The pipeline alignment is shown on Figure 2-9.

The pipeline is designed for a maximum throughput of 50,400 bpd, with a normal operating throughput of 12,000 bpd. The pipeline oil temperature is maintained between 100° F and 180° F. The maximum allowable operating pressure of the pipeline is 800 psig. The line is buried to a minimum cover of 36 inches.

(b) (7)(F), (b) (3)

[redacted]

Oil is metered at Orcutt and again at Summit. All readings are transmitted to the Company Control Center, which monitors and controls pipeline operations. These readings are continuously checked and compared by computer for any indications of leaks.

NORTHERN LINES-COAST (SANTA MARGARITA/L-400)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Mark A. Mitchell, Area Supervisor	(805) 438-6201	(b) (6)	(805) 391-3713	1 hr
Office: 18781 El Camino Real, Atascadero, CA 93422		**Home:** (b) (6) 22		
Alt. QI/IC Daniel A. French, Technician	(805) 438-6210	(b) (6)	(805) 391-3811	1 hr
Office: 18781 El Camino Real, Atascadero, CA 93422		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Christensen, Dale - Mechanic	(805) 438-4365	(b) (6)	(805) 391-3721	1 hr
Estrada, Gary - Operator	(805) 438-6204		(805) 391-3809	1 hr
Lindsey, Michael - Utility Person	(805) 438-6208		(805) 391-3719	1 hr
Wilcox, Casey - Mechanic	(805) 438-4365		(805) 391-3715	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Rodgers, Brad A. - Utility A	(805) 438-6213		(805) 391-3719	1 hr
Marquez, Tony - Utility A	(805) 438-6213		(805) 391-3717	1 hr
French, Daniel A. - Technician	(805) 438-6210		(805) 391-3811	1 hr
Floyd, Kenneth H. - Technician	(805) 438-6203		(805) 391-3212	1 hr
Gorman, Clovus B. - Utility A	(805) 438-6213		(805) 391-3073	1 hr
Medvedoff, Brian D. - Utility A	(805) 438-6213		(805) 391-3477	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>
Kennedy, Ronny - Utility Person	(805) 438-6201		(805) 440-3979	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	4 hrs
Patriot Environmental Services	(800) 624-9136		2 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	6 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
CA Dept. of Forestry, Park Hill Station	911	(805) 438-5426
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA EMA, Region 1 (San Luis Obispo County)	(805) 445-1166	
CA EMA, Region 1 (Santa Barbara County)	(805) 560-1081	
CA EMA, Southern District (Santa Barbara County)	(909) 484-0167	
CA EMA-Northern Coast District (San Luis Obispo County)	(707) 944-5588	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA HIghway Patrol	(916) 657-7261	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Fire Marshall, Northern Region	(916) 445-8550	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game, CA Northern Lines	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, Southern Dist./Santa Barbara County, C/	(909) 484-0167	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire Prevention Division	911	(805) 681-5523
Fire: Santa Barbara County	911	(805) 681-5500
Ambualnce: Sierra Vista	911	(805) 546-7600
Medical: Santa Barbara County	911	(805) 681-5500
Sheriff/Police, San Luis Obisp	911	(805) 781-4550
Sheriff: Santa Barbara County	911	(805) 681-5500
County Petroleum Office	(805) 934-6128	
Hospital: Sierra Vista	(805) 546-7600	
Media: KKAL 92.5 FM Radio	(805) 781-2750	
Media: KSBY TV-San Luis Obispo	(805) 541-6666	
County Planning & Develpoment/Energy Div.	(805) 886-7165	
Office of Emergency Services/Santa Barbara County, CA	(805) 560-1081	
Santa Barbara County Energy Division	(805) 568-2507	

NORTHERN LINES-COAST (SANTA MARIA/L-300)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Butch Lemos, Jr., Area Supervisor, Santa Maria	(805) 925-5795	(b) (6)	(805) 331-6965	1 hr
Office: 1580 E. Battles Rd, Santa Maria, CA 93454		**Home:** (b) (6)		
Alt. QI/IC Jeremy Wilson, Maintenance Coordinator	(805) 349-7628	(b) (6)	(805) 331-6967	1 hr
Office: 1580 E. Battles Rd, Santa Maria, CA 93454		**Home:**		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Deschamp, Terry J. - Mechanic	(805) 925-1468	(b) (6)	(805) 331-9963	1 hr
Gaona, Mike A. - Mechanic	(805) 925-1468		(805) 331-6973	1 hr
Garner, John - Station Operator A	(805) 925-1468		(805) 391-3768	1 hr
Hernandez, Trinidad - Operator	(805) 349-7628		(805) 391-3717	1 hr
Menchaca, Jesse - Station Operator A	(___) ___-____		(805) 331-6971	1 hr
Perez, Wayne - Gauger	(805) 925-1468		(805) 331-9961	1 hr
Wilson, Jeremy - Maintenance Coordinator	(805) 349-7628		(805) 331-6967	1 hr
Colclasure, Stephen - Station Operator A	(805) 925-1468		(805) 331-6975	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Hicks, Chris - Technician	(805) 614-3808		(805) 325-6275	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	4 hrs
Patriot Environmental Services	(800) 624-9136		2 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	4 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
CA Dept. of Forestry, Park Hill Station	911	(805) 438-5426
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA EMA, Region 1 (San Luis Obispo County)	(805) 445-1166	
CA EMA, Region 1 (Santa Barbara County)	(805) 560-1081	
CA EMA, Southern District (Santa Barbara County)	(909) 484-0167	
CA EMA-Northern Coast District (San Luis Obispo County)	(707) 944-5588	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA Highway Patrol	(916) 657-7261	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Fire Marshall, Northern Region	(916) 445-8550	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game, CA Northern Lines	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, Southern Dist./Santa Barbara County, C/	(909) 484-0167	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire Prevention Division	911	(805) 681-5523
Fire: Santa Barbara County	911	(805) 681-5500
Ambulance: Sierra Vista	911	(805) 546-7600
Medical: Santa Barbara County	911	(805) 681-5500
Sheriff/Police:San Luis Obispo	911	(805) 781-4550
Sheriff: Santa Barbara County	911	(805) 681-5500
County Petroleum Office	(805) 934-6128	
Hospital: Sierra Vista	(805) 546-7600	
Media: KKAL 92.5 FM Radio	(805) 781-2750	
Media: KSBY TV San Luis Obispo	(805) 541-6666	
County Planning & Develpoment/Energy Div.	(805) 886-7165	
Office of Emergency Services/Santa Barbara County, CA	(805) 560-1081	
Santa Barbara County Energy Division	(805) 568-2507	

NL-VALLEY (TRACY/L-200/COALINGA/JUNCTION)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Kenneth Willey, Area Supervisor, Tracy	(209) 836-1873	(b) (6)	(209) 321-4229	1 hr
Office: 7551 Carmelo Ave, Tracy, CA 95304		**Home:** (b) (6)		
Alt. QI/IC Jerry Keeney, Facility Supervisor	(559) 935-0388	(___) ___-____	(559) 513-3552	<Unknown>
Office: 256 East Polk St, Coalinga, CA 93210		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Bravo, Jr., Valentin C. - Utility Person	(559) 935-0388	(b) (6)	(559) 352-9353	1 hr
Christie, Tony - Utility Person	(559) 935-0388		(559) 352-9351	1 hr
Donez, Thomas - Operator	(661) 465-5666		(559) 901-8805	1 hr
Gregorich, Andrew - Mechanic	(559) 935-0388		(559) 352-9349	1 hr
Hedgecock, Lonny - Mechanic	(559) 935-1112		(559) 217-3520	1 hr
Jordan, Richard - Gauger	(559) 935-0563		(559) 967-8389	1 hr
McKusick, Leroy - Operator	(661) 465-5666		(___) ___-____	1 hr
Seed, Andrew H. - Operator	(661) 465-5666		(___) ___-____	1 hr
Witt, Lance - Utility Person	(559) 935-0388		(559) 352-9357	1 hr
Arbogast, Ken - Utility Person	(209) 836-1873		(209) 321-4226	1 hr
Harris, Jeff - Utility Person	(209) 836-1873		(209) 321-2462	1 hr
Summerford, Stephen - Utility Person	(559) 935-0388		(559) 217-8155	<Unknown>
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Jensen, Eric L. - Utility Person	(559) 935-0388		(559) 352-9355	1 hr
Hoffman, Dale A. - Technician	(661) 587-2977		(661) 343-0166	2 hrs
Dahlgren, Derek - I & E Coordinator	(661) 587-2976		(661) 343-0174	2 hrs
Northrop, Jr., Bill E. - I & E Coordinator	(661) 587-2975		(661) 343-0160	2 hrs
Williams, Robert A. - Operator	(661) 465-5666		(559) 862-7804	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>
Smith, Glenn - Mechanic	(661) 465-5666		(559) 513-3175	<Unknown>
McQuown, Bruce - Utility Person	(209) 836-1873		(___) ___-____	<Unknown>
Gonzalez, Alex - Utility Person	(559) 935-0388		(559) 240-3439	<Unknown>
New, Steve - Technician	(559) 318-6119		(559) 318-6119	<Unknown>

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	5 hrs
Patriot Environmental Services	(800) 624-9136		5 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	4 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
State		
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES, Region 2 (Contra Costa & Alameda County)	(925) 646-4461, 24-hr.	
CA OES, Region 4 (San Joaquin & Stanislaus County)	(530) 887-8134	
CA OES, Region 5 (Merced, Fresno, Kings & Kern County)	(209) 966-5460	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (California)	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, CA Central District	(559) 243-4005 x153	
Highway Patrol	(661) 764-5580	
HIghway Patrol-Tracy, CA Offic	(209) 835-8920	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire: City/County Dispatch	911	(661) 324-6551
Fire: Tracy, CA	911	(209) 831-6700
Ambulance: American Med.	(209) 832-8195	
Ambulance: Hall's	911	(800) 924-4882
Police Tracy, CA	911	(209) 831-4533
Sheriff: Kern County, CA	911	(800) 861-3110
Sheriff: San Joaquin County, C	911	(209) 468-4421
Hospital: STCH; Tracy, CA	(209) 835-1500	
Hospital: Westside Urgent Care	(661) 765-1935	
Media: KCRA-TV 3	(209) 523-6727	
Media: KCSO-TV 33	(209) 576-3301	
Media: KOVR-TV 13	(209) 466-1313	

NORTHERN LINES-VALLEY (TAFT AND LINE 100)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Jon Cornell, Area Supervisor, Taft	(661) 765-6092	(___) ___-____	(661) 699-5376	1 hr
Office: 1441 Wade Ave, Taft, CA 93268		**Home:** (b) (6)		
Alt. QI/IC Kenneth Willey, Area Supervisor, Tracy	(209) 836-1873	(b) (6)	(209) 321-4229	1 hr
Office: 7551 Carmelo Ave, Tracy, CA 95304		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	832-865-1693	(b) (6)	281-627-3177
Alt. Environmental Contact	Jim Phelan	(281) 293-3715		(580) 761-3233
Alt. DOT Contact	Todd Tullio	832-765-1636		281-685-3646
Alt. Health & Safety Contact	Brad A. Hendrix	(918) 661-0140		(918) 977-0137
Manager, Division	Travis J. Wilke	(281) 293-2515		(580) 401-0047
Manager, HSE	Jeff Mazzoccoli	832-765-1150		281-704-3411
Manager, Engineering & Projects	Dave Barney	(281) 293-4385		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 661-0271		(832) 274-8478

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Barnes, Ron - Utility Person	(661) 765-6092	(b) (6)	(661) 978-6997	1 hr
Dargusch, Cary - Utility Person	(661) 765-6092		(661) 978-6995	1 hr
Howard, Gary - Utility Person	(661) 765-6092		(661) 577-2011	1 hr
Howard, Keith T. - Gauger	(661) 765-4552		(661) 978-6994	1 hr
Jenkins, M. Randy - Gauger	(661) 765-4552		(661) 978-6820	1 hr
Kitchens, Mike K. - Operator	(661) 765-6092		(661) 201-7956	1 hr
Mortimer, Richard W. - Gauger	(661) 765-4552		(661) 978-6821	1 hr
Fox, Rickey D. - Mechanic	(661) 765-6092		(661) 978-8833	1 hr
Mace, Cody C. - Utility Person	(661) 765-6092		(661) 978-8827	1 hr
Norris, Jimmy P. - Utility Person	(661) 765-6092		(661) 978-6996	1 hr
Wescott, Jason C. - Mechanic	(661) 765-6092		(661) 978-8831	1 hr
Arguello, David -	(661) 765-6092		(661) 978-8311	1 hr
Flores, Val - Area Supervisor, Taft	(661) 765-6092		(661) 670-9182	1 hr
Cerna, Armando - Utility Person	(661) 765-6092		(661) 978-7709	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	4 hrs
Patriot Environmental Services	(800) 624-9136		4 hrs
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	4 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES, Region 2 (Contra Costa & Alameda County)	(925) 646-4461, 24-hr.	
CA OES, Region 4 (San Joaquin & Stanislaus County)	(530) 887-8134	
CA OES, Region 5 (Merced, Fresno, Kings & Kern County)	(209) 966-5460	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (California)	(916) 445-0045	(213) 620-4700
Dept. of Fish & Game, CA Central District	(559) 243-4005 x153	
Fire Marshall	(562) 497-9100	
Highway Patrol, CA	(661) 764-5580	
U.S. Dept of Fish & Game, CA Northern Coast District	(707) 944-5588	
Local		
Fire: City/County Dispatch	911	(661) 324-6551
Ambulance: Hall's	911	(800) 924-4882
Sheriff: Kern County	911	(800) 861-3110
Hospital: Westside Urgent Care	(661) 765-1935	
Media: KBAK CBS/Fox TV-29	(661) 327-7955	
Media: KERO ABC TV-23	(661) 637-2320	
Media: KGET NBC TV-17	(661) 283-1717	

SOUTHERN LINES (LA BASIN AREA)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Dennis Doherty, Area Supervisor	(310) 326-8777	(b) (6)	(310) 420-5311	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		
Alt. QI/IC Harold Dingee, Operations Supervisor	(310) 602-7737	(b) (6)	(310) 466-4831	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478
LA Refinery-PR Contact	Betsy Brien	(310) 952-6038		(310) 487-0487

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Licitra, Charles - Mechanic	(310) 602-7741	(b) (6)	(310) 466-7912	1 hr
Bivens, Craig - Utility Person	(310) 602-7735		(310) 466-6722	1 hr
Hadley, David - Mechanic	(310) 602-7739		(310) 466-7928	1 hr
Stone, Ronald - Utility Person	(310) 602-7751		(562) 843-7011	1 hr
Rallings, Anthony W. - Operator	(310) 326-0612		(310) 345-8269	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Flores, Renée - Utility Person	(310) 602-7752		(310) 466-5129	1 hr
Navarro, José I. - I&E Specialist	(310) 602-7743		(310) 420-6632	1 hr
Tamanaha, Wayne T. - Technician	(310) 602-7746		(562) 254-9420	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>
Lucier, Kris - Mechanic	(310) 602-7756		(310) 466-5631	1 hr
Valle, Rod - Utility Person	(310) 302-7754		(310) 466-6051	1 hr

Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	1 hr
Patriot Environmental Services	(800) 624-9136		1 hr
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	2 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
Air Quality Management, CA Southern Coast District	(800) 288-7664	
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas (Cypress Dist. Office)	(916) 445-0806	(714) 816-6847
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES Division 1 (Ventura & Los Angeles Counties)	(805) 445-1166	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA Regional Water Quality Control Board	(916) 255-3000	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (CA Southern Lines)	(909) 484-0167	(951) 782-4353
Fire Marshall	(562) 497-9100	
Highway Patrol	(323) 906-3400	
Local		
Fire: El Segundo, CA Dept.	(310) 524-2801	
Fire: LA County, CA	911	(323) 890-4317
Fire: Torrance, CA	911	(310) 638-6121
Ambulance: AMR	911	(213) 808-2100
Police Port of Los Angeles, C	(310) 732-3500	
Police Torrance, CA	911	(310) 618-5641
Hospital: Torrance Memorial	(310) 325-9110	
Media: COP PR; LAR Wilmington,	(310) 952-6038	
Air Pollution Control District (Ventura County, CA)	(805) 645-1400	
Environmental Resource Division, Orange County, CA	(714) 567-6360	
Flood Control, Los Angeles District	(800) 303-0003 (24-hr)	(626) 458-4146
Health Dept./HazMat Response, Los Angeles, CA	(323) 890-4317	
Health Dept./HazMat Response, Ventura, CA	(805) 654-5000	
Resource Management Response Team, Ventura, CA	(805) 654-2813	
Utilities: Public Works Dept.; Los Angeles, CA	(626) 458-3538	

SOUTHERN LINES (TORRANCE TANK FARM)

Emergency Notification Contact List

Emergency Response Numbers

Group/Function	Telephone	Other Telephone/Fax
Duty Officer	800-231-2551	Fax: 918-662-0179
Control Center Emergency Hotline	877-267-2290	800-231-2566
Company "Meet Me" Number	866-836-3169	Pass Code: 157528
Employee Hotline (Natural Disaster)	866-397-3822	
Axiom Medical Monitoring	281-419-7063	

Qualified Individual / Incident Commander (QI / IC) Contact List

Name / Job Title	Office Phone	Home Phone	Cell Phone	Resp. Time
QI/IC Harold Dingee, Operations Supervisor	(310) 602-7737	(b) (6)	(310) 466-4831	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		
Alt. QI/IC Dennis Doherty, Area Supervisor	(310) 326-8777	(b) (6)	(310) 420-5311	1 hr
Office: 2650 Lomita Blvd, Torrance, CA 90505		**Home:** (b) (6)		

Incident Support Team

Position	Name	Office Phone	Home Phone	Mobile Phone
EPR&S Contact	Rob Yarbrough	(832) 765-1693	(b) (6)	(281) 627-3177
Environmental Contact	Jim Phelan	(832) 765-1682		(580) 761-3233
DOT Contact	Todd Tullio	(832) 765-1636		(281) 685-3646
Health & Safety Contact	Brad A. Hendrix	(918) 977-4045		(918) 977-0137
Manager, Division	Travis Wilke	(562) 290-1502		(661) 912-9471
Manager, HSE	Jeff C. Mazzoccoli	(832) 765-1529		(281) 704-3411
Manager, Engineering & Projects	Dave J Barney	(832) 765-1530		(281) 467-4732
Manager, Logistics	Doug B. Sauer	(918) 977-4080		(832) 274-8478
LA Refinery PR Contact	Betsy Brien	(310) 952-6038		(310) 487-0487

Transportation Tier 1 Responders

Name	Office Phone	Home Phone	Mobile Number	Resp. Time
Soles, Bill S. - Operator	(310) 326-0612	(b) (6)	(310) 345-4284	1 hr
Martinez, G. (Willie) - Gauger	(310) 602-7742		(310) 345-4285	1 hr
Kachelmeyer, Jerry - Operator	(310) 326-0612		(310) 345-8269	1 hr
Friichtenicht, Joseph - Operator	(310) 326-0612		(310) 345-8269	1 hr
Roach, Michael - Operator	(310) 326-0612		(310) 345-4284	1 hr
Gibbs, Brian - DOT Coordinator	(909) 877-5502		(909) 241-3358	<Unknown>
Brown, Derrick - Gauger	(310) 602-7738		(310) 466-6522	1 hr
Escobar, Douglas A. - Gauger	(310) 602-7738		(310) 466-8187	1 hr
Flores, Renée - Utility Person	(310) 602-7752		(310) 466-5129	1 hr
Moore, William J. - Operator	(310) 326-0612		(310) 345-8269	1 hr
Orr, Gregory R. - Gauger	(310) 602-7745		(310) 571-7342	1 hr
Root, Richard R. - Operator	(310) 326-0612		(310) 345-4284	1 hr
Walker, Mike D. - Safety Coordinator	(562) 290-1515		(562) 206-9874	<Unknown>

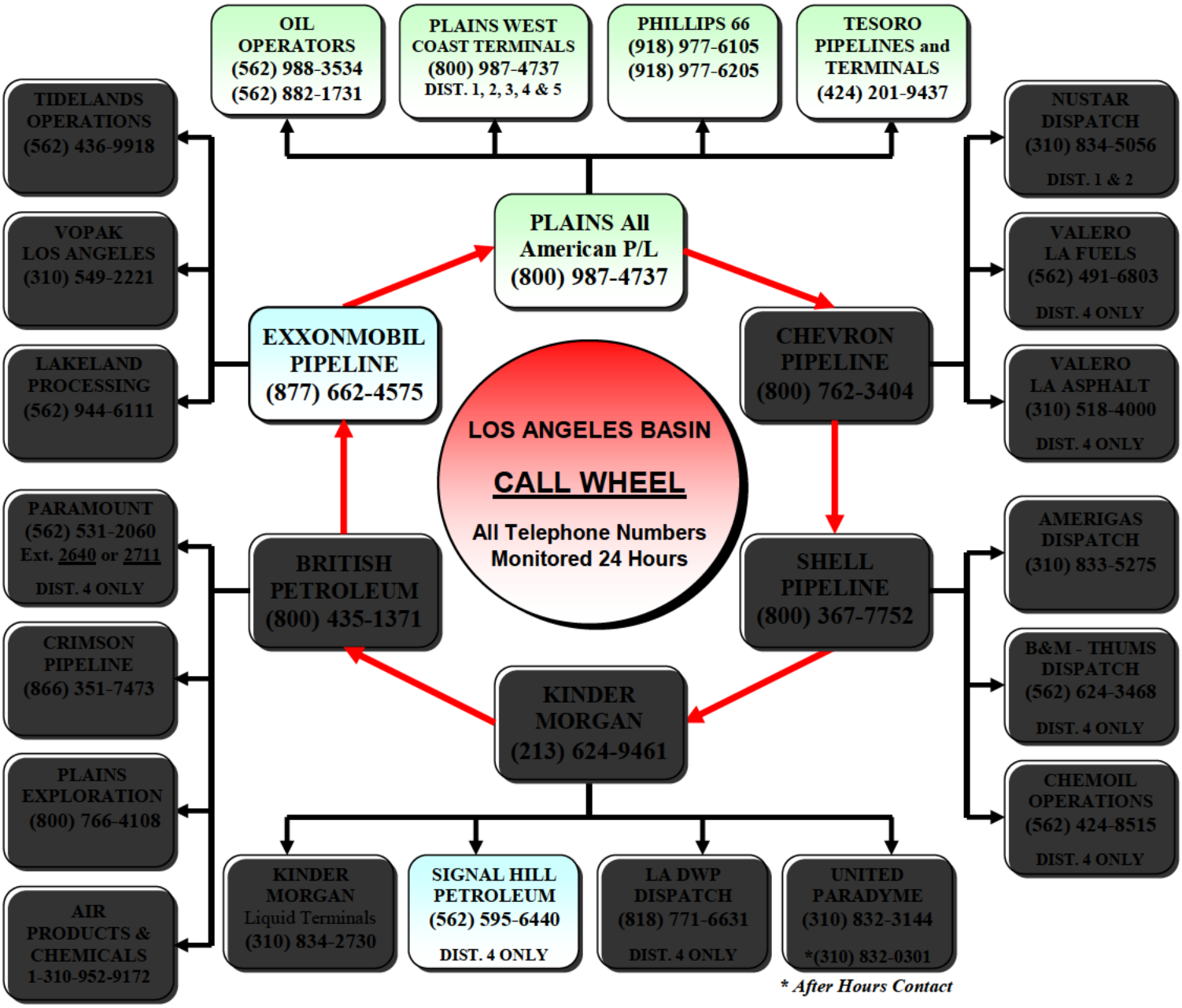
Emergency Response Contractors

Name	Phone	Alt. Phone	Resp. Time
Contract			
Clean Seas, LLC	(805) 684-3838, 2		4 hrs
MSRC & STAR Contractors	(800) 645-7745	(800) 259-6772	4 hrs
National Response Corp. (NRC)	(800) 337-7455	(206) 546-7150	1 hr
Patriot Environmental Services	(800) 624-9136		1 hr
Other			
CA Oiled Wildlife Care Network	(877) 823-6926	877-UCD-OWCN	2 hrs

Agency/Other Telephone Numbers

Agency/Group	Telephone	Other Telephone/Fax
Federal		
National Response Center	(800) 424-8802	(202) 267-2675
EPA Region 09	(800) 300-2193	(415) 947-4400
National Weather Service - NOAA	www.weather.gov	(206) 526-6317
U.S. Fish & Wildlife Service (USF&WS/CA Office)	(916) 414-6464	
USCG (Sector LA/LB)	(415) 399-3547	
State		
Air Quality Management, CA Southern Coast District	(800) 288-7664	
CA Dept. of Toxic Substances Control - Burbank, CA	(818) 551-2800	
CA Division of Oil & Gas, Ventura County, CA	(805) 654-4761	
CA Emergency Management Agency	(800) 852-7550 (24-hr.)	
CA OES Division 1 (Ventura & Los Angeles Counties)	(805) 445-1166	
CA Office of Historic Preservation, Dept. of Parks/Recreation	(916) 653-6621	
CA Oiled Wildlife Network/Fish & Game	(916) 445-0045	(530) 752-4167
CA Regional Water Quality Control Board	(916) 255-3000	
CA State Lands Commission - Northern Coast	(562) 590-5201	
Dept. of Fish & Game (CA Southern Lines)	(909) 484-0167	(951) 782-4353
Fire Marshall	(562) 497-9100	
Highway Patrol	(323) 906-3400	
Local		
Fire: El Segundo, CA Dept.	(310) 524-2801	
Fire: Torrance, CA	911	(310) 638-6121
Ambulance: AMR	911	(213) 808-2100
Police Port of Los Angeles	(310) 732-3500	
Police Torrance, CA	911	(310) 618-5641
Hospital: Torrance Memorial	(310) 325-9110	
Media: COP PR at LAR Wilimgton	(310) 952-6038	
Air Pollution Control District (Ventura County, CA)	(805) 645-1400	
Environmental Resource Division, Orange County, CA	(714) 567-6360	
Flood Control, Los Angeles District	(800) 303-0003 (24-hr)	(626) 458-4146
Health Dept./HazMat Response, Los Angeles, CA	(323) 890-4317	
Health Dept./HazMat Response, Ventura, CA	(805) 654-5000	
Resource Management Response Team, Ventura, CA	(805) 654-2813	
Utilities: Public Works Dept.; Los Angeles, CA	(626) 458-3538	

LOS ANGELES BASIN – EMERGENCY CALL WHEEL



** After Hours Contact*

PURPOSE OF THE CALL WHEEL

The "Call Wheel" is a voluntary and mutually beneficial system serving the industry as well as the local community. The "Call Wheel" is to aid in sharing potential spill or release information and notification to companies on the Call Wheel as well as response information on who may have claimed the leak.

HOW TO USE THE CALL WHEEL

The companies in the inner wheel of the Call Wheel connect using a nationwide pager and a dial-in conference line. Any company within the inner wheel that becomes aware of a leak may be connected simultaneously with the other companies on the inner wheel. (A satellite company that becomes aware of a leak should contact the inner wheel company to initiate the Call Wheel.) Upon initiating the Call Wheel, take roll call and then pass on the leak information. If any company on the inner wheel is absent for roll call, the company immediately prior to the absent party should call the absent company directly. In the event a company on the inner wheel cannot be contacted, the company immediately prior to the absent party should call the satellite (outer wheel) company that the absent party was supposed to contact. In the event that any of the inner wheel companies are unable to contact their satellite companies, this information should be passed back to the inner wheel companies.

IF THE WHEEL COMMUNICATION IS NOT AVAILABLE

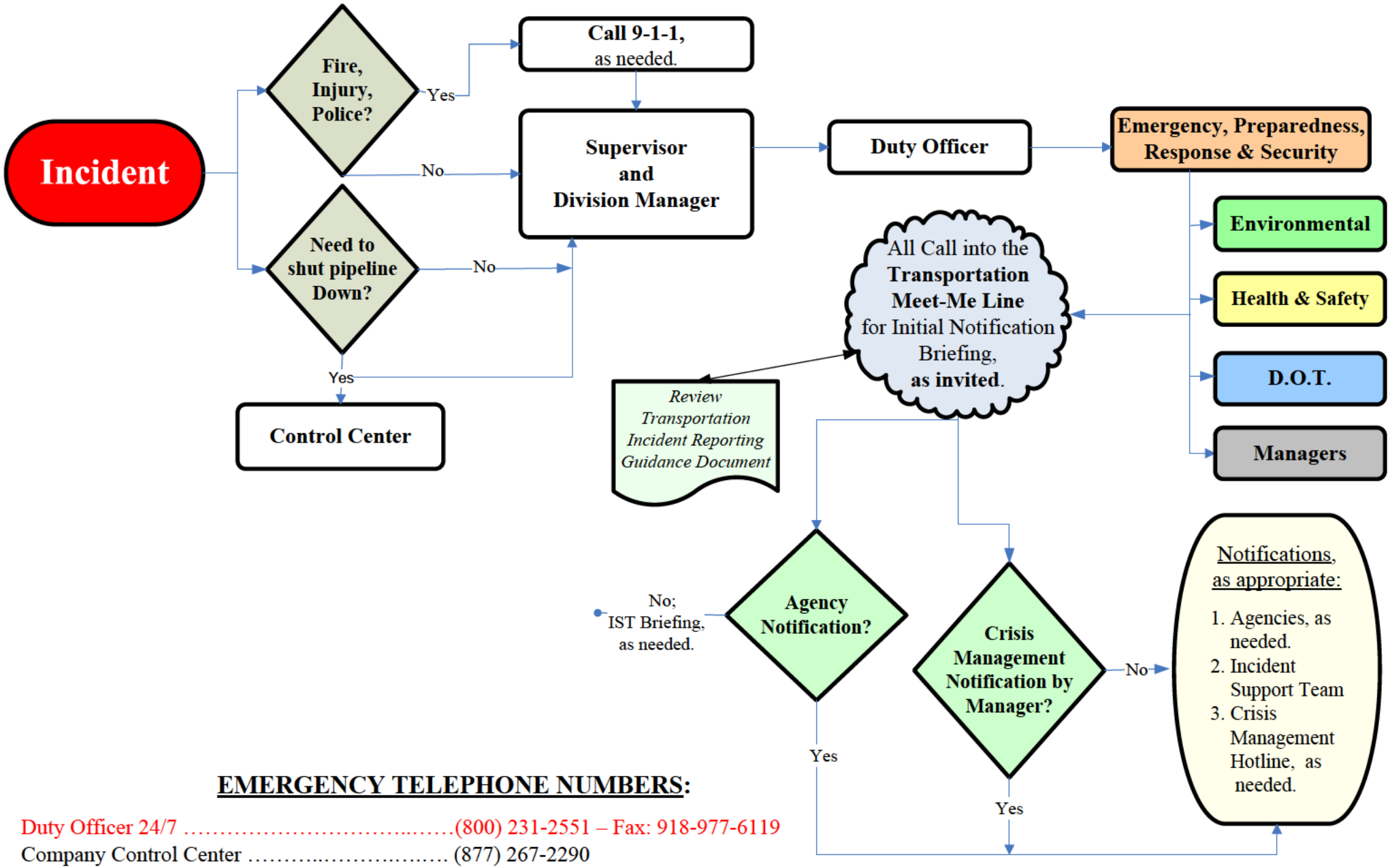
In the event the nationwide pager does not work, revert to individual telephone calls as indicated on the Call Wheel. The initiating company should call the next party in the Call Wheel sequence. If any of the companies on the inner wheel cannot be contacted, the party immediately prior to the absent party should notify the next party on the inner wheel in sequence after the absent party. The party immediately prior to the absent party should also be responsible for calling the satellites of the absent party.

In the event of a phone number change, please contact Roseanne Rother at Crimson Pipeline at (562) 577-3490 or (562) 285-4103 OR Mark Jensen at Kinder Morgan at (714) 560-4862 as soon as possible.

REV #16 02/25/2013

CRIMSON PIPELINE – ROSEANNE M. ROTHER
rrother@crimsonpl.com

Transportation Notifications Flowchart



EMERGENCY TELEPHONE NUMBERS:

Duty Officer 24/7 ……..……(800) 231-2551 – Fax: 918-977-6119
Company Control Center ……..…….…… (877) 267-2290
Transportation Meet Me Conference Line ……..(866) 836-3169; Pass Code: 157528
Axiom Medical Consulting ……..…… (281) 419-7063
Employee Hotline (Evacuation & Natural Disaster)….. (866) 397-3822
Crisis Management Hotline ……..(855) 699-8701 *or* (832) 765-3500

Revision: 20130129

Transportation Incident Notification & Reporting Tool
QI/IC Field Version

The following incidents should be immediately reported to the Transportation Duty Officer. The Transportation Duty Officer will contact the on-call Transportation Emergency Preparedness, Response and Security (EPR&S) team member. EPR&S will contact the person reporting the incident to the Duty Officer to determine the level of response and support required and if an Incident Briefing meeting should be scheduled. Incidents marked as "Crisis Hotline Notification" will need to be immediately reported to the Transportation Duty Officer. Transportation HSE is responsible for reporting incidents to the Crisis management Hotline.

Incident Notification Criteria **Duty Officer Number: 1-800-231-2551**
INJURY:
Incident resulting in an on-the-job employee, contractor or public fatality.
Incident resulting in one or more injuries requiring immediate overnight hospitalization and treatment of employee, contractor or the public.
Incident resulting in multiple injuries/illnesses to employees, contractors or the public.
SPILLS/RELEASES:
Greater than 5-gallons, or potential to exceed 5-gallons. This includes suspected, but not yet confirmed potential leaks.
HVL (Any volume.)
To environmentally sensitive areas, any water of the United States, national Parks or wildlife habitats and refuges. (Any volume)
That attracts or is likely to attract media attention.
That causes closure, stoppage or re-routing of traffic on public road or waterway.
PROPERTY DAMAGE/BUSINESS INTERRUPTION:
Property damage events exceeding or likely to exceed $25,000 in estimated damages (example fire, explosion, pipeline repairs, collision, act of nature, vandalism, theft, etc.)
Unscheduled business interruption events exceeding or likely to exceed $1,000,000 (USD) or more in estimated losses regardless of cause.
EVACUATION/SHELTER IN PLACE
Evacuation beyond facilities of employees or contractor personnel (includes evacuation as a result of storms or threat of storms).
Shelter-In-Place of employees or contractors.
Shelter-In-Place or mandatory evacuation of the public.
PUBLIC RELATIONS/ACTUAL OR POTENTIAL COMPANY IMPACT
Any situation that attracts or is likely to attract media attention.
Serious transportation incidents such as derailments involving our products resulting in a closure of a public road and/or re-routing or stoppage of traffic.
Acts of terrorism (bomb threat, sabotage, kidnapping, employee violence, etc.)
Confrontations with anti-industry groups that could attract media attention.
Multiple complaints of acute illness by third parties allegedly caused by our operations or products (i.e. calls by more than one individual)
SECURITY
Theft or Vandalism of Company property, equipment and/or facility
Security Breach (trespassing)
Suspicious activity (Picture tacking, parking near facility, etc.)
Threats by telephone or warnings from local enforcement.

Notification Sequence Summary

1. 911

2. Control Center

3. Qualified Individual / Supervisor /Terminal Division Manager

a) Local Response Team

b) OSRO and Contractor Support

c) LEPC (Local Emergency Planning Coordinator) if not already notified by 911

d) Duty Officer

i. Director of Emergency Preparedness, Response & Security
ii. Health and Safety Coordinator

iii. Environmental Coordinator

1. CA Office of Spill Preventions and Response (OSPR)
2. National Response Center (NRC)
3. Environmental Protection Agency (EPA)

iv. DOT Coordinator

1. Pipeline and Hazardous Materials Safety Administration (PHMSA)

	Notification Sequence		
✓	**911**		
✓	Duty Officer	800-231-2551	
✓	Meet-me Line	866-836-3169	Pass Code: 157528

NOTE: If communications are down refer to Section II.3 of the Core Plan for detailed guidance on the required notifications.

6.2 Response Equipment List, Testing & Deployment

Northern Lines – Coast Area

Shandon Station: Spill Response Equipment List & Location

Equipment Location: Santa Margarita Pump Station; 18781 El Camino Real; Atascadero, CA 93422					
Inspection Date:		**Inspector:**			
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Year Purchased**	**Comments****
*Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)					
Emergency Response Trailer #1					
1. Trailer		Each	1		
2. Tires		Each	2		
Personal Protective Equipment					
3. Cartridges, Airborne Particle		Each	3		
4. Cartridges, Organic Vapor		Each	3		
5. Face Shield Frame		Each	5		
6. Face Shields (Clear)		Each	5		
7. First Aid Kit		Each	2		
8. Floatation Devices, Personal		Each	1		
9. Pump, Draeger		Each	1		
10. Pump, MSA Combustible Gas		Each	1		
11. Radio (Kept in Main Office)		Each	1		
12. Radio, Portable		Each	4		
13. Respirators	Medium	Each	3		
14. Respirators	Large	Each	1		
15. SCBA Gear		Each	6		
Spill Containment/Absorbant Materials					
16. Absorbent Boom		Bag	5		
17. Absorbent Pads		Bag	8		

ADDITIONAL COMMENTS:

Equipment Location: Santa Margarita Pump Station; 18781 El Camino Real; Atascadero, CA 93422					
Inspection Date:		**Inspector:**			
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Year Purchased**	**Comments****
s: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)					
Decon Equipment					
18. Brush, Scrub		Each	3		
19. Buckets		Each	2		
20. Hand Cleaner		Each	1		
21. Pool, Plastic Kiddie		Each	3		
22. Shower		Each	1		
23. Tubs		Each	3		
Emergency Response Trailer #2					
24. Trailer		Each	1		
25. Tires		Each	2		
Personal Protective Equipment					
26. Absorbent Boom, Large		Each	6		
27. Absorbent Boom, Small		Each	3		
28. Absorbent Pads		Bag	6		
29. Anchor		Each	10		
30. Boom, Containment		Feet	500		
31. Can, Gasoline (5-Gallon)		Each	1		
32. Face Shield (Clear)		Each	6		
33. Life Vests		Each	13		
34. Rope, 600’		Roll	1		
35. Sponge, Scrub		Each	38		
36. Stretcher		Each	1		
37. T-Posts		Each	6		

ADDITIONAL COMMENTS: _____

Equipment Location: Santa Maria Pump Station; 1580 East Battles Road; Santa Maria, CA 93454						
	Inspector:					
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
Emergency Response Trailer #1						
Trailer		Each	1			
Tires		Each	2			
Response Equipment						
Calibration Station, 4-Way		Each	1			
Generator, EB 5000	Honda	Each	1			
Sample Kit		Each	1			
Lights, Work w/ Stand		Each	1			
Lights, Portable-Trailer Mounted		Each	4			
Radio Base Station		Each	1			
Radio, Portable		Each	4			
Rope, Poly (500' x ⅝")		Roll	1			
Decon Equipment						
Brushes, Scrub		Each	8			
Buckets, 5-Gal w/ lids		Each	6			
Pool, Small Plastic		Each	3			
Personal Protective Equipment						
Eye Wash Station		Each	1			
Face Shield		Each	1			
First Aid Kit		Each	1			
Respirator		Each	6			
Respirator Cartridges	Assorted	Each	30			
SCBA		Each	6			
SCBA, Spare Bottles		Each	4			
Vest, Life		Each	6			
Spill Containment/Absorbant Materials						
Oil Snare		Each	1			
Sorbent Boom		Section	23			
Sorbent pads		Bundle	6			

Equipment Location: Santa Maria Pump Station; 1580 East Battles Road; Santa Maria, CA 93454						
	Inspector:					
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
Emergency Response Trailer #1						
Hand Tools						
Monitor, 4-Way		Each	1			
Post Driver, “T”		Each	1			
Miscellaneous Materials						
Battery Charger	120v x 120v	Each	1			
Fax Machine		Each	1			
Fax Machine Cartridge		Each	2			
ADDITIONAL COMMENTS:						

Northern Lines – Valley Area

Equipment Location: Spill Trailer 1 (Lic# 1VM3710) Coalinga Office; 256 E. Polk St., Coalinga, CA 93210				
Inspection Date:		**Inspector:**		
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Comments****
nts: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)				
Decontamination				
Pressure Sprayers	2.5	gal	4	
Scrub Brushes	Various		6	
Plastic Buckets	2	gal	1	
Plastic Tubs	10	gal	3	
Sheep Troughs			3	
Hand Tools				
Fire Axe			1	
Tool Box		Large	1	
Tool Box		Small	1	
Scrapers		Various	2	
Hay Hooks			2	
Shovels		Coal	2	
Shovels		Square	6	
Shovels		Round	2	
Pitch Fork			2	
Garden Rake			6	
Misceallaneous				
Trash Containers	33	gal	4	
Electrical Cord	100	ft	2	
Electrical Cord	80	ft	3	
Halogen Lights	Various		7	
Harness			1	
Tarps	10 x 12	ft	4	
Ladder	10	ft	1	
Orange Fencing		Roll	3	
Fence Post			15	
Lathe		Bundle	1	
Reflector (Blue)	3	ft	10	
Plastic Sheeting	20' x 100'	ft	2 Rolls	
Blower, Fresh Air w/hose			1	
Shade House	10x10x7	ft	1	
PPE				
Chemical Goggles			6	
Scott Air Packs			4	
Life Vest (working)			12	

Response				
Traffic Control Signs	Hand held		3	
DO NOT ENTER	Red	Roll	12	
OPEN TRENCH	Yellow	Roll	2	
CAUTION	Yellow	Roll	9	
SAFETY HAZARD	Yellow	Roll	8	
Road Barricades			3	
Traffic Cones			90	
Fire Extinguisher	30	lb	1	
Portable Shower			1	
Sorbent Boom	4	in	40 Feet	

Equipment Location: Spill Trailer 2 (Lic# 4AZ6941) Coalinga Office; 256 E. Polk St., Coalinga, CA 93210				
Inspection Date:		**Inspector:**		
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Comments****
nts: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)				
Boom – Absorbent	6” x10’		20	
Boom – Floating	200	Ff		
Bridger Line Gun			1	

Northern Lines - Valley Area

Equipment Location:	Line 200 Area Office (Tracy); 7551 Carmelo Avenue; Tracy, CA 95304					
Inspection Date:		**Inspector:**				
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
s: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
EMERGENCY RESPONSE TRAILER #1						
Tires		Each	2			
Trailer		Each	1			
SPONSE EQUIPMENT						
Absorbent Boom	Type 270	4/Bag	7			
Absorbent Boom, 4” x 20’	Type 420	2/Bag	11			
Absorbent Pads, 17” x 19”		100/Bag	7			
Absorbent Rice Hull, 50 lb.		Bag	1			
Fire Extinguisher, 30#	Dry Chemical	Each	1			
Hazmat Response Kit, Brass		Each	1			
Post, Tee		Each	18			
PERSONAL PROTECTIVE EQUIPMENT						
Dräger CMS		Each	1			w/ chips for Benzene & Petroleum hydrocarbon
Face Shield		Each	3			
Face Shield Headgear		Each	3			
Fire Blanket		Each	1			
SCBA		Each	3			
Shin Guards, Snake		Pair	2			
DECON EQUIPMENT						
Brush, Long Handled	Scrub	Each	4			
Hose, 50’ Garden		Each	1			
Hose, Water Wand		Each	1			
Pail, 2-Gallon Plastic		Each	6			
Polyethylene Sheeting	6-mil	200 sq/ft	3			
Sprayer, 3-Gallon		Each	1			
Tub, 50-Gallon		Each	3			
HAND TOOLS						
Jack, Floor	2 Ton	Each	1			
Post Driver, Tee		Each	1			
ADDITIONAL COMMENTS:						

Southern Lines Area

Spill Response Equipment

Location:	Hazmat Trailer – Torrance, CA										Year:			
Release, Containment & Recovery	**Qty**	**Comments:**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**
Two Oil Absorbent Booms, 6"/Foot	120 ea.													
Oil Absorbent (Safe Step)/ Bags	24													
Oil Absorbent Pads/ Bundles	12													
Shovels, Square Point (Plastic)/Ea	8													
Shovels, Round Point/ Ea	8													
Brooms/ Ea	6													
Rakes/ Ea	8													
Squeegee/ Ea	6													
Sand Bags/ Ea	100													
Personal Protective	**Qty**	**Comments:**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**
Coveralls (Chem-Tuff)/ Pair	60													
Coveralls (Saranex)/ Pair	24													
Boots, Rubber/ Pair	6													
Gloves, Nitrile Outer/ Dozen	8													
Gloves, Nitrile Inner/ Dozen	8													
Gloves, Leather/Dozen	6													
Gloves, Fire/Pair	13													
Boots, Fire/Pair	4													
Turnouts, Fire/Pair	8													
Helmets, Fire/Each	8													
S.C.B.A./Each	3													
S.C.B.A., Spare Bottles/Each	5													
Air Respirator, Disposable/Each	24													
Safety Goggles/Pair	20													
Safety Glasses/Dozen	2													
Reflective Safety Vests/Each	20													
Rain Gear/Set	21													

6.3 Evacuation Plan

The following procedures were developed by site personnel after assessment of potential emergency conditions and should be used to escape and evacuate from emergencies relating to these specific areas of the facility during an emergency that would require an evacuation. This information is general and can be applied to any situation in which an evacuation is necessary. Detailed evacuation information for each site is included in Annex 1 of this Plan.

When evacuation is required:	
✓	Notify employees by emergency alarm system, radios or cell phones, as appropriate.
✓	Report location & communication methods to responding support (public authorities, specialized contractors).
✓	Proceed to assembly area. Evacuate area of assigned workplace in orderly fashion.
✓	Account for all personnel, including contractors.
✓	Notify Production Supervisor of all missing personnel and last known location.
✓	Always move upwind in the case of a gas release.

Procedures for Employees who remain to Operate	
✓	A terminal emergency such as an uncontrollable fire requires the complete evacuation of the terminal.
✓	No employee will remain to operate the facility.
✓	All processes should be shut down and all employees evacuate via approved evacuation routes to the designated place of gathering.

Procedures to Account for All Employees Following an Evacuation	
✓	The Area Supervisor, Facility Manager, Technician and/or Operator shall be responsible for accounting for all personnel, including employee's visitors, drivers and contractors.
✓	Persons responsible for accounting for all employees should report to the responding agency Incident Commander that all personnel are accounted for or the last known location of any missing employees.

Arrival Route of Emergency Response Personnel and Response Equipment	
✓	Responders should be directed to arrive at the main office on Pak Tank Road.

Transportation of Injured Personnel	
✓	Transportation of injured personnel will be coordinated through the Carlyss Fire Department.
✓	Injured personnel will be transported to Lake Charles Memorial Hospital.
✓	Injured personnel will be picked up either at the Main Office or either of the two Evacuation and Assembly areas.

Location of Stored Material & Hazards Imposed by Those Materials	
✓	Crude oil and refined products are stored in containers as shown on the facility diagrams. Hazards posed by releases from these containers are vapors and fire.

Prevailing Winds	
✓	Wind socks at the facility should be used to determine the wind direction during an emergency and responders should keep upwind of the spill. All personnel have personal air monitoring devices and should move upwind when they alarm.

Community Evacuation Plan	
✓	Not Applicable – facility is not located within city limits.

Location of Alarms / Notification Systems	
✓	Alarms are integrated in the facility control systems and are activated automatically in the event of a system disruption.
✓	Local alarms and notification systems are part of the SCADA system.
✓	SCADA alarms are tied to the facility emergency shutdown system.
✓	Notifications may also be made via operator cell phone or mobile communications.

Mitigation Command Center Location	
✓	The Evacuation and Assembly area will serve as the on-scene incident command post / mitigation command center.

When the alarm is sounded or a signal to evacuate is given all personnel should:

Evacuation Checklist		
Procedures	✓	Date/Time
Immediately stop work activities.	☐	__/__/__ [00:00]
Check the wind direction.	☐	__/__/__ [00:00]
Move upwind or cross wind.	☐	__/__/__ [00:00]
Check the wind again.	☐	__/__/__ [00:00]
Person-in-Charge will conduct a head count to account for all personnel known to be at the facility.	☐	__/__/__ [00:00]
Person-in-Charge will assist in alerting and escorting personnel, including visitors and contractors to the appropriate evacuation point.	☐	__/__/__ [00:00]
Person-in-Charge will notify the appropriate office, and make all other appropriate notifications, as necessary.	☐	__/__/__ [00:00]
Person-in-Charge will assist in hazard control activities as requested.	☐	__/__/__ [00:00]
Person-in-Charge will initiate search and rescue of missing persons.	☐	__/__/__ [00:00]
All other personnel will remain at the evacuation point until the "All Clear" signal is given.	☐	__/__/__ [00:00]
Note: Evacuation should be carried out in an orderly manner. Personnel should WALK, not run or panic.		

6.4 Immediate Actions

Spill Response Checklist

The following response activities represent suggested actions during a response to a spill.

Response Action	Person Taking Action (Initials)	Date/Time Action Taken
First Person To Discover Spill		
IMMEDIATELY NOTIFY TERMINAL SUPERVISOR OR ALTERNATE		
Primary Response Actions (Incident Commander or Designee)		
ENSURE PERSONNEL SAFETY - Sound alarm, evacuate if necessary, account for all personnel, explain hazards, require appropriate PPE and secure spill area		
ELIMINATE IGNITION SOURCES - Shut off motors, electrical pumps, electrical power, open flames, etc. in spill area		
QUICKLY ASSESS SPILL AND SAFETY HAZARD – Spill size, rate, type, cause, movements, fire/explosion hazard and health risk		
ACTIVATE PRIMARY RESPONSE TEAM – Utilize onsite personnel to extent possible and supplement with off-duty personnel		
IF SAFE, CONTROL SPILL SOURCE – Shut down pumps, close valves, transfer oil from leaking tank, etc.		
INITIATE FACILITY SPILL CONTROL – Block storm drains and close separator valves (if necessary), construct containment/diversion berms, apply sorbents, etc.		
RE-ASSESS SPILL PARAMETERS AND RESPONSE – Estimate spill volume/rate, cause, type/classification, effectiveness of source/spill control operations, spill movements, safety/environmental concerns, weather/hydrographic conditions, etc.		
INITIATE OFF-SITE SPILL CONTROL – For spill to river, initiate aquatic spill control and Sensitive Area Protection		
Notification/Documentation (Incident Commander)		
NOTIFY APPROPRIATE COMPANY PERSONNEL - Primary Response Team Members, Qualified Individual, Company Management, Area Response Team Call Duty Officer		
NOTIFY/ACTIVATE RESPONSE CONTRACTORS (As required) -		
NOTIFY APPROPRIATE REGULATORY AGENCIES – Federal NRC, State DEM, Regional Ecology office and others, such as LEPC, as necessary		
NOTIFY THREATENED NEARBY PARTIES/SENSITIVE AREA MANAGERS (Uncontained Spills or vapor clouds only)		
NOTIFY/ACTIVATE OTHER RESPONSE CONTRACTORS OR SUPPORT SERVICES (As required)		

Spill Response Checklist Cont'd

Response Action	Person Taking Action (Initials)	Date/Time Action Taken
INITIATE DOCUMENTATION PROCEDURES – Document all response actions taken previously and all subsequent response actions including notifications, agency/media meetings, equipment/personnel deployments, recovery and disposal of oil and oily waste, extent and degree of area impacted, etc.		
Secondary Response Actions (Primarily for Uncontained Spills)		
ESTABLISH COMMAND POST/COMMUNICATIONS CENTER		
INITIATE SPILL TRACKING AND SURVEILLANCE OPERATIONS – Helicopters, fixed-wing aircraft, vehicle (if safe)		
IDENTIFY THREATENED SENSITIVE AREAS AND PRIORITIZE – Parks, wildlife/fish habitats, marinas, etc.		
DEVELOP OVERALL RESPONSE OBJECTIVE AND INCIDENT ACTION PLAN – Maximize utilization of available equipment, personnel and logistics to limit the area affected by the spill and the associated impacts. Prioritize actions. Plan for the effective utilization of additional equipment and supplies as they arrive		
IDENTIFY EQUIPMENT, PERSONNEL and LOGISTICAL SUPPORT REQUIREMENTS FOR SECONDARY SPILL RESPONSE OPERATIONS – Containment, protection, recovery and cleanup		
IMPLEMENT APPROVED INCIDENT ACTION PLAN - In order of priority		
ESTIMATE WASTE HANDLING AND INTERIM STORAGE REQUIREMENTS - Based on quantity spilled, recovery capacity, areas affected, degree of impact, etc.		
ARRANGE FOR INTERIM SOLID AND LIQUID WASTE HANDLING AND STORAGE – Pumps, barges, portable tanks, available tankage at facility, debris boxes, lined storage cells, heavy equipment, permits, etc.		
INITIATE LOGISTICAL SUPPORT FOR RESPONSE OPERATIONS – Transportation, lodging, meals, supplies, portable toilets, communications equipment, additional office space, etc.		
ARRANGE FOR TRANSPORTATION, TREATMENT and/OR DISPOSAL OF RECOVERED OIL AND OILY WASTES – Determine characterization, packaging and transportation requirements for the candidate treatment/disposal facilities		
COMPLETE CLEANUP OPERATIONS AND OBTAIN CLEARANCE FROM REGULATORY AGENCIES - Obtain written agency clearance for each section of shoreline as cleanup is completed		

(b) (7)(F), (b) (3)

Coast Area – Sections 1 Through 5

Coast Area – Sections 6 Through 15

(b) (7)(F), (b) (3)

Coast Area – Section 16

(b) (7)(F), (b) (3)

Coast Area – Sections 17 Through 21

(b) (7)(F), (b) (3)

Coast Area – Sections 22 Through 25

Coast Area – Sections 34 Through 41

(b) (7)(F), (b) (3)

Coast Area – Sections 42 Through 44

(b) (7)(F), (b) (3)

Coast Area – Section 46

Coast Area – Sections 47 Through 56

(b) (7)(F), (b) (3)

Coast Area – Sections 57 Through 63

(b) (7)(F), (b) (3)

Coast Area – Sections 64 Through 70

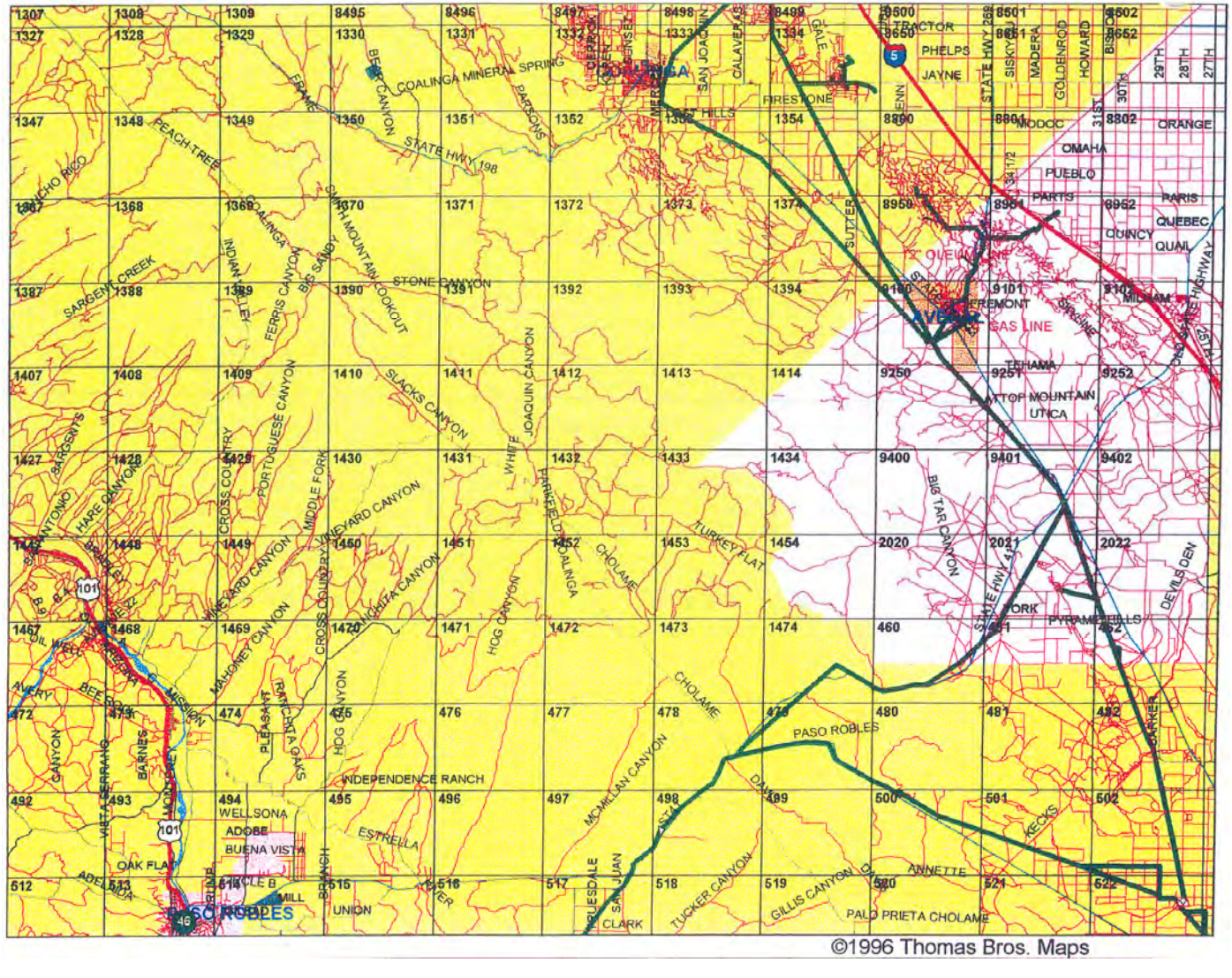
(b) (7)(F), (b) (3)

Coast Area – Sections 71 Through 75

(b) (7)(F), (b) (3)

Coast Area – Shandon to Antelope

Antelope to Junction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BIG SANDY
SMITH MOUNTAIN LOOKOUT
STONE CANYON
PORTUGUESE CANYON
MIDDLE FORK
VINEYARD CANYON
CROSS COUNTRY
HIGHFIA CANYON
HOG CANYON
FARMERSVILLE
COALINGA
CHOLAME
TURKEY FLAT
BIG TAR CANYON
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YORK
PYRAMID HILLS
DEVILS DEN
MAHONEY CANYON
RANCHITA OAKS
INDEPENDENCE RANCH
MCMILLAN CANYON
PASO ROBLES
ESTRELLA
ADOBE
BUENA VISTA
OAK FLAT
ANNETTE
TUCKER CANYON
GILLIS CANYON
PALO PRIETA CHOLAME
CLARK
SAN JUAN
FIRESTONE
PHELPS
JAYNE
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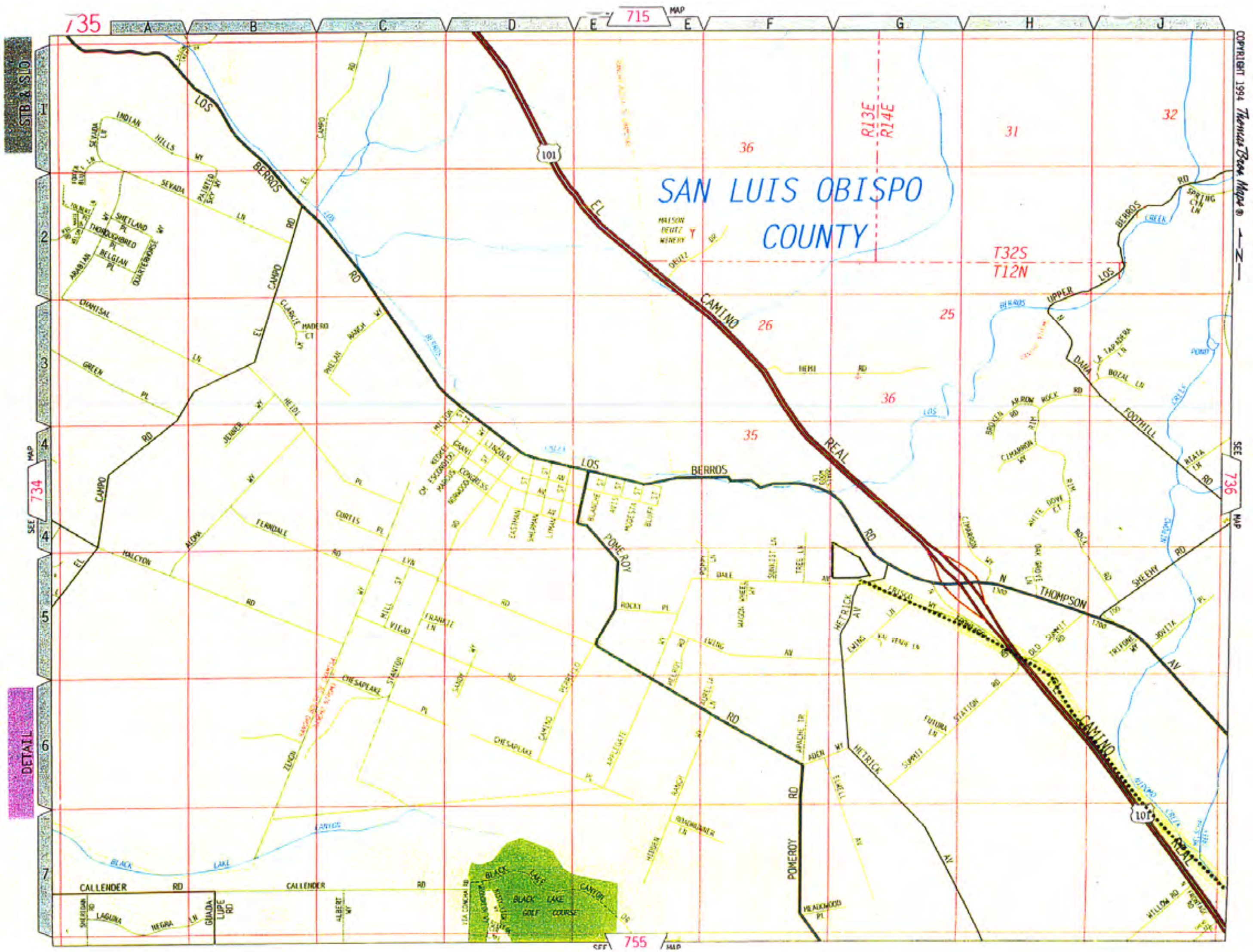
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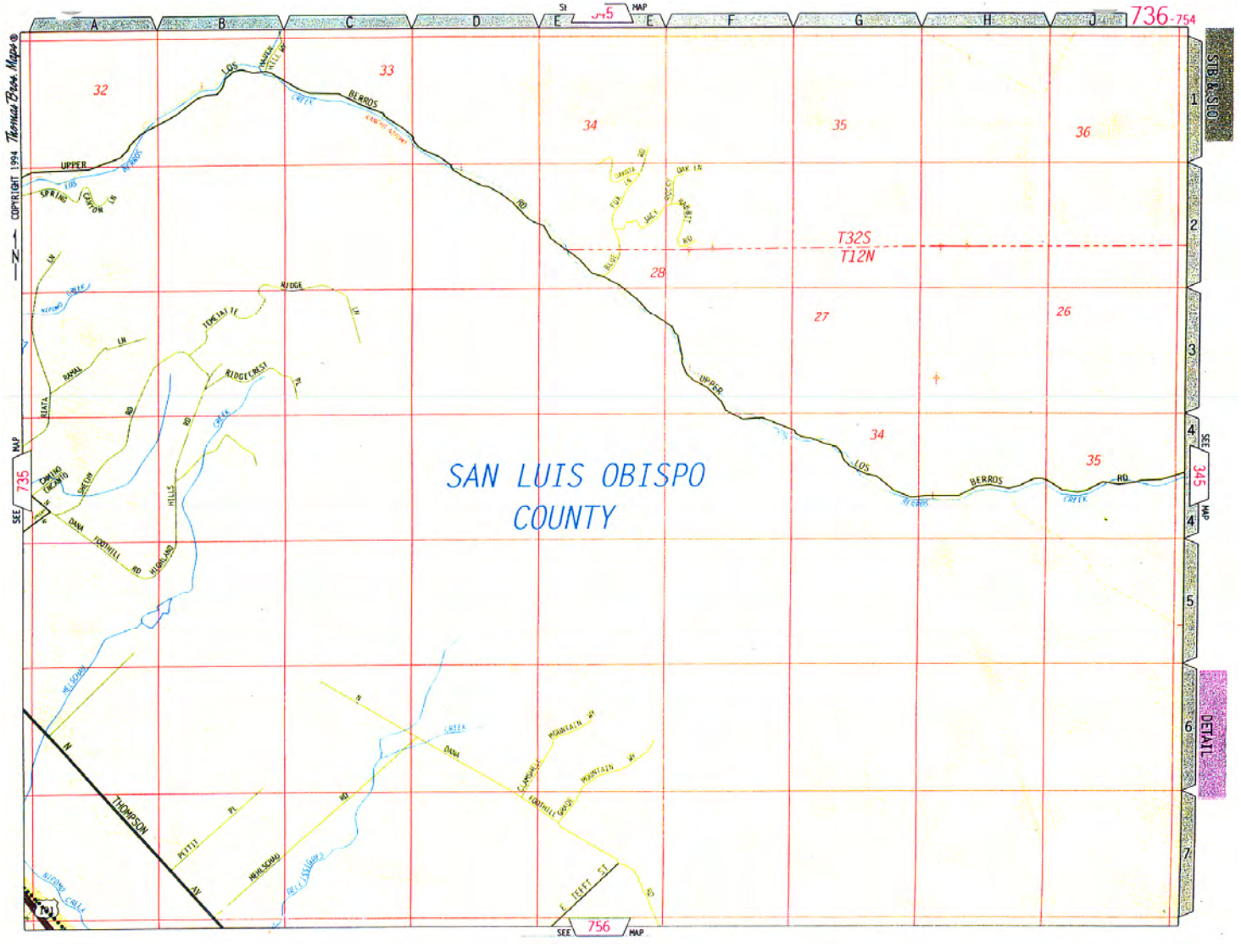
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COUNTY
T32S
T12N
736-754
SEE MAP 735
SEE MAP 345
SEE MAP 756
STB & SLO
DETAIL
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UPPER LOS BERROS CREEK
LOS BERROS RD
THOMPSON AV
DANA HILLS
DANA FOOTHILL RD
RIDGE
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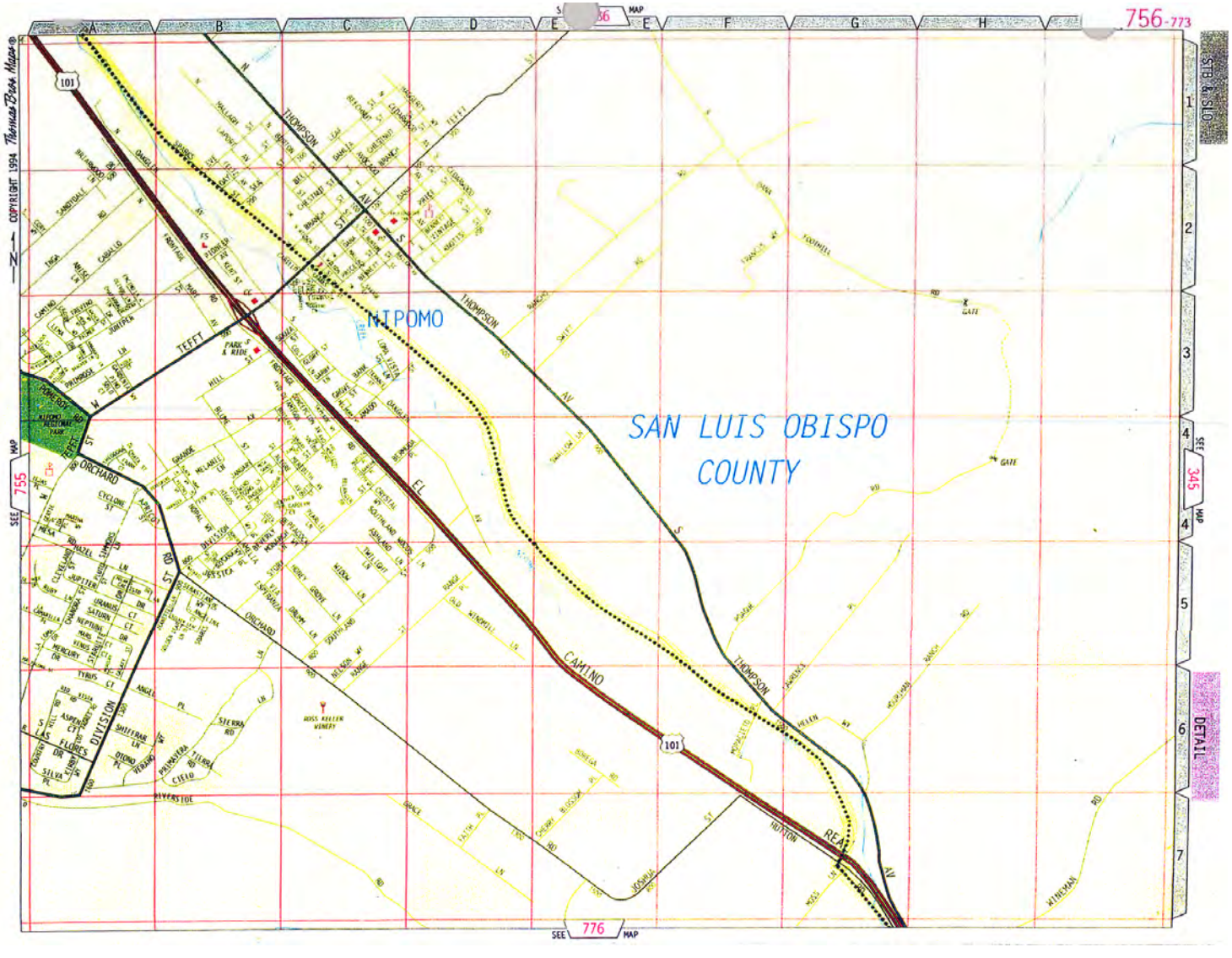
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SEE 755 MAP
SEE 776 MAP
SEE 345 MAP
DETAIL
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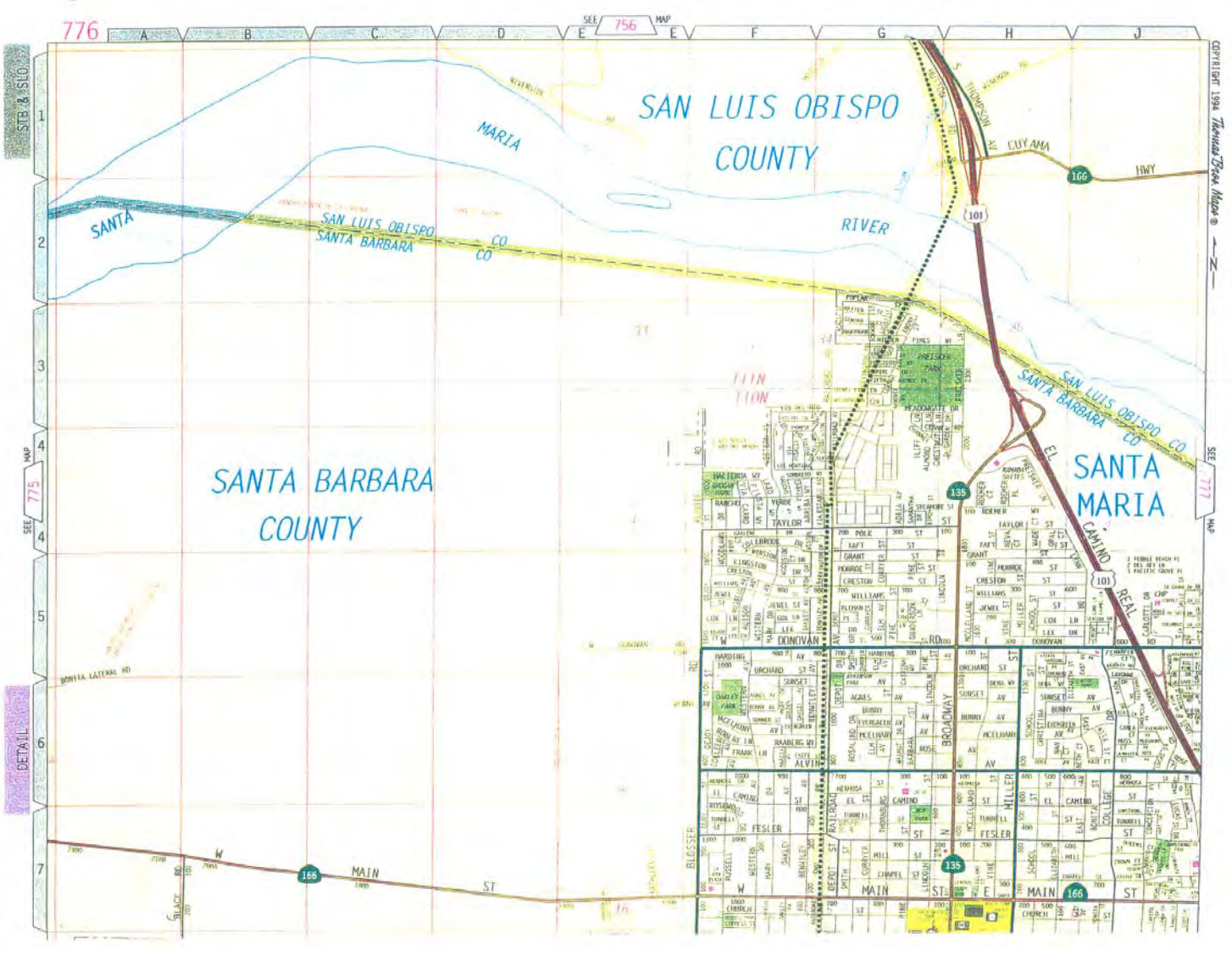
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SEE 756 MAP
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SANTA BARBARA COUNTY
SANTA MARIA
MARIA RIVER
SANTA
SAN LUIS OBISPO
SANTA BARBARA CO
SAN LUIS OBISPO CO
SANTA BARBARA CO
CUYAMA HWY
THOMPSON AV
EL CAMINO REAL
BROADWAY
MAIN ST
W MAIN ST
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DONOVAN RD
BONITA LATERAL RD
SEE 775 MAP
SEE 777 MAP
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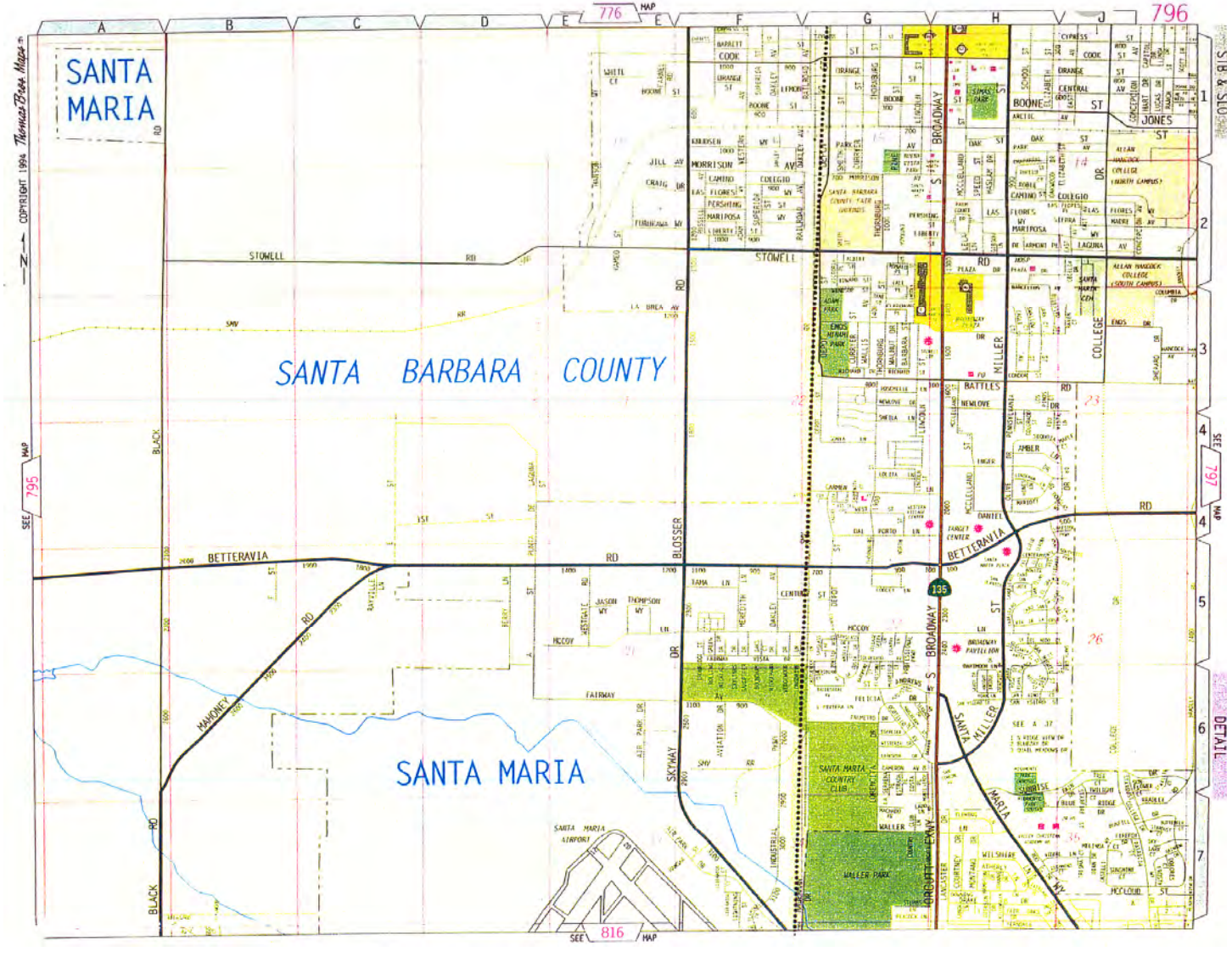
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BLOSSER RD
BROADWAY
MILLER
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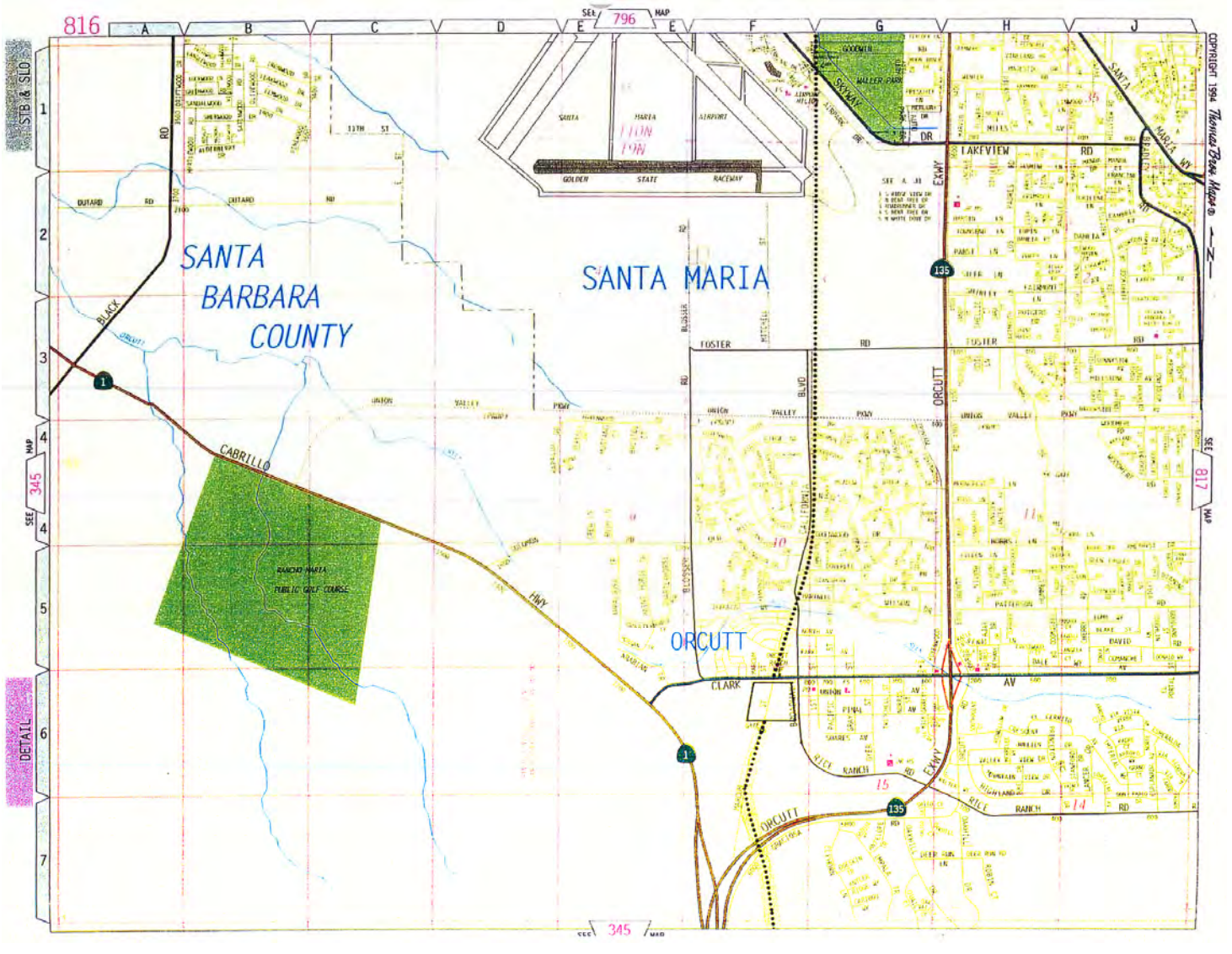
BOONE
JONES
BLACK RD
MAHONEY AVE
SKYWAY DR
SANTA MARIA AIRPORT
SANTA MARIA COUNTRY CLUB
WALLER PARK
SEE 795 MAP
SEE 797 MAP
SEE 816 MAP
SEE DETAIL
776 MAP
796 MAP
135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SEE 796 MAP
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SANTA BARBARA COUNTY
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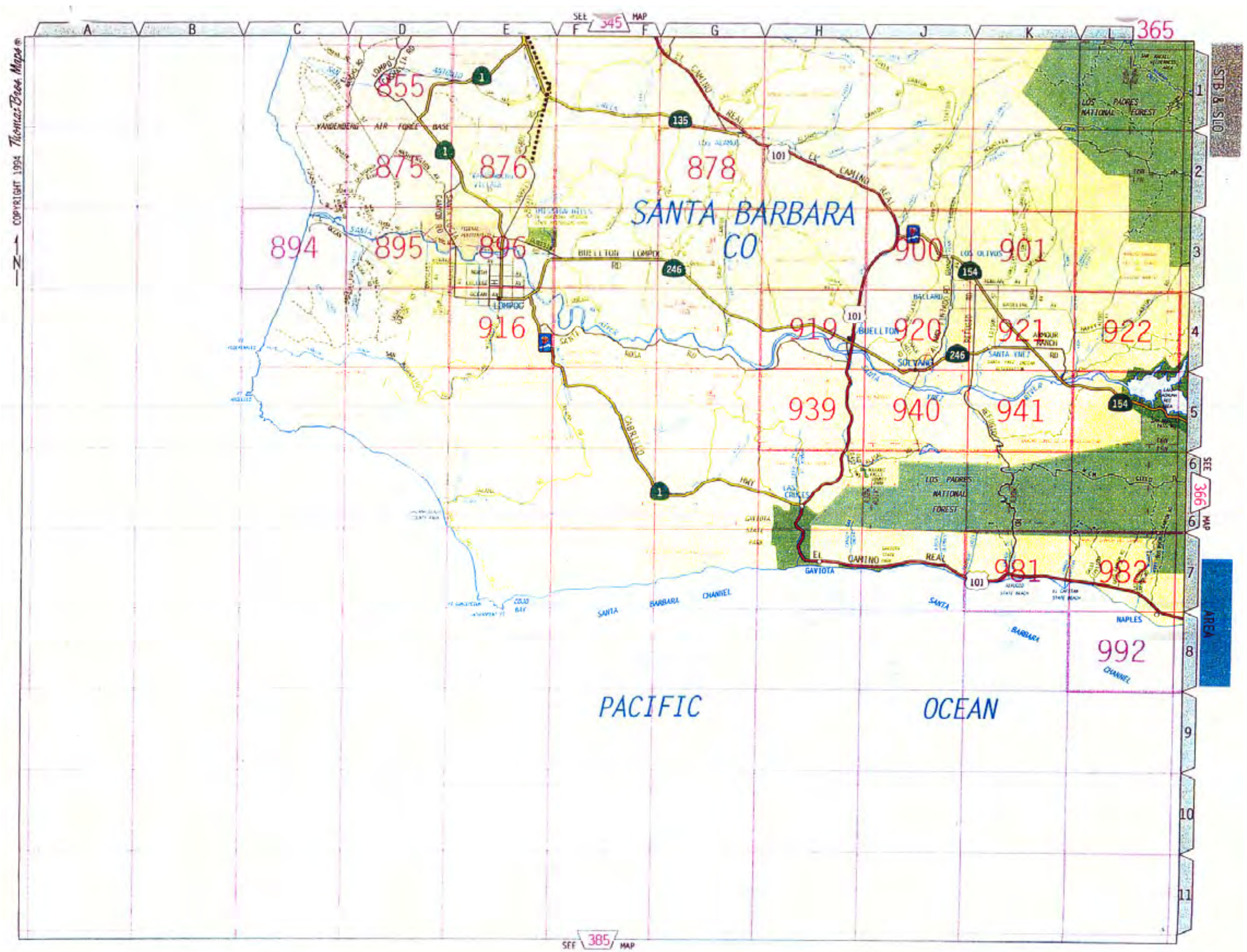
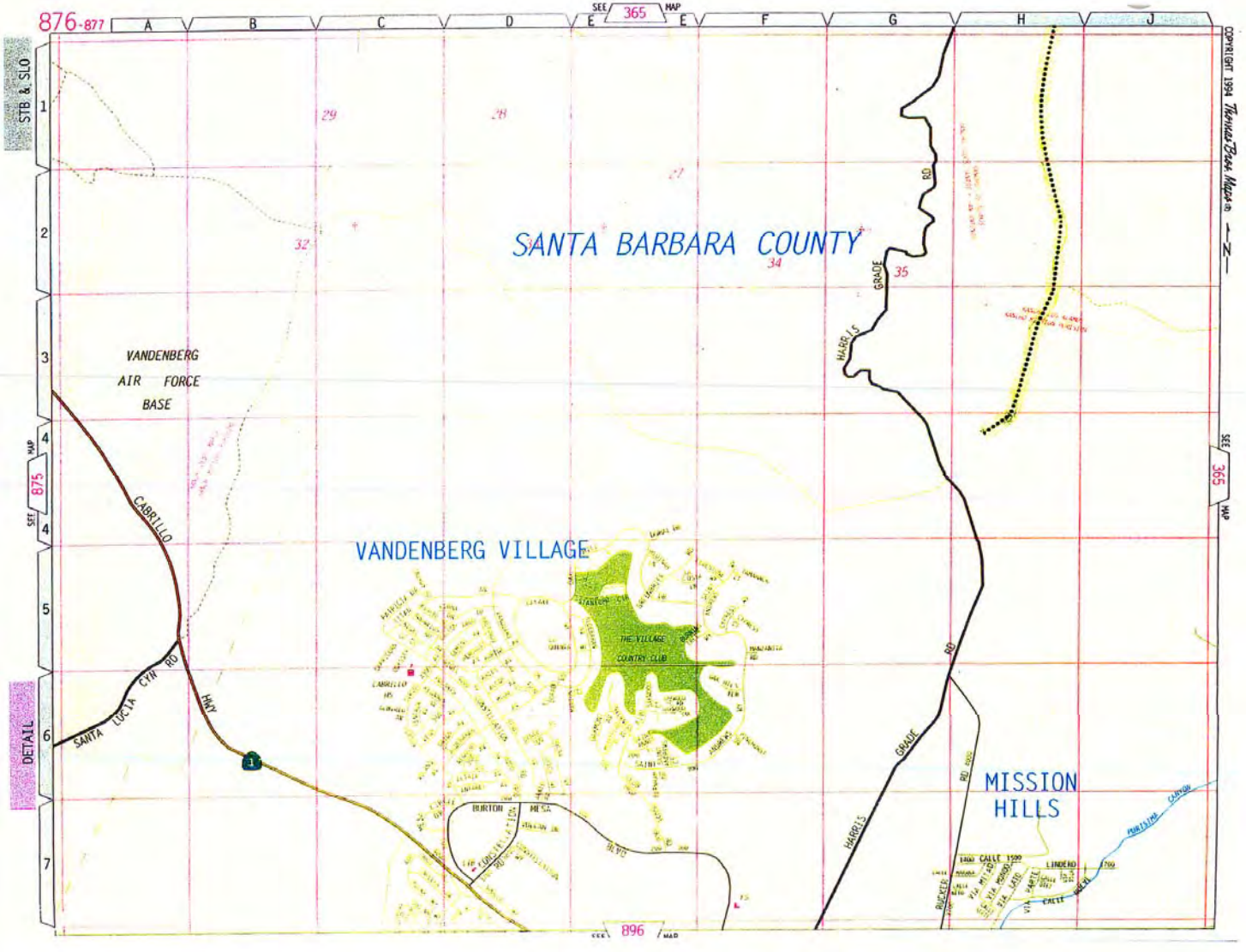
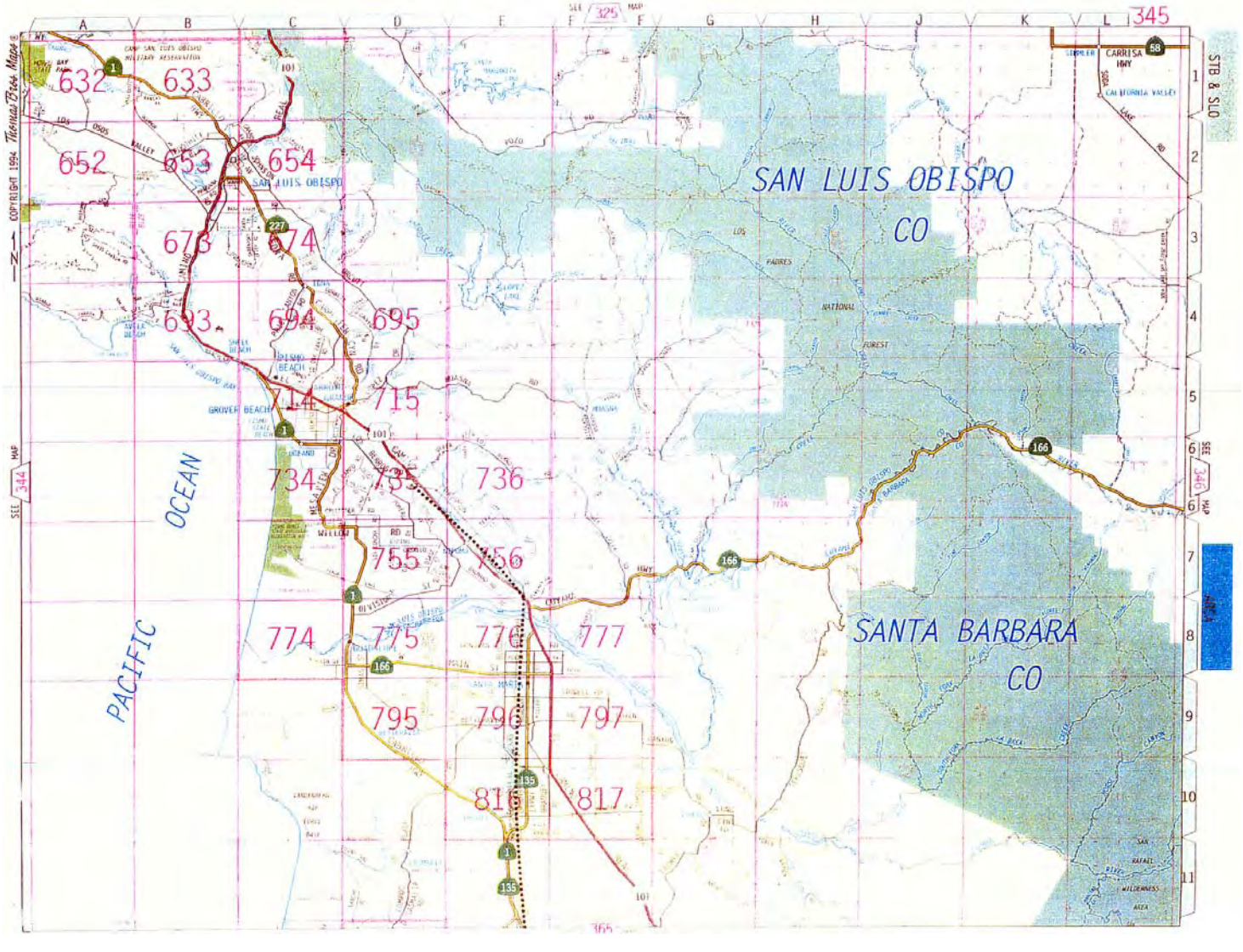
ORCUTT
CABRILLO
BLACK
FOSTER
RD
BLVD
ORCUTT
EXWY
LAKEVIEW
RD
SANTA MARIA
HWY
CLARK
RICE RANCH
RD
SEE 345 MAP
SEE 817 MAP
345
SANTA MARIA PUBLIC GOLF COURSE
GOLDEN STATE RACEWAY
AIRPORT
WALLER PARK
GOODWIN
SKATEWAY
COPYRIGHT 1994 Thomas Bros. Maps®

PHMSA 000076935




876-877
SEE 365 MAP
A
B
C
D
E
F
G
H
J
STB & SLO
DETAIL
SEE 875 MAP
SEE 365 MAP
SEE 896 MAP
SANTA BARBARA COUNTY
VANDENBERG AIR FORCE BASE
VANDENBERG VILLAGE
THE VILLAGE COUNTRY CLUB
MISSION HILLS
CABRILLO
SANTA LUCIA CYN RD
HWY 1
HARRIS GRADE RD
BURTON MESA BLVD
LINDERO
CALLE
COPYRIGHT 1994 Thomas Bros. Maps



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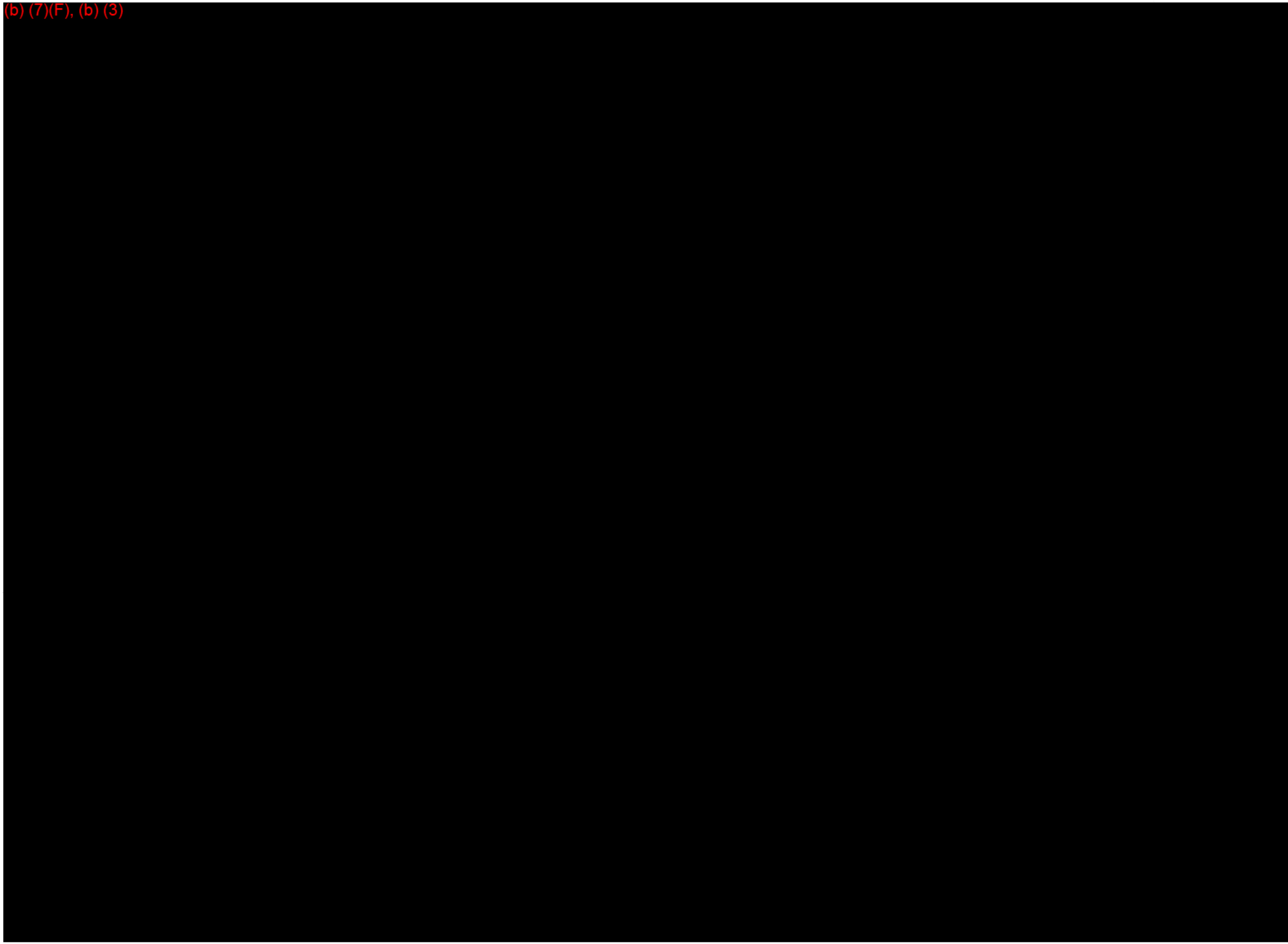
(b) (7)(F), (b) (3)



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(b) (7)(F), (b) (3)

6.6 Response Forms

Incident Report Form

ICS 201-1 Incident Briefing Map

ICS 201-2 Incident Briefing – Summary of Current Actions

ICS 201-3 Incident Briefing – Current Organization

ICS 201-4 Incident Briefing – Resources Summary

ICS 201-5 Incident Briefing – Site Safety Plan (Short Form)

Weather Report

ICS 202 Response Objectives

ICS 203-Organizational Assignment List

ICS 211p-Check In List – Personnel

ICS 211e Check In List – Equipment

Spill Trajectory Report Form

TRANSPORTATION – HEALTH & SAFETY

EPR&S PREP – COMPANY INCIDENT REPORT FORM

Company, Agency and environmental notifications must be made quickly. **Do NOT wait for all incident information before calling the National Response Center at 800-424-8802.** Use this form to record as much incident information as possible. **Communicate within 30 to 60 minutes of discovery time**. Use the Emergency Notifications Log to document all communication, any additional information and distribution.

I. INCIDENT TYPE

A. Check all that apply: ☐ **Release** ☐ **Security** ☐ **Fire** ☐ **Other (Specify)** _____

B. REPORTING PARTY		**C. SUSPECTED RESPONSIBLE PARTY**	
Name/Title:		Name/Title:	
Company:		Company:	
Address:		Address:	
City, State Zip:		City, State Zip:	
Call Back #:		Call Back #:	

D. **Calling for the Responsible Party?** ☐ Yes ☐ No

II. INCIDENT LOCATION INFORMATION

Incident Location: ☐ Terminal ☐ Pump Station ☐ Vessel ☐ Pipeline ☐ Truck ☐ Rail

Owner Name:		Operator Name:	
Address:	3010 Briarpark Dr; PWC 07-7330-34	Address:	
City, State, Zip:	Houston, TX 77042	City, State, Zip:	
County/Parish:		Hwy or River Mile Marker:	
Section-Township-Range:		Latitude	Longitude
Dist./Dir. to Nearest City:		Facility Storage Capacity:	(bbls)
Container Type (☐ AST/ ☐ UST)		Container Capacity	(bbls)
Site Supervisor/Contact:		Call Back #:	

III. INCIDENT DESCRIPTION & IMPACTS

Date/Time Discovered:		Discovered by:	
Material Released:		Quantity Released:	(bbls/lbs)
Duration of the Release:		Weather Conditions:	
Quantity to Surface Water:		Temperature: °F	Humidity:
Off Company Property? ☐ Yes ☐ No		Wind Speed:	Direction:
Evacuations: ☐ Yes ☐ No	# Evacuated:	Name of Surface Water	
Fire: ☐ Yes ☐ No	# Hospitalized:	Distance to Water:	(ft/mi)
Explosion: ☐ Yes ☐ No	# of Injuries:	# of Fatalities	Media coverage expected? ☐Yes ☐ No

If Operator error, has Drug and Alcohol program been initiated? ☐Yes ☐ No **DOT jurisdiction event?** ☐Yes ☐ No

If DOT event, list those completing Drug and Alcohol testing? _____

Incident description (Including Source and or Cause of the Incident) _____

Impacted area description _____

Damage description and estimate ($, days down, etc.) _____

Actions taken to correct, control or mitigate (Change in Security Level, FSP and/or ERP Implemented, etc.) _____

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
IV. EMERGENCY NOTIFICATIONS - LOG							
Duty Officer/		800-231-2551					Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

Agency/Person Contacted	Notified By	Office Phone	Cell Phone	Other Phone	Date & Time Notified	Log #	Comments
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No
							Follow-Up: ☐ Yes ☐ No

V. ADDITIONAL INFORMATION

** Alternate NRC contact information: Fax: 202-267-2165, TDD: 202-267-4477, or e-mail: lst-nrcinfo@comdt.uscg.mil

VI. PREPARED BY AND DISTRIBUTION

Prepared by: _____ **Date:** _____ **IMPACT Entry Complete:** ☐ Yes ☐ No

* Notify the appropriate Company DOT Coordinator to complete the *PHMSA FORM F 7000-1*, as applicable.

ICS 201-1 Incident Briefing Map/Sketch	
Incident:	**Prepared By:** **at**
Period:	**Version Name:**

ICS 201-1 Incident Briefing Map/Sketch	

ICS 201-2 – Summary of Current Actions	
Incident:	**Prepared By:** **at:**
Period: **to**	**Version Name:**

Incident Information

Initial Incident Objectives

Summary of Current Actions

Date/Time	Action/Note

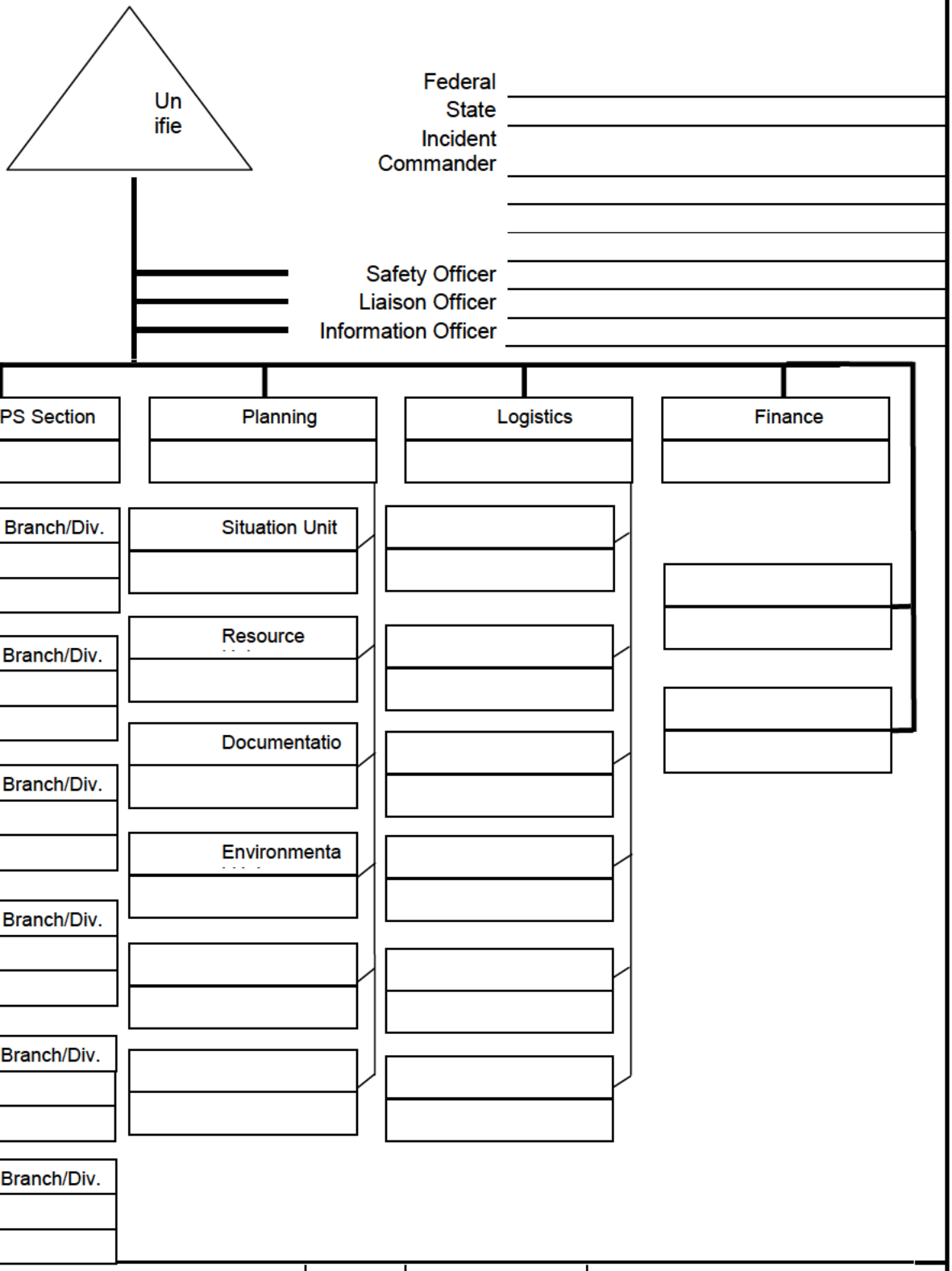
ICS 201-2 Summary of Current Actions			© 1997-2012 TRG/dbSoft, Inc.

ICS 201-2 – Summary of Current Actions	
Incident:	Prepared By: at:
Period: to	Version Name:

Summary of Current Actions	
Date/Time	Action/Note
ICS 201-2 Summary of Current Actions	© 1997-2012 TRG/dbSoft, Inc.

ICS 201-3 Current Organization

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**



ICS 201-3 – Current Organization | **© 1997-2012 TRG/dbSoft, Inc.**

ICS 201-4 – Resource Summary

Incident:					Period:			
ID	**Supplier**	**Resource Type**	**Description**	**Quantity**	**Size**	**Area of Operation**	**Status**	**Status Date/Time**

ICS 201-4 Resource Summary			© 1997-2012 TRG/dbSoft, Inc.

ICS 201-5 Site Safety and Control Analysis

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

Site Control

1. Is Site Control set up? ☐ Yes ☐ No	2. Is there an on-scene command post? ☐ Yes ☐ No If so, where?
3. Have all personnel been accounted for? ☐ Yes ☐ No ☐ Don't Know	Injuries: Fatalities: Unaccounted: Trapped:
4. Are observers involved, or rescue attempts planned? Observers: ☐ Yes ☐ No Rescuers: ☐	5. Are decon areas setup? ☐ Yes ☐ No If so, where?

Hazard identification, immediate signs of: (if yes, explain in Remarks)

1. Electrical line(s) down or overhead? ☐ Yes ☐ No	2. Unidentified liquid or solid products visible? ☐ Yes ☐ No
3. Wind direction across incident: ☐ Towards your position Wind Speed ☐ Away from	4. Is a safe approach possible? ☐ Yes ☐ No
5. Odors or smells? ☐ Yes ☐ No	6. Vapors visible? ☐ Yes ☐ No
7. Holes, ditches, fast water, cliffs, etc. nearby? ☐ Yes ☐ No	8. Fire, sparks, sources of ignition nearby? ☐ Yes ☐ No
9. Is local traffic a potential problem? ☐ Yes ☐ No	10. Product placards, color codes visible? ☐ Yes ☐ No
11. Other Hazards? ☐ Yes ☐ No	12. As you approach the scene from the upwind side, do you note a change in the status of any of the above? ☐ Yes ☐ No

Hazard Mitigation: have you determined the necessity for any of the following?

1. Entry Objectives:

2. Warning sign(s), barriers, color codes in place? ☐ Yes ☐ No

3. Hazardous material being monitored? ☐ Yes ☐ No
   - 3a. Sampling Equipment:
   - 3b. Sampling location(s):
   - 3c. Sampling frequency:
   - 3d. Personal exposure monitoring:

4. Protective gear / level:
   - 4a. Gloves:
   - 4b. Respirators:
   - 4c. Clothing:
   - 4d. Boots:
   - 4e. Chemical cartridge change frequency:

5. Decon
   - 5a. Instructions:
   - 5b. Decon equipment and materials:

6. Emergency escape route established? ☐ Yes ☐ No
   Route?

7. Field responders briefed on hazards? ☐ Yes ☐ No

8. Remarks:

ICS 201-5 Site Safety and Control Analysis	

Weather Report

Incident:	**Prepared By:** at
Period:	**Version Name:**

Present Conditions

Wind Speed:		Wave Height:	
Wind Direction From The:		Wave Direction:	
Air Temperature:		Swell Height:	
Barometric Pressure:		Swell Interval:	
Humidity:		Current Speed:	
Visibility:		Current Direction Toward:	
Ceiling:		Water Temperature:	
Next High Tide (Time):		Next Low Tide (Time):	
Next High Tide (Height):		Next Low Tide (Height):	
Sunrise:		Sunset:	

Notes:

24 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

48 Hour Forecast

Sunrise:		Sunset:	
High Tide (Time):		High Tide (Time):	
High Tide (Height):		High Tide (Height):	
Low Tide (Time):		Low Tide (Time):	
Low Tide (Height):		Low Tide (Height):	

Notes:

Weather Report			

ICS 202 - General Response Objectives		
Incident:	**Prepared By:** **at:**	
Period:	**Version Name:**	
Overall and Tactical Objectives		
	Assigned to:	Status
1. Ensure the Safety of Citizens and Response Personnel		
☐ 1a. Identify hazard(s) of spilled material		
☐ 1b. Establish site control (hot zone, warm zone, cold zone, & security)		
☐ 1c. Consider evacuations if needed		
☐ 1d. Establish vessel and/or aircraft restrictions		
☐ 1e. Monitor air in impacted areas		
☐ 1f. Develop site safety plan for personnel & ensure safety briefings are conducted		
2. Control the Source of the Spill		
☐ 2a. Complete emergency shutdown		
☐ 2b. Conduct firefighting		
☐ 2c. Initiate temporary repairs		
☐ 2d. Transfer and/or lighter product		
☐ 2e. Conduct salvage operations, as necessary		
3. Manage a Coordinated Response Effort		
☐ 3a. Complete or confirm notifications		
☐ 3b. Establish a unified command organization and facilities (command post, etc.)		
☐ 3c. Ensure local and tribal officials are included in response organizations		
☐ 3d. Initiate spill response Incident Action Plans (IAP)		
☐ 3e. Ensure mobilization & tracking of resources & account for personnel & equip		
☐ 3f. Complete documentation		
4. Maximize Protection of Environmentally-Sensitive Areas		
☐ 4a. Implement pre-designated response strategies		
☐ 4b. Identify resources at risk in spill vicinity		
☐ 4c. Track oil movement and develop spill trajectories		
☐ 4d. Conduct visual assessments (e.g., overflights)		
☐ 4e. Development/implement appropriate protection tactics		
ICS 202 General Response Objectives		**© 1997-2012 TRG/dbSoft,**

ICS 202 - GENERAL RESPONSE OBJECTIVES		
Incident:	**Prepared By:**	**at:**
Period:	**Version Name:**	

Overall and Tactical Objectives		
	Assigned to:	Status
5. Contain and Recover Spilled Material		
☐ 5a. Deploy containment boom at the spill site & conduct open-water skimming		
☐ 5b. Deploy containment boom at appropriate collection areas		
☐ 5c. Evaluate time-sensitive response technologies (e.g., dispersants, in-situ burning)		
☐ 5d. Develop disposal plan		
6. Recover and Rehabilitate Injured Wildlife		
☐ 6a. Establish oiled wildlife reporting hotline		
☐ 6b. Conduct injured wildlife search and rescue operations		
☐ 6c. Setup primary care unit for injured wildlife		
☐ 6d. Operate wildlife rehabilitation center		
☐ 6e. Initiate citizen volunteer effort for oiled bird rehabilitation		
7. Remove Oil from Impacted Areas		
☐ 7a. Conduct appropriate shoreline cleanup efforts		
☐ 7b. Clean oiled structures (piers, docks, etc.)		
☐ 7c. Clean oiled vessels		
8. Minimize Economic Impacts		
☐ 8a. Consider tourism, vessel movements, & local economic impacts		
☐ 8b. Protect public and private assets, as resources permit		
☐ 8c. Establish damage claims process		
9. Keep Stakeholders and Public Informed of Response Activities		
☐ 9a. Provide forum to obtain stakeholder input and concerns		
☐ 9b. Provide stakeholders with details of response actions		
☐ 9c. Identify stakeholder concerns and issues, and address as practical		
☐ 9d. Provide timely safety announcements		
☐ 9e. Establish a Joint Information Center (JIC)		
☐ 9f. Conduct regular news briefings		
☐ 9g. Manage news media access to spill response activities		
☐ 9h. Conduct public meetings, as appropriate		
ICS 202 General Response Objectives	**© 1997-2012 TRG/dbSoft, Inc.**	

ICS 203 - Organization Assignment

Incident:	**Prepared By:** **at:**
Period:	**Version Name:**

Command Staff

Title	Name	Mobile	Pager	Other	Radio
Federal (FOSC)		( ) -	( ) -	( ) -	
State (SOSC)		( ) -	( ) -	( ) -	
RP(s)		( ) -	( ) -	( ) -	
Incident Commander		( ) -	( ) -	( ) -	
Deputy Incident Commander		( ) -	( ) -	( ) -	
Safety Officer		( ) -	( ) -	( ) -	
Information Officer		( ) -	( ) -	( ) -	
Liaison Officer		( ) -	( ) -	( ) -	
Intelligence Officer		( ) -	( ) -	( ) -	

Operations Section

Title	Name	Mobile	Pager	Other	Radio
Operations Section Chief		( ) -	( ) -	( ) -	
Deputy Operations Section Chief		( ) -	( ) -	( ) -	
Staging Area Manager		( ) -	( ) -	( ) -	
Recovery & Prot. Branch Director		( ) -	( ) -	( ) -	
Emergency Resp. Branch Director		( ) -	( ) -	( ) -	
Air Ops Branch Director		( ) -	( ) -	( ) -	
Wildlife Branch Director		( ) -	( ) -	( ) -	
Branch Director		( ) -	( ) -	( ) -	
Division/Group Supervisor		( ) -	( ) -	( ) -	
Disposal Group Supervisor		( ) -	( ) -	( ) -	

Planning Section

Title	Name	Phone	Fax	Other	Radio
Planning Section Chief		( ) -	( ) -	( ) -	
Deputy Planning Sec ion Chief		( ) -	( ) -	( ) -	
Situation Unit Leader		( ) -	( ) -	( ) -	
Resource Unit Leader		( ) -	( ) -	( ) -	
Documentation Unit Leader		( ) -	( ) -	( ) -	
Technical Specialist		( ) -	( ) -	( ) -	
Demobilization Unit Leader		( ) -	( ) -	( ) -	
Check In Recorder		( ) -	( ) -	( ) -	

ICS 203 Organization Assignment

ICS 203 - Organization Assignment (Continued)

Incident:	Prepared By: at
Period:	Version Name:

Logistics section

Title	Name	Phone	Fax	Other	Radio
Logis ics Section Chief		( ) -	( ) -	( ) -	
Deputy Logistics Section Chief		( ) -	( ) -	( ) -	
Service Branch Director		( ) -	( ) -	( ) -	
Medical Unit Leader		( ) -	( ) -	( ) -	
Food Unit Leader		( ) -	( ) -	( ) -	
Communication Unit Leader		( ) -	( ) -	( ) -	
Support Branch Director		( ) -	( ) -	( ) -	
Supply Unit Leader		( ) -	( ) -	( ) -	
Facilities Unit Leader		( ) -	( ) -	( ) -	
Ground Support Unit Leader		( ) -	( ) -	( ) -	
Vessel Support Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Finance Section

Title	Name	Phone	Fax	Other	Radio
Finance Section Chief		( ) -	( ) -	( ) -	
Deputy Finance Section Chief		( ) -	( ) -	( ) -	
Time Unit Leader		( ) -	( ) -	( ) -	
Procurement Unit Leader		( ) -	( ) -	( ) -	
Compensa ion/Cla ims Unit Leader		( ) -	( ) -	( ) -	
Cost Unit Leader		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

Source Control Section

Title	Name	Phone	Fax	Other	Radio
Salvage/Source Control Group		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	
		( ) -	( ) -	( ) -	

ICS 203 Organizational Assignment

ICS 211p – Check-In List (Personnel)					
Incident:			Prepared By:		at:
Period:			Version Name:		
Check-In Location - - ☐ Command Post ☐ Staging Area ☐ Other --> Location Name:					
Personnel Check-In Information					
Name (Last, First) & Contact Information	Classification & Company/Agency	Assigned Section & Position	Quantity & UOM	Check-In Date/Time	Check-Out Date/Time Destination
ICS 211P Check-In List (Personnel)					© 1997-2012 TRG/dbSoft, Inc.

ICS 211e – Check-In List (Equipment)					
Incident:			**Prepared By:**		**at:**
Period:			**Version Name:**		
Check-In Location: ☐ Command Post ☐ Staging Area ☐ Other --> **Location Name:**					
Equipment Check-In Information					
Equipment Description & Identifier	**Supplier & Contact Information**	**Quantity & UOM**	**Size & UOM**	**Check-In Date/Time & Assignment**	**Check-Out Date/Time & Destination**
ICS 211e Check-In List (Equipment)					© 1997-2012 TRG/dbSoft, Inc.

Spill Trajectory Form

The Response Group
Emergency Response Pre-Planning & Support

Spill Trajectory Request Form

THE RESPONSE GROUP	**OFFICE: (281) 880-5000**	**EFAX: (281) 596-6976**
FAX: (281) 880-5005	**EMAIL ADDRESS: trajectory@responsegroupinc.com**	

COMPANY INFORMATION

Company Name: _____

Company Contact Name: _____

Phone #: _____ Fax #: _____

Alternante # (i.e.: Mobile, Pager): _____

Email Address: _____

SPILL SITE INFORMATION

Source Type (Circle): Platform/Well Pipeline Vessel Facility

Source Name & Location (Name/Area/Block): _____

Latitude: ____ ° ____ ‘ ____ “ Longitude: ____ ° ____ ‘ ____ “

Date & Time of Incident (mm/dd/yy): ____ / ____ / ____ ____ : ____ (Military)

Type of Product (i.e.: Medium Crude): _____ API Gravity: ____

Estimated Volume of Release: _____ Barrels or Gallons

Continues Release Rate: _____ bbls/hr How Long: _____ hrs.

WEATHER CONDITIONS

Wind Direction (From the): _____	Wind Speed: MPH or Knots
Current Direction (Toward): _____	Current Speed: MPH or Knots
Air Temperature: _____ °	Water Temperature: _
High Tide: ____ : ____ (Military)	Low Tide: ____ : ____ (Military)

Weather Forecast:

OVERFLIGHT INFORMATION

Date & Time of Overflight (mm/dd/yy): ____ / ____ / ____ ____ : ____ (Military)

Leading Edge Location: Latitude: ____ ° ____ ‘ ____ “ Longitude: ____ ° ____ ‘ ____ “

Trailing Edge Location: Latitude: ____ ° ____ ‘ ____ “ Longitude: ____ ° ____ ‘ ____ “

Length: _____ Feet / Yards / Miles	Width: _____ Feet / Yards / Miles

Slick Appearance (Percent & Estimated Length & Width)

Barely Visible: ____ % L x W: ____	Silvery: ____ % L x W: ____
Slight Color: ____ % L x W: ____	Bright Color: ____ % L x W: ____
Dull: ____ % L x W: ____	Dark: ____ % L x W: ____

THE RESPONSE GROUP 13939 TELGE ROAD CYPRESS, TX 77429

INTEGRATED CONTINGENCY PLAN

CALIFORNIA PIPELINE RESPONSE ZONE

SANTA BARBARA COUNTY, SISQUOC & POINT PEDERNALES PIPELINES
VOLUME 2 OF 2

PHMSA Sequence Number 1277
OSPR Number P5-19-1695

Owner/Operator:

Phillips 66
3010 Briarpark Drive
Houston, TX 77042

24-Hour Number:

(800) 231-2551 or (877) 267-2290

Prepared by: The Response Group, Inc. 13939 Telge Road; Cypress, Texas 77429

EMERGENCY RESPONSE PLAN

SISQUOC TO SANTA MARIA STATION AND PT. PEDERNALES LOMPOC OIL AND GAS PLANT TO ORCUTT PUMP STATION

Phillips 66 Company:

Santa Maria Pump Station
1560 East Battles Road
Santa Maria, California 93454
(805) 925-1661

Summit Pump Station
1364 Dale Avenue
Nipomo, California 93444
(805) 489-7877

Meter Facility at AAPL Sisquoc Pump Station
5781 Santa Maria Mesa Road
Santa Maria, California 93454
AAPL Phone: (800) 322-PIPE

Meter Facility at Orcutt Pump Station
Clark and Marcum Streets
Orcutt, CA. 93455
Orcutt Pump Station (805) 937-6121

Thomas Bros. Maps (1992) 345, 365, 735, 736, 756, 776, 796, 797, 816, 836,856, 876

Issued/Submitted by: **Phillips 66 Company | 3010 Briarpark Drive**
Houston, Texas |77042
(281) 293-3891

SIGNATURE

Rob Yarbrough

May 1, 2013
Date

Director; Emergency Preparedness, Response & Security

Accepted and Approved by:

_____ DATE: _____
Santa Barbara County Office of Emergency Services

_____ DATE: _____
Santa Barbara County Fire Department

_____ DATE: _____
Santa Barbara County Planning & Development Department – Energy Division

EMERGENCY RESPONSE PHILOSOPHY

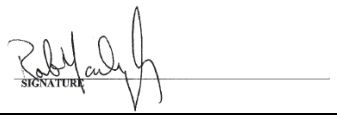
This document has been adopted by the Phillips 66 Company as the Emergency Response Plan for the Sisquoc Pipeline and Point Pedernales Projects. This Plan is a requirement of the County of Santa Barbara and other governmental agencies. *Note: Effective February 1, 2005, Union Pipeline Company (California) was merged into ConocoPhillips Company. All references in this document to Union Pipeline Company or UNOCAP are to be considered ConocoPhillips Company. All UNOCAP references have been changed to ConocoPhillips Company. Effective May 1, 2012 ConocoPhillips Company repositioned assets into two separate companies; ConocoPhillips Company and Phillips 66 Company. The below are now owned and operated by Phillips 66 Company; hereafter referred to as the Company, in this plan.*

It shall be the intent of this Company to activate this Plan according to the guidelines set forth herein. All pipeline operation employees assigned to the Sisquoc Station to Santa Maria Station Pipeline, Santa Maria Station to Summit Station Pipeline, Santa Maria Pump Station, Sisquoc Meter Facility, Orcutt Pump Station Facility, ConocoPhillips Pipe Line Company pipeline between the Nuevo Energy Company (NEC) Lompoc Oil and Gas Plant (LOGP) and Summit Pump Station, shall become familiar with, and adhere to, the spirit and intent of this Plan. The pipeline between the LOGP and Summit Pump Station includes the 12¾-inch diameter pipeline between the LOGP and Orcutt Pump Station and the 8-inch diameter pipeline between the Orcutt and Summit Pump Stations

In the event of an emergency situation along the pipeline system, at the Santa Maria Pump Station, Sisquoc Meter Facility, Orcutt Pump Station or at the Summit Pump Station, The Company's' primary concern is the safety of the public and workers. Employees are to limit their emergency response efforts to those that can be carried out safely, as determined by on-site personnel.

It is the policy of this Company to strive for the protection of life and property both on and off-site, employee and non-employee, in the event of an emergency. Personnel safety is the first priority. The employees of this Company shall notify the County emergency forces via 9-1-1 (805/683-2724 from outside of Santa Barbara County) in the event of an emergency. If an employee is unsure if an emergency has occurred, or feels that an emergency may occur, 9-1-1 will be notified. After calling 9-1-1 from a cellular phone, ask the California Highway Patrol dispatcher to connect you with Santa Barbara County 9-1-1.

The employees of this Company shall cooperate with all concerned governmental entities in the mitigation of emergencies and their impacts.



Date: May 1, 2013

Rob Yarbrough
Director; Emergency Preparedness, Response & Security

EMERGENCY RESPONSE PLAN

This Emergency Response Plan has been developed to be of assistance in the event of an emergency occurring along the Sisquoc to Santa Maria, Santa Maria to Summit Station, LOGP to Orcutt, Orcutt to Summit, Oil Pipelines, or at the associated Sisquoc Meter Facility, Santa Maria Pump Station, and Orcutt Pump Station. The oil pipeline and associated facilities were designed and constructed with the latest safety technology. However, in the unlikely event that an emergency occurs, it is imperative that appropriate personnel dial 911 (805/683-2724 from outside of Santa Barbara County) without delay, and follow the procedures outlined in this manual.

While it is difficult to precisely predict the circumstances that might be faced for every possible event, certain general procedures can be pre-planned and resource requirements can be anticipated. This plan provides checklists for anticipated circumstances, which are intended as a guide, but not intended to supersede or replace specific actions, deemed necessary or prudent during an incident.

Upon the arrival of the Santa Barbara County Fire Department, a face-to-face unified command briefing will take place, so that a county official can become a part of Unified Command. Unified Command shall have the power and authority to direct such operation as may be necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or to take any other necessary actions.

DISTRIBUTION OF PLAN

Refer to the Distribution Log located in the Introduction section of the Company California Response Zone Appendix.

RECORD OF REVISIONS

Revision Number	Revision Date	Revision Description	Date Entered	Signature of Person Entering
1	*8-16-93*	*Administrative changes*	*9-15-93*	*[incorporated in this printing of the manual]*
2	*9-30-93*	*Incorporate changes to describe pipeline realignment beneath the Sisquoc riverbed.*	*9-30-93*	*[incorporated in this printing of the manual]*
3	*6-1-95*	*Update ConocoPhillips organization; Update Administrative changes*	*6-3-95*	*[incorporated in this printing of the manual]*
4	*7-13-95*	*Update ConocoPhillips organization; Update Administrative changes*	*7-13-95*	*[incorporated in this printing of the manual]*
5	*9-1-98*	*Update company name and personnel*	*9-1-98*	*[incorporated in this printing of the manual]*
6	*5-20-99*	*Update company name and information*	*5-20-99*	*[incorporated in this printing of the manual]*
7	*2/4/00*	*Note on cover sheet that manual covers Sisquoc and Pt. Ped. and includes Thomas guide map pages for Pt. Pedernales.*	*2/4/00*	*[incorporated in this printing of the manual]*
8	*2/4/00*	*Fixed format error on 3-12*	*2/4/00*	*Incorporated within*
9	*2/4/00*	*Included Protective Services phone number on 4-11*	*2/4/00*	*Incorporated within*
10	*2/4/00*	*Page 6-1includes reference to Lompoc O&GP control center*	*2/4/00*	*[incorporated in this printing of the manual]*
11	*2/4/00*	*Page 6-12 lists O&GP phone number*	*2/4/00*	*[incorporated in this printing of the manual]*
12	*2/4/00*	*Page 6-20 – added description of O&GP public address system*	*2/4/00*	*[incorporated in this printing of the manual]*
13	*2/4/00*	*Page 8-9 now includes reference to Pt. Ped spill scenarios*	*2/4/00*	*[incorporated in this printing of the manual]*
14	*2/4/00*	*New Clean Seas equipment list included in Section 8*	*2/4/00*	*[incorporated in this printing of the manual]*
15	*2/4/00*	*Resource lists updated in Section 8*	*2/4/00*	*[incorporated in this printing of the manual]*
16	*2/4/00*	*Section 10 is new; it contains the Thomas Guide maps and Orcutt station drawings.*	*2/4/00*	*[incorporated in this printing of the manual]*

Revision Number	*Revision Date*	*Revision Description*	*Date Entered*	*Signature of Person Entering*
17	*2/4/00*	*Appendix A2 is new; it contains the Risk Analysis for Pt. Ped to Orcutt pipeline.*	*2/4/00*	*[incorporated in this printing of the manual]*
18	*2/4/00*	*Natural Gas added to Appendix B*	*2/4/00*	*[incorporated in this printing of the manual]*
19	*2/4/00*	*Page 3-7 includes description of ConocoPhillips Response Team.*	*2/4/00*	*[incorporated in this printing of the manual]*
20	*2/4/00*	*Unified Command matrix changed on page 3-8, to streamline operation*	*2/4/00*	*[incorporated in this printing of the manual]*
21	*5/01/00*	*Revised manual to incorporate the Pt. Pedernales Pipeline Emergency Response Plan*	*5/01/00*	*[incorporated in this printing of the manual]*
22	*11/2/00*	*Revised manual to incorporate the Pt. Pedernales Pipeline Emergency Response Plan*	*11/2/00*	*(Entire manual incorporated in this printing.)*
23	*05/09/01*	*Revised Section 4.*		
24	*09/01/03*	*Revised entire manual to incorporate company name change and phone numbers and to merge with CA DOT plan.*		
25	*09/02/09*	*Revised entire manual to incorporate Company personnel and phone numbers and add as Volume 3 - Addendum A of the ConocoPhillips CA-RZ plan.*		*(Entire replacement manual incorporated in this printing.)*
26	*05/01/2012*	*Revised manual to replace owner/operator ConocoPhillips with Phillips 66*		*(Replacement manual incorporated in this printing.)*
27	*09/03/2013*	*Updated physical address of main office, minor formatting edits*		*(Replacement manual incorporated in this printing.)*

SANTA BARBARA COUNTY PLAN
MASTER TABLE OF CONTENTS

Also refer to:

Integrated Contingency Plan – California Response Zone Appendix – Volume 1

SECTION 1

INTRODUCTION

SECTION ONE
INTRODUCTION

TABLE OF CONTENTS

SECTION ONE
INTRODUCTION

1.0 - PURPOSE

The purpose of the Sisquoc Pipeline & Pt. Pedernales Pipeline Project Emergency Response Plan is to provide emergency guidelines for use by the on-duty facility staff in response to various on-site emergency incidents. This Plan is not meant to supplant the use of common sense or actions not specifically mentioned in the Plan, but necessary to mitigate a problem.

This emergency response plan describes the sequence of actions which should be carried out in the event of an accident or emergency associated with the transportation of crude oil by pipeline from the All American Pipeline (AAPL) Sisquoc Pump Station to the Santa Maria Pump Station, and Nuevo Energy Company (NEC) Lompoc Oil and Gas Plant (LOGP) to the Company Summit Pump Station.

The Plan complies with the Company's requirements, County Permit Condition # P-3_____ and with State and County Business Plan requirements for an emergency response plan.

The Sisquoc Pipeline & Pt. Pedernales Pipeline Project ERP is intended to be utilized in conjunction with the Company Core Plan and is part of the California Response Zone. During an emergency, this Sisquoc & Pt. Pedernales ERP Annex will take initial precedence over all other Company ERP Sections.

SECTION ONE
INTRODUCTION

1.1 - SCOPE

This Plan is limited to emergency incidents associated with the Sisquoc to Santa Maria oil pipeline system, the Company Meter Facility at the AAPL Sisquoc Station, the Santa Maria Pump Station, the Santa Maria Station to Summit Station oil pipeline LOGP to Orcutt oil pipeline, Orcutt to Summit Pipeline and the Orcutt Pump Station.

The AAPL Emergency Response Plan deals with incidents at the AAPL Sisquoc Pump Station and the Company Emergency Response Plan deals with incidents at the LOGP.

Spill prevention and cleanup procedures for the oil pipeline system and associated facilities are contained in the Oil Spill Contingency Plan. Spill prevention and cleanup procedures for other segments of the pipeline system are contained in the California Pipeline Response Zone Integrated Contingency Plan.

The Plan includes action checklists for the following incidents, to be used by on-site company response personnel:

Sisquoc to Santa Maria Oil Pipeline, LOGP to Summit Oil Pipeline, Orcutt Pump Station and Santa Maria Pump Station Checklists (Recommended based on risk assessment)

1.2 - AUTHORITIES

This Plan is required by the County of Santa Barbara as a condition of the Final Development permit for this facility.[1] Non-compliance with any substantive elements in this plan may be cause for the County to relinquish the facilities operating permit. This Plan is subject to review by the Santa Barbara County Office of Emergency Management, Fire Department, and Planning and Development Department.

This plan shall be the official Emergency Response Plan for the facility and is hereby adopted as corporate policy and procedures. This plan shall be immediately activated upon the occurrence of any emergency event including those defined in Table 2-2. This plan may also be activated by the facility supervisor (or person in charge in his or her absence). The highest ranking on-duty person will be the "Incident Commander", until formally relieved by a higher-ranking company person or the County Fire Department. An Incident Commander shall be designated for an incident in order to establish and maintain an orderly chain of command. All emergency responders will utilize the ICS[2]. The ICS is described in Section 2.

Facility personnel must be trained and ready to respond to all incidents and to implement this Plan. The Fire Department with jurisdictional authority has command authority for most disasters including fore, hazardous materials and rescue. Upon arrival of the Fire Department, facility personnel shall work in coordination with the Fire Department to mitigate the problem, including providing technical support and expertise to County personnel under the ICS.

[1]This plan may also satisfy Business Plan requirement of California Health & Safety Code 25500 et seq. The Business Plan must be approved by the local administering agency, which is the County Fire Department

[2]The Incident Command System is an emergency organization which can be implemented for management of emergencies. The system uses functional titles of various positions in the organization and is activated and expanded as the emergency dictates.

1.3 - UPDATING PROCEDURE

This plan will be reviewed at least annually by a Company Supervisor for modification and update. Further, upon any change in the pipeline system or pump station, which could affect emergency responses, this Plan will be modified accordingly. The most recent drawings of the pipeline systems and pump stations will be included in each revision.

NOTE: All revisions must be approved by the following:

- **Santa Barbara County Office of Emergency Management,**
- **Santa Barbara County Fire Department and**
- **Santa Barbara County Planning & Development Department, Energy Division**

1.4 - RELATIONSHIP WITH OTHER PLANS

The Company has prepared several plans to address the public health and safety and environmental protection aspects of the Sisquoc to Santa Maria Pipeline, LOGP to Summit Oil Pipeline, Orcutt Pump Station and Santa Maria Pump Station. These plans may be organized as shown in Figure 1-1. Copies of these plans are available at the Santa Barbara County Office of Emergency Management, County Planning and Development Department, all appropriate County Fire Department locations (including Stations 22, 23 and 51), pertinent Company offices and facilities, and other locations as noted.

In the event of an emergency, the Emergency Response Plan takes precedence. This Plan references the other plans where appropriate.

Figure 1.1: COMPANY EMERGENCY RESPONSE PLAN MATRIX

Event or Situation	Company Plan
LOGP to Orcutt Oil Pipeline Emergency or Accident	☐ Emergency Response Plan ☐ Oil SpillContingency Plan
Accident or Emergency at the Orcutt Pump Station	☐ Emergency Response Plan ☐ Oil Spill Contingency Plan
Orcutt to Summit Oil Pipeline Emergency or Accident	☐ Emergency Response Plan ☐ Oil Spill Contingency Plan
Major Incident with Long Term, Off-Site Implications	☐ Area Oil & Gas Industry Emergency Response Plan (P-4 Plan)
Sisquoc Pipeline Emergency or Accident	☐ Emergency Response Plan ☐ Oil Spill Contingency Plan
Santa Maria Station to Summit Station Pipeline Emergency or Accident	☐ Emergency Response Plan ☐ Oil Spill Contingency Plan
Accident or Emergency at the Santa Maria Pump Station	☐ Emergency Response Plan ☐ Oil Spill Contingency Plan
Accident or Emergency at the Company Meter Facility at the AAPL Sisquoc Pump Station	☐ Emergency Response Plan ☐ Oil Spill Contingency Plan
Accident or Emergency at the AAPL Sisquoc Pump Station	☐Company Emergency Response Plan *- for initial actions until AAPL takes command* ☐ AAPLEmergency Response Plan *- takes precedence once activated* ☐ AAPL Oil Spill Response Plan
Major Incident with Long Term, Off-Site Implications	☐ Area Oil & Gas Industry Emergency Response Plan (P-4 Plan)

Copies of the Plans are available at the following locations:

County Fire Headquarters
4410 Cathedral Oaks Road
Santa Barbara, CA 93110

County Planning & Development Dept. Energy Division
123 E. Anapamu Street
Santa Barbara, CA 93101

County Fire Station Number 22
1596 Tiffany Park Court
Santa Maria, CA 93455

County Office of Emergency Management
4408 Cathedral Oaks Road
Santa Barbara, CA 93110

County Fire Station Number 23
5003 Depot Avenue
Sisquoc, CA 93455

County Fire Station Number 51
749 Burton Mesa Road
Lompoc, CA 93436

1.5 - ACTIVATION OF THE PLAN

This Plan shall immediately be activated upon occurrence of any event including those identified in Section 1.2 (Scope) of this Plan. All incidents, whether observed or reported, will be treated as an emergency until proven otherwise. It shall also be in effect when activated by the District Supervisor (or person in charge in his absence). *The highest ranking on-duty person will be the "Incident Commander"* until formally relieved at the appropriate time by a higher ranking management person once the relief personnel are fully informed of all actions and circumstances of the response effort. An Incident Commander shall be designated for the incident in order to maintain an orderly "chain of command." The emergency organization shall be comprised of an initial response team, and if required, sustained response teams. These teams are described in Section Three of the Plan.

Figure 1.2 - INITIAL ACTION MATRIX

This matrix is inserted here for fast reference when an emergency occurs. The numbers indicate the priority of each task to be performed. This matrix is derived from the checklists in this plan, and is not intended to cover all situations nor is it intended to supplant common sense. (Note: This is an example only.)

WARNING: *Oil has a flash point of 74° F and should be treated as a Class I Flammable Liquid. The possibility of ignition is high!*

WARNING: *Burning oil produces Sulfur Dioxide (SO^2), a toxic gas.*

THE EMPLOYEE SHOULD NOT ATTEMPT TO EXTINGUISH BLAZE

PROTECT WORKERS AND PUBLIC FIRST!

TYPE OF EMERGENCY:	Structure Fire	Releases of Ignitable Liquid/No Fire	Release of Gas/No Fire	Liquid Fire	Gas Fire	Actual/Threatened Haz-Mat Release	Earthquake	Wildland Fire	Off-Site Emergency	Public Demonstrations/Civil Disorder/ Terrorism	Flood/Tidal Wave/Tsunami	High Wind	H2S in Sales Gas	State of War	Bomb Threat	Explosions
Assess Situation & Take Command	1	1	1	1	1											
ESD (within 5 minutes)		2	2	2	2											
Rescue/Evacuate threatened people, if it can be done safely	2	3	3	3	3											
Call 9-1-1 (within 5 minutes)	3	4	6	4	4											
Shut-Off Source (Close valves to shut off source)		2	4	5	5											
Notify The Company Control Center at (877) 267-2290																
Notify Supervisor (use duty roster)	6	6	7	8	8											
Protect Exposures	4			6	6											
Confine Spill		5														
Attempt Extinguishment, if it can be done safely	5			7	7											
Administer First Aid																
Exercise Caution: H_2S and SO^2			*	*	*											
Do Not Attempt Restart																
Inspect Pipeline Piping Equipment																
Expect Aftershocks																
Eliminate Ignition Sources		3	5													
Operate Fire Systems as Appropriate																
Apply Foam on Spill		7														
Refer to Checklist*	7	8	8	9	9											

*Note at earliest possible moment when you know or suspect an emergency has occurred; call 9-1-1.

Figure 1.3 - HOW TO ACTIVATE THIS PLAN

INITIAL ACTIONS

(To be done by plant operations)

- **TAKE COMMAND**
- **ASSURE SAFETY OF RESPONDERS, WORKERS AND PUBLIC (SHELTER-IN-PLACE AND/OR EVACUATE, IF APPROPRIATE)**
- **ASSESS THE SITUATION (TYPE OF EMERGENCY, LOCATION, MAGNITUDE, SEVERITY, THREAT)**
- **MAKE AGENCY NOTIFICATIONS**

All Emergencies:	HAZMAT Incidents	HAZMAT Incidents:
LOCAL **9-1-1** Within 5 minutes of Incident (805) 683-2724, IF CALLING FROM OUT OF COUNTY ON CELL PHONE)	**CA STATE WARNING CENTER** **(800) 852-7550** (POTENTIAL OR SIGNIFICANT RELEASES)	**FEDERAL (NRC)** **(800) 424-8802** (REPORTABLE QUANTITIES)

- **REFER TO APPROPRIATE RESPONSE CHECKLIST**
- **ACTIVATE AN INCIDENT COMMAND SYSTEM**
- **ISOLATE, CONTAIN, CONTROL AND MITIGATE THE EMERGENCY IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGUATIONS**

SECTION 2

PIPELINE SYSTEM DESCRIPTION

SECTION TWO
PIPELINE SYSTEM DESCRIPTION

TABLE OF CONTENTS

SECTION TWO
PIPELINE SYSTEM DESCRIPTION

2.0 - OVERVIEW OF SISQUOC PIPELINE PROJECT

The pipeline system is approximately 10.5 miles in length between Sisquoc Station and Santa Maria Station, and approximately 13.5 miles in length between Santa Maria Station and Summit Station. It transports Point Arguello and Santa Ynez (Las Flores Canyon) pipeline quality oil (less than 3 percent water and sediment) from the All American Pipeline (AAPL) Sisquoc Pump Station to the Company Santa Maria Refinery, via the Santa Maria and Summit Pump Stations.

Pipeline alignment maps show the location of the buried pipeline, pump stations, and access roads. The alignment of the Sisquoc to Santa Maria segment of the pipeline system is shown in Figure 2-1. The alignment of the Santa Maria to Summit segment of the pipeline system is shown in Figure 2-2.

The 12-inch oil line from Sisquoc to Santa Maria is pigged as needed. Pigs are transported to the AAPL Sisquoc Pump Station by one of the Pipeline Department employees during routine maintenance visits. Wax removed by a pipeline scraper remains in the oil line and ultimately reaches the Company Santa Maria Refinery where it is processed.

Oil is metered into the line at Sisquoc and metered again when it reaches Santa Maria. At Santa Maria, crude oil from the Sisquoc Pipeline is commingled with Santa Maria Valley crude oil and transported by pipeline to Summit Station. The Santa Maria Valley crude oil stream is metered at Santa Maria. All readings are transmitted from the Santa Maria Refinery to the Company Control Center, which monitors and controls pipeline operations. These readings are continuously checked and compared by computer for any indication of volume imbalance. The Company Control Center can detect discrepancies in the event of an accidental spill or release of oil and remotely shut in the pipeline valves from Sisquoc to Santa Maria Station to isolate a problem.

2.1 - PIPELINE SYSTEM DESCRIPTION

SANTA MARIA TRUNK LINE (Line 300)						
Sec. No.	(b) (7)(F), (b) (3)	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
		12" Lompoc to Orcutt – Crude Oil (40,000 bpd max.)				
1		2,100	1,050	140	1,190	(b) (7)(F), (b) (3)
2		110	20	140	160	
3		1,490	700	140	840	
4		1,420	1,400	140	1,540	
5		2,400	1,700	140	1,840	

SANTA MARIA TRUNK LINE (Line 300) *Continued*						
Sec. No.	**Block Valves**	**Line Volume**	**Max. Drainage**	**Max. Pumping Loss**	**LFD**	**Sensitive Areas**
8" Orcutt to Summit – Crude Oil (36,000 bpd max.)						
6	(b) (7)(F), (b) (3)	820	800	120	920	(b) (7)(F), (b) (3)
7		620	80	120	200	
8		1,080	460	120	580	
9		460	160	120	280	
10		2,460	2,20	120	2,320	
		10", 12" SMS to Summit – Crude oil (48,000 b				
11		1,030	130	170	300	
12		2,070	1,040	170	1,210	
13		890	360	170	530	
14		2,400	2,400	170	2,570	
15		2,440	1,850	170	2,020	
		10" Summit to SMR – Crude oil (52,000 bpd				
17		3,530	2,200	120	2,320	
18		220	200	120	320	
19		2,720	1,250	120	1,370	
20		1,250	520	120	640	
21		4,120	1,040	120	1,160	

ORCUTT GATHERING LINE (Line 353)						
Sec. No.	**Block Valves**	**Line Volume**	**Max. Drainage**	**Max. Pumping Loss**	**LFD**	**Sensitive Areas**
6", 8" Lompoc to Orcutt – Crude Oil (5,000 bid max./1,000 bbl lease tank)						
23	(b) (7)(F), (b) (3)	1,760	1,380	N/A	2,390	(b) (7)(F), (b) (3)
24		440	350	N/A	1,350	
25		220	180	N/A	1,180	

SISQUOC LINE (Line 300)

Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
12" Sisquoc to SMS – Crude Oil (84,000 bpd max.)						
42	(b) (7)(F), (b) (3)	1,560	1,560	140	1,700	(b) (7)(F), (b) (3)
43		3,260	2,890	140	3,030	
44		2,600	2,600	140	2,740	

MIOSSI LINE (Line 355)

Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
8" SMR Products Line Junction to Avila Terminal – Products (24,000 bpd max.)						
46	(b) (7)(F), (b) (3)	1,450	1,040	80	580	(b) (7)(F), (b) (3)

COAST-VALLEY TRUNK LINE (Line 400)

Sec. No.	Block Valves	Line Volume	Max. Drainage	Max. Pumping Loss	LFD	Sensitive Areas
8", 12" SMR to San Luis Obispo Tank Farm – Products (36,000 bpd)						
47	(b) (7)(F), (b) (3)	520	420	120	540	(b) (7)(F), (b) (3)
48		70	60	120	180	
49		1,180	600	120	720	
50		20	20	120	140	
51		1,180	600	120	720	
52		1,480	700	120	820	
53		20	20	120	140	
54		520	420	120	540	
55		4,210	2,100	120	2,220	
56		410	330	120	450	
		8"Summit to SMR – Crude Oil (20,000 bpd				
57		1,400	470	70	540	

COAST-VALLEY TRUNK LINE (Line 400) *Continued*						
Sec. No.	**Block Valves**	**Line Volume**	**Max. Drainage**	**Max. Pumping Loss**	**LFD**	**Sensitive Areas**
8" Summit to Avila – Crude Oil, Gasoil (20,000 bpd max.)						
58	(b) (7)(F), (b) (3)	1,570	2,200	70	2,270	(b) (7)(F), (b) (3)
59		100	200	70	370	
60		620	560	70	630	
61		590	460	70	530	
62		560	230	70	300	
63		1,840	460	70	530	
		inal to Santa Margarita – No. 1 and No. 2 Oil (24				
64		850	620	100	720	
65		1,510	820	100	920	
66		460	750	100	850	
67		560	390	100	490	
68		330	260	100	360	
69		750	720	100	820	
70		2,430	1,050	100	1,150	
		argarita to Shandon – No. 1 and No.2 Oil (24,000				
71		230	160	100	260	
72		3,600	1,330	100	1,430	
73		3,600	1,160	100	1,260	
74		130	30	100	130	
75		1,250	720	100	820	
8" Shandon to Antelope – No. 1 and No. 2 Oil (24,000 and 28,000 bpd max.)						
1	(b) (7)(F), (b) (3)	1,480	490	100	590	(b) (7)(F), (b) (3)
2		2,390	1,250	100	1,350	
		elope to Junction – No. 1 and No. 2 Oil (24,000 an				
3		4,100	3,500	100	3,600	

2.2 - SISQUOC PIPELINE SYSTEM DESCRIPTION

2.2.1 - SISQUOC TO SANTA MARIA PIPELINE

The Sisquoc to Santa Maria pipeline has an outside diameter of 12.75 inches with a wall thickness of 0.250 inches. The steel grade is 5LX60, and the pipeline is covered with a polyethylene/butyl wrap and cathodic protection is applied to help protect from the pipe external corrosion. The pipeline is designed for an average throughput of 84,000 BPD. The temperature of the oil in the pipeline does not exceed 165° F. (b) (7)(F), (b) (3) existing lines in the corridor. At the Sisquoc River crossing, the line is buried beneath the riverbed.

(b) (7)(F), (b) (3)

2.2.2 - SANTA MARIA TO SUMMIT PIPELINE

The Santa Maria to Summit pipeline is a 10 and 12 inch underground pipeline, coated and cathodic protection is applied to help protect the pipe from external corrosion. The pipeline is designed for an average throughput of 84,000 BPD. The temperature of the oil in the pipeline does not exceed 165°F. The actual operating pressure ranges from approximately 600 to 800 psig. The line was buried to a minimum cover depth of 42 inches and located a minimum of one foot from any existing lines in the corridor.

(b) (7)(F), (b) (3)

2.3 - ALL AMERICAN PIPELINE SISQUOC PUMP STATION

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

2.5 - OVERVIEW OF SANTA MARIA BASIN PROJECT

(b) (7)(F), (b) (3)

The system is designed to transport a maximum of 40,000 barrels per day of oil and 13 million cubic feet per day of gas. Pipeline capacities and facility growth provisions are included in the system to allow for future development of the Santa Maria Basin by other oil companies, with the products handled in a consolidated manner by NEC. The Santa Maria Basin project is illustrated in Figure 2-5.

2.6 - LOMPOC O&GP TO ORCUTT PIPELINE SYSTEM DESCRIPTION

The LOGP to Orcutt pipeline system is approximately 10.5 miles in length. It transports pipeline quality oil (less than three percent water and sediment) from the LOGP facility to the Orcutt Pump Station. The pipeline has an outside diameter of 12¾ inches, with a wall thickness of 0.250 inches (0.375 inches across San Antonio Creek). The steel grade is 5LX42. The pipeline alignment between the LOGP and the Orcutt Pump Station is shown on Figure 2-6, with references to the applicable Thomas Guide maps along the pipeline route.

The pipeline is designed for a maximum throughput of 80,000 bpd, with a normal operating throughput of 20,000 bpd. The pipeline oil temperature is maintained between 150° F and 180° F. Maximum allowable working pressure is 800 psig, and the actual operating pressure is 660 psig. The line is buried to a minimum cover of 36 inches, and located approximately five feet from any existing lines in the corridor.

(b) (7)(F), (b) (3)

The pipeline is protected from external corrosion by a cathodic protection system along its entire length. An independent cathodic protection system has been installed between valves MOV-1 and MOV-2 (refer to Figure 2-7). This redundant system allows for a close monitoring of any changes in current usage, separate from the rest of the pipeline, for early detection of corrosion problems along this central portion of the pipeline route.

The line can be pigged if necessary, to clear the line of contaminants or debris, or for inspection by an instrumented pig.

(b) (7)(F), (b) (3)

2.7 - ORCUTT PUMP STATION DESCRIPTION

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

2.8 - ORCUTT TO SUMMIT PIPELINE SYSTEM DESCRIPTION

The Orcutt to Summit Pipeline is approximately 16 miles in length. It transports crude oil from the Orcutt Pump Station to the Summit Station. The oil transported is normally a blend of Pt. Pedernales oil from the LOGP and area production. The pipeline has an outside diameter of 8.625 inches, with a wall thickness of 0.277 inches. The pipeline alignment is shown on Figure 2-9.

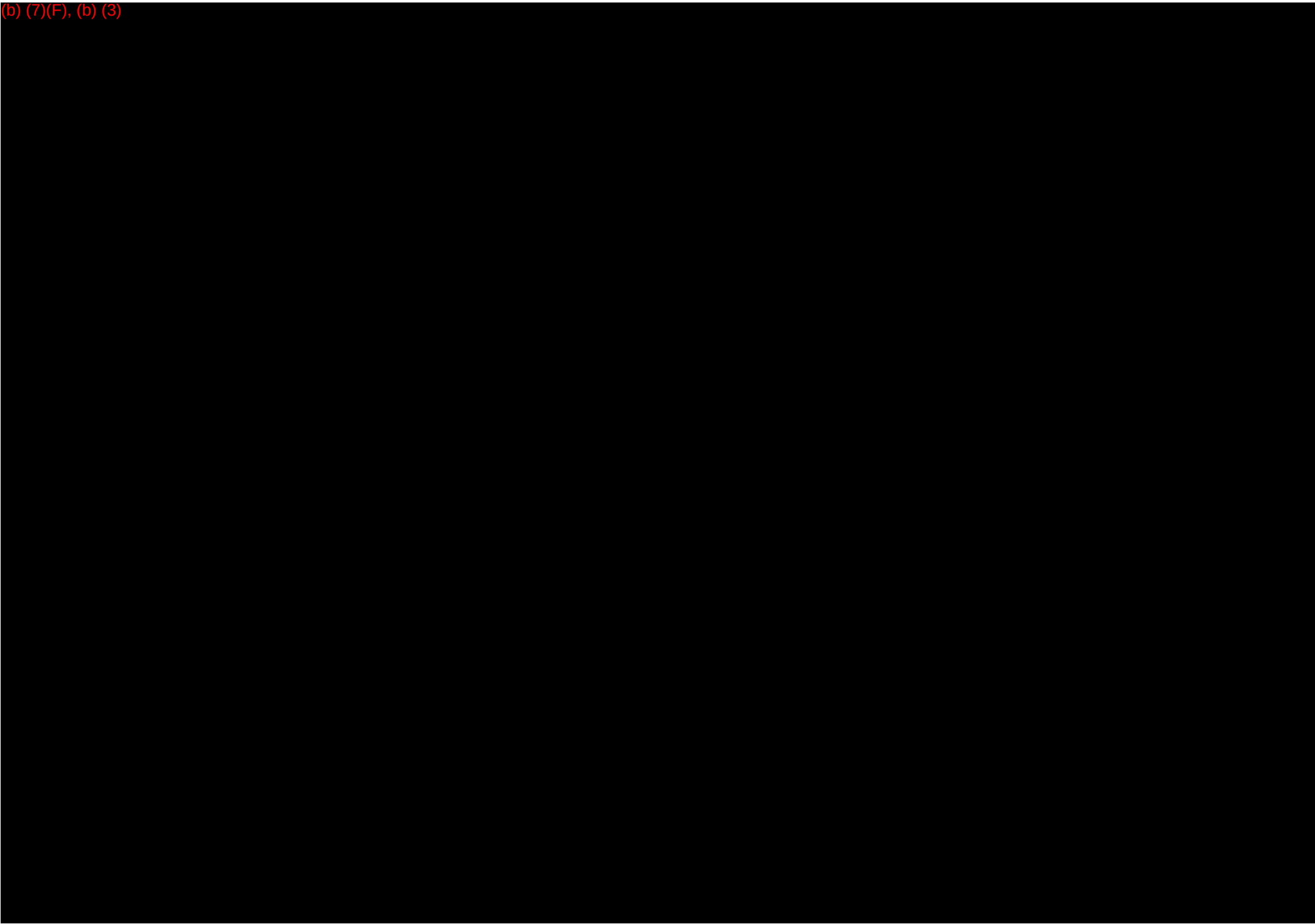
The pipeline is designed for a maximum throughput of 50,400 bpd, with a normal operating throughput of 12,000 bpd. The pipeline oil temperature is maintained between 100° F and 180° F. The maximum allowable operating pressure of the pipeline is 800 psig. The line is buried to a minimum cover of 36 inches.

(b) (7)(F), (b) (3)

[redacted]

SECTION TWO
PIPELINE SYSTEM DESCRIPTION

(b) (7)(F), (b) (3)



SECTION TWO
PIPELINE SYSTEM DESCRIPTION

(b) (7)(F), (b) (3)

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FIGURE 2-3: AAPL SISQUOC PUMP STATION PLOT PLAN

FIGURE 2-4
SANTA MARIA PUMP STATION FIRE SAFETY EQUIPMENT & EMERGENCY SHUT DOWN

I.D.#

COUNTY OF SANTA BARBARA
ENVIRONMENTAL HEALTH SERVICES
BUSINESS PLAN

(b) (7)(F), (b) (3)

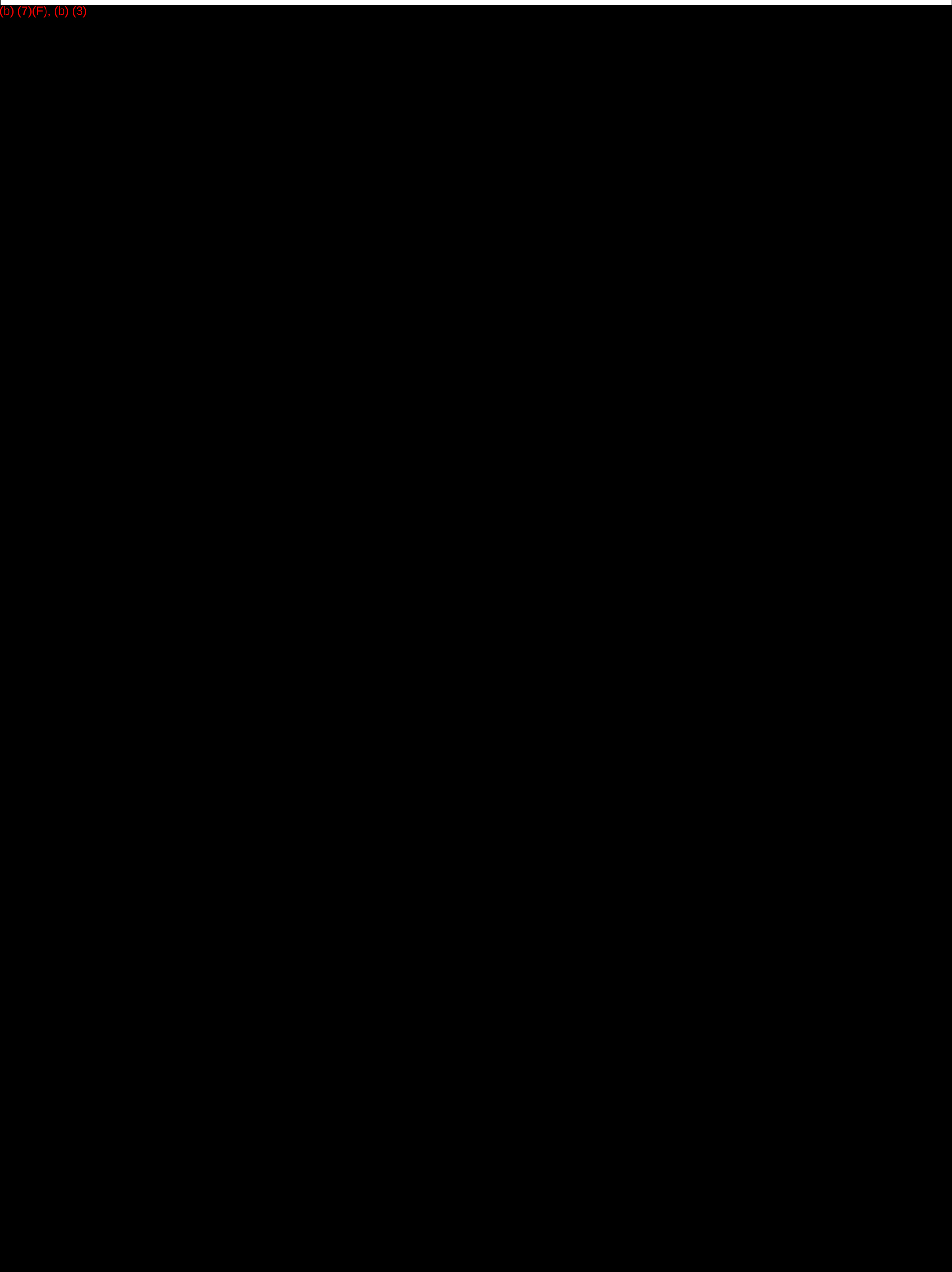

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FIGURE 2-5: SANTA MARIA BASIN PROJECT MAP

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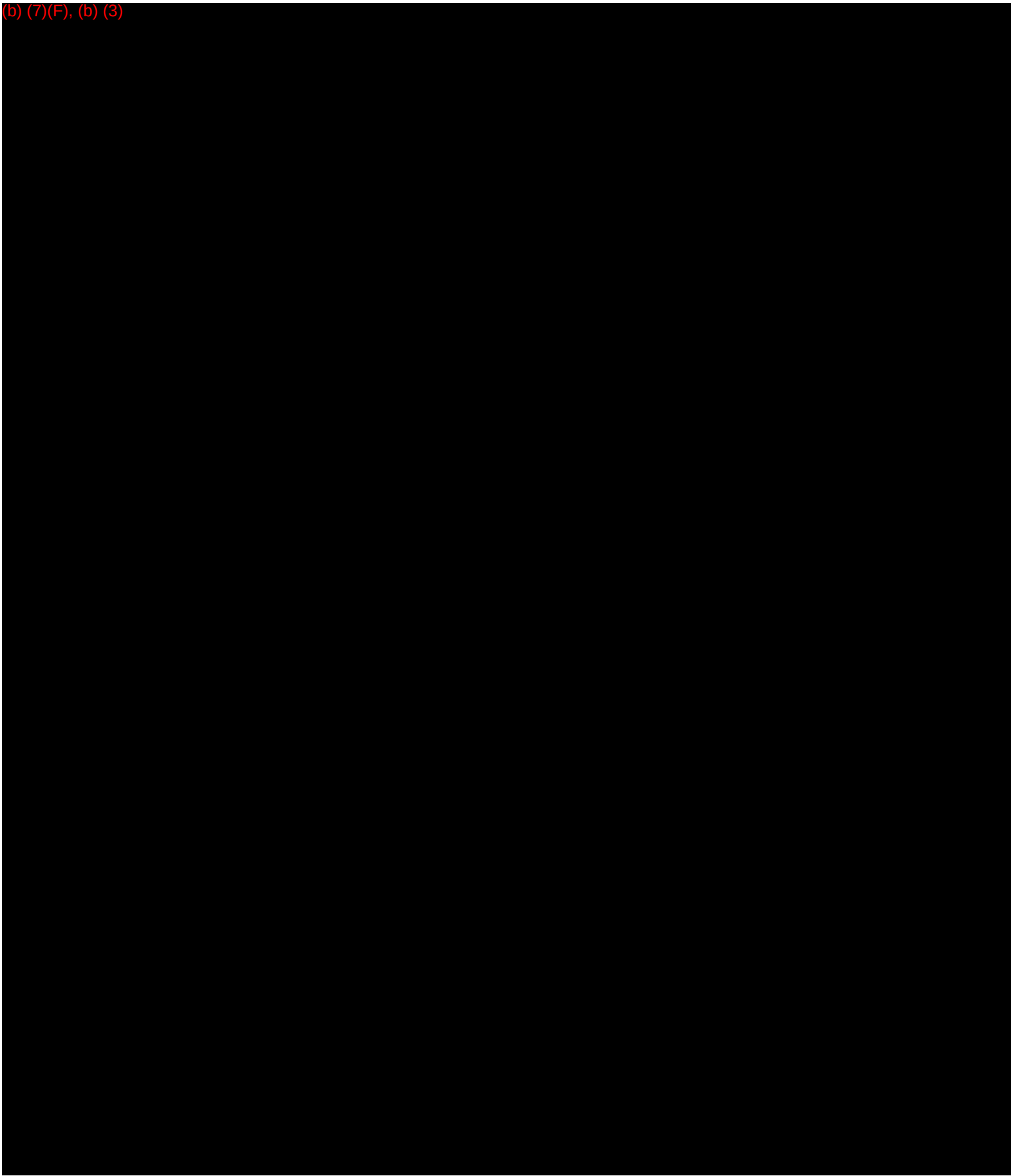


FIGURE 2-6: LOMPOC O&GP TO SUMMIT PUMP STATION PIPELINE ALIGNMENT MAP

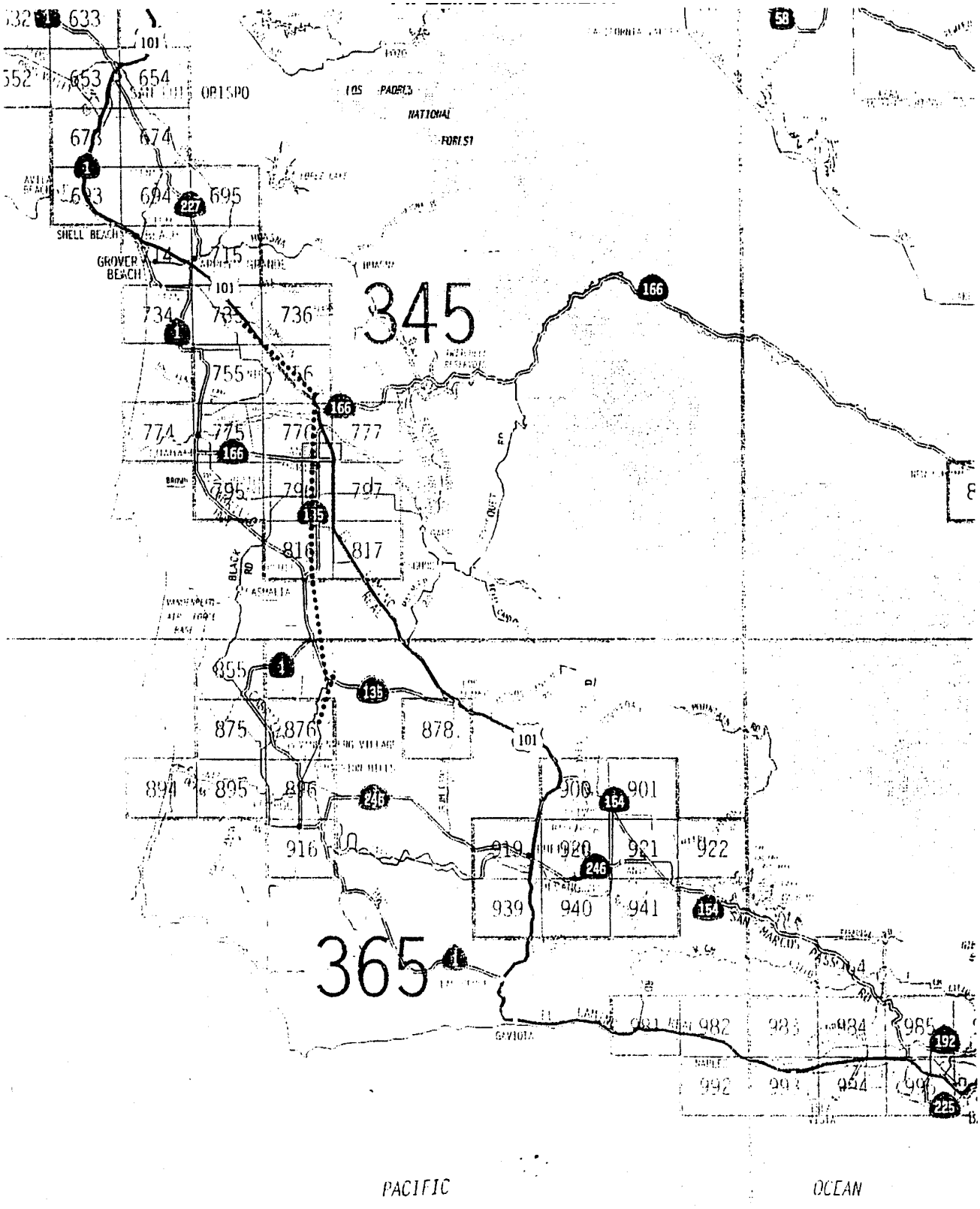
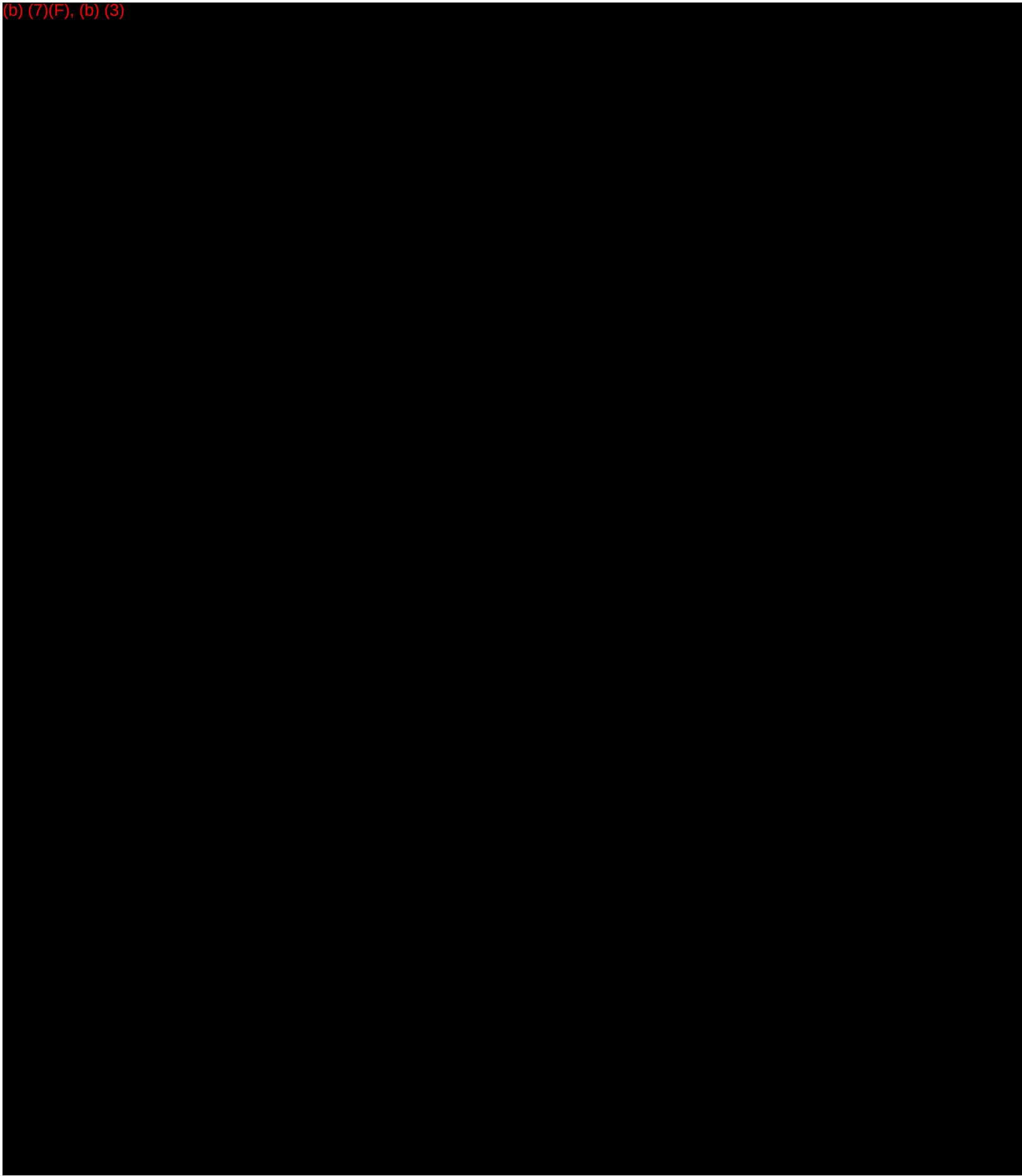


FIGURE 2-7: LOMPOC O&GP TO ORCUTT PIPELINE DIAGRAM

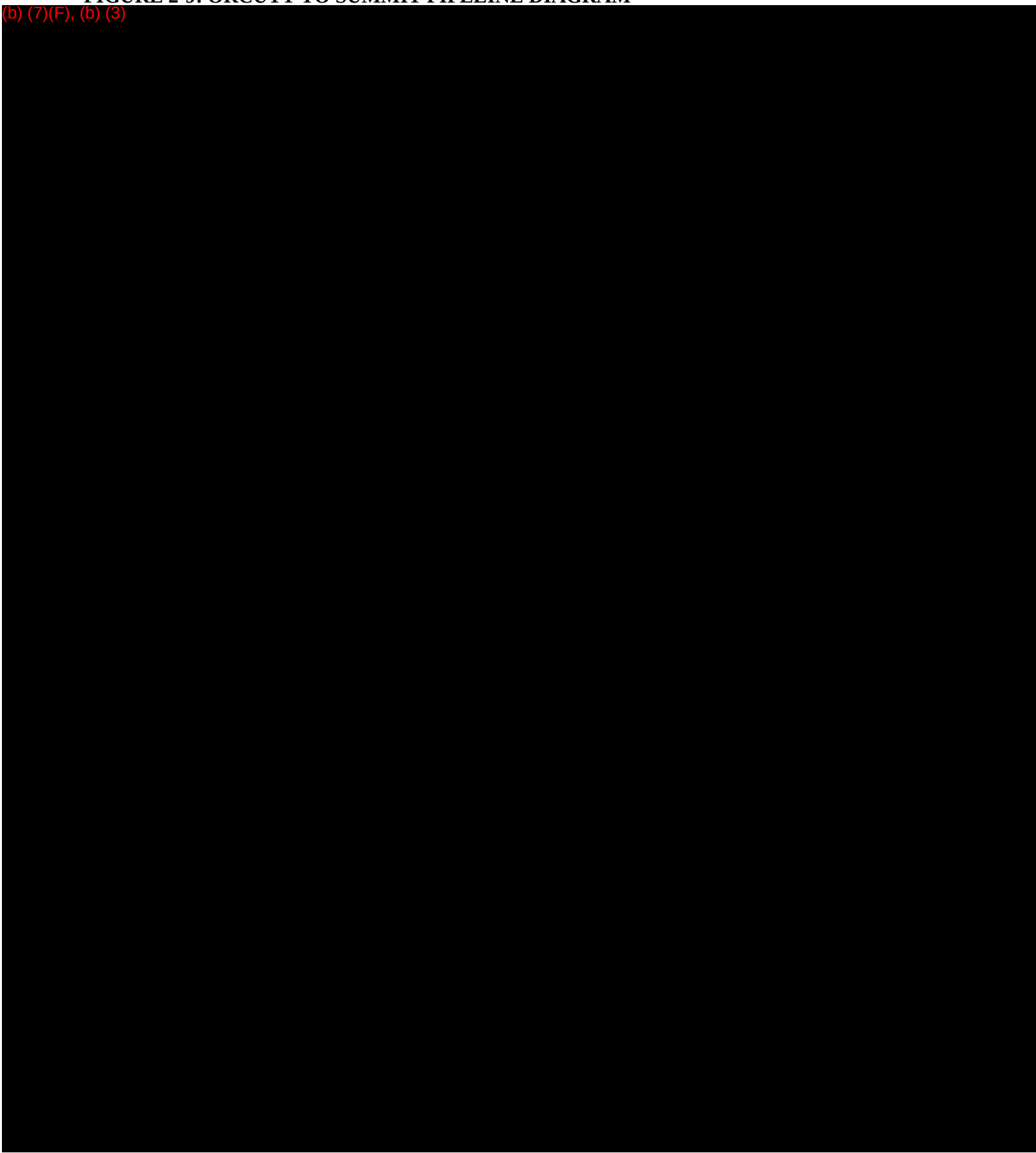
(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

FIGURE 2-9: ORCUTT TO SUMMIT PIPELINE DIAGRAM

(b) (7)(F), (b) (3)



SECTION 3

ORGANIZATION

SECTION THREE
ORGANIZATION

TABLE OF CONTENTS

SECTION THREE
ORGANIZATION

3.1 INCIDENT COMMAND ORGANIZATION

The Company Northern Pipeline has implemented a three-tier emergency response organization, following the Incident Command approach:

Level 1(Minor Incident): Division Immediate Response Team - Immediate Mobilization
Level 2(Major Incident): Division Sustained Response Team - Mobilization in 1-12 hrs
Level 3(Major Incident): Company Worldwide Response Team - Mobilization in 6-24 hrs

The Company's Incident Commander (IC) will be the first Company employee at the scene of an emergency incident, and will take command until relieved by a more senior employee of the Company. After preliminary reconnaissance has been conducted and the situation has been reported to the Incident Commander, the first level of response will be mobilized by activating the Immediate Response Team. This team, made up of Division employees, will be the first to respond to any incident, regardless of size. The team will be responsible for carrying out the critical duties and responsibilities in the initial stages of an incident. For minor incidents or those brought under immediate control, this level of response will likely be sufficient, and mobilization of higher levels of response will not be needed. Santa Maria Area Pipeline personnel can field two shifts of the Immediate Response Team with the assistance of Division Pipeline personnel.

The second level of response will be utilized when the magnitude of the incident or its impacts indicate the need for additional personnel to manage the incident, or where it is anticipated that the response effort will be sustained. In this case, the Immediate Response Team requires assistance or relief. The Division Sustained Response Team will augment the response. Division personnel may be activated from the San Luis Obispo Division office, as well as trained members of Immediate Response Teams from other Division offices.

The third level of response is indicated when the size of the incident or circumstances dictates the need for a major sustained response effort. In a Level Three response, The Company has a World-Wide Incident Management Team in place known as the Company Incident Management Assistance Team (IMAT). The team is made up of specially trained personnel, who are prepared to travel to the incident location and assume responsibilities for a major sustained response effort. The decision to mobilize this level of response will be made by the Incident Commander and by following the Company Notification Flowchart located in the Core Plan Notifications Section.

When the circumstances at any level of response warrant the need for additional expertise in a particular area, individual team members of the higher level response organizations can be mobilized to provide the assistance.

Refer to the California Core Plan Section 9, Training & Exercises for a copy of the ICS Forms utilized in a response.

3.2 IMMEDIATE RESPONSE TEAM

The Sisquoc to Santa Maria Pipeline system is monitored by personnel at the Company Control Center around the clock, and is maintained by the Area Supervisor, Pipeline Technicians and Utility people during weekday operations. Employees are on-site periodically, performing maintenance activities. The operations staff had been trained and drilled to execute all requisite duties and responsibilities of the Immediate Response Team. Training and drills are described in Appendix D of the Plan.

The Immediate Response Team is responsible for initiating immediate response measures in the event of an emergency incident. The team is trained to respond rapidly and effectively to any emergency situation that may occur along the Sisquoc to Santa Maria Pipeline. The Immediate Response Team is under the direction and supervision of the Area Supervisor, or the first employee that arrives at the scene, who assumes the role of Incident Commander (figure 3-1). During non-workday hours, the Company Pipeline Controller may be the initial Incident Commander until relieved by a Division employee. The Incident Commander is responsible for implementing an immediate emergency response using any necessary trained personnel, equipment and materials.

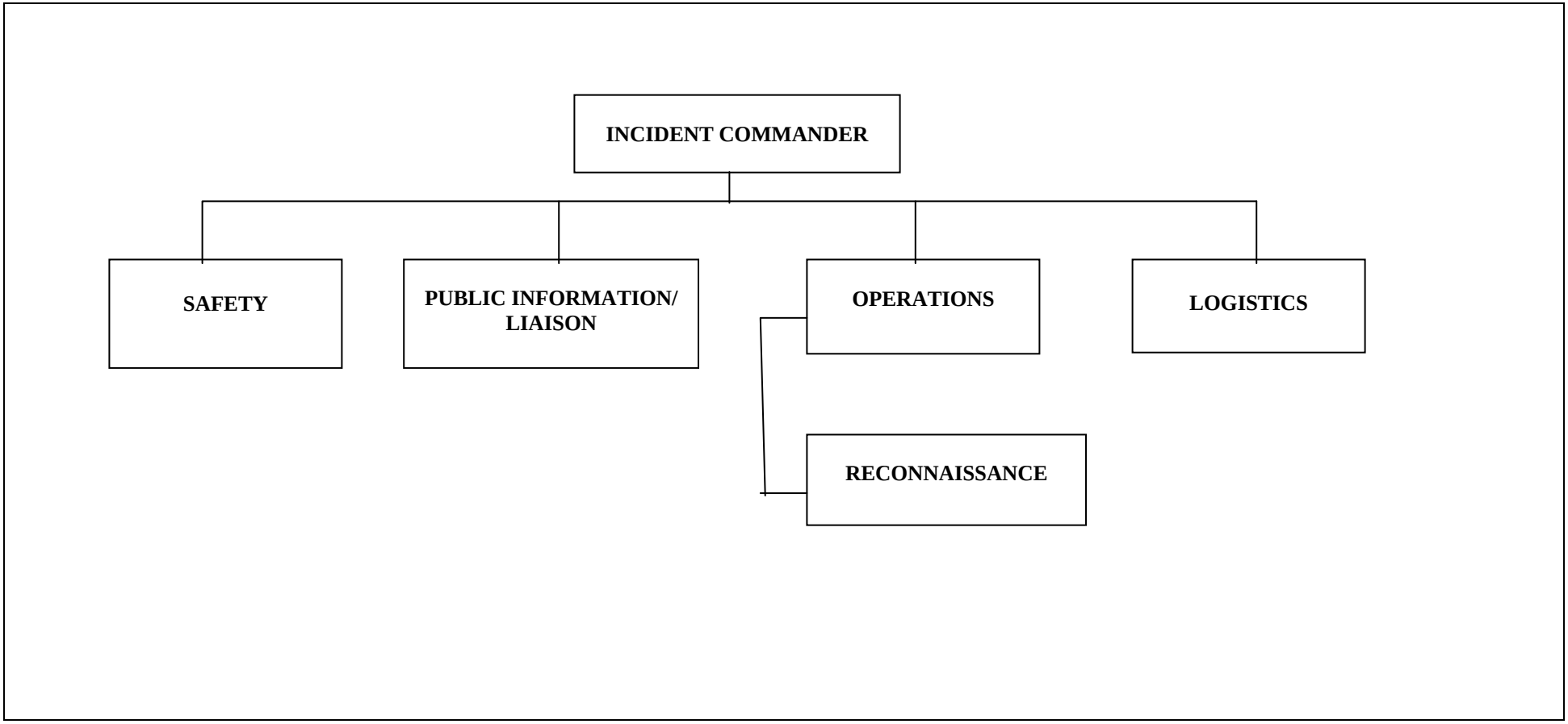
If spill resources immediately available to the Immediate Response Team are judged by the Incident Commander to be inadequate to provide for the immediate and complete mitigation of the emergency situation, assistance will be requested from Division personnel. Outside contractors in the area may also be called upon to assist in a response effort as needed. These resources can provide additional manpower; equipment and supplies (see Section Eight). The Incident Commander will direct the activities of additional Company personnel and/or contractors until the Pipeline Division Director/Manager arrives on the scene. The Pipeline Division Director/Manager may assume the role of Incident Commander in any emergency situation that is not brought under control.

3.2.1 Pre-Mobilization

The Unified Command may be faced with a report of an emergency, which may not be associated with a Company Pipeline or facility. The report may or may not fully describe the location or the areas affected by an emergency situation. In order to effectively respond to the incident, the first action (*after calling 9-1-1 or 805-683-2724 from outside the County)* is to dispatch the nearest employees to the scene of the reported emergency, to investigate and report their findings to the Unified Command.

For this phase of the immediate response, the Unified Command will assign the positions of Operations, Logistics, Public Information/Liaison and Safety to available personnel. Operations may establish a one- or several person reconnaissance team or teams depending on the size of the area to be reconnoitered.

FIGURE 3-1: IMMEDIATE RESPONSE ORGANIZATION FLOWCHART



On the basis of reconnaissance reports, if the emergency situation can be positively identified as not being associated with a Company facility, the Incident Commander will not mobilize the Immediate Response Team. In this case, the Incident Commander would notify the responsible party, and contact the appropriate agencies to make them aware of the situation.

If the source of an emergency remains unidentified, the Incident Commander must weigh the evidence from the reconnaissance reports, and determine the likelihood of the emergency originating from Company pipelines or facilities. The Unified Command will then make a decision whether or not to mobilize the Immediate Response Team, erring on the side of caution.

3.2.2 Duties and Responsibilities of the Immediate Response Team

The action checklists presented in Section Five of the Plan are intended to be a guide and checklist for the individual Immediate Response Team members assigned to the positions shown in Figure 3-1. These action checklists do not supplant the use of common sense and judgment, based on the actions that may be required due to the circumstances of a particular emergency situation.

3.2.3 Assignment of Team Positions

The Unified Command has the latitude to assign team positions to personnel based on the specific needs of the response team. Some assignments may be temporary until the arrival of the other team personnel on the scene, when a more qualified team member becomes available for a specialized area of the response effort.

The Immediate Response Team may be expanded as dictated by the situation. Other personnel from Level Two and Three response organizations may be assigned to the team.

The flexibility of the ICS provides for organizing the Immediate Response Team to accommodate the circumstances of the incident, and permits assignment of additional personnel and expansion in any area of special concern. It provides for reassignment of under-utilized team members to areas requiring more resources. Conversely, the duties and responsibilities of more than one position can be assigned to a single team member when such positions do not require a full time dedicated person.

3.2.4 Safety Training and Drills

All personnel assigned to emergency response positions will be assigned with regard to their respective level of training. Under *no* circumstances will personnel be assigned to emergency response positions without the minimum training and competency level required by the position. Minimum levels of training for response personnel are described in Appendix D of the Plan.

3.3 SUSTAINED RESPONSE TEAM

For an incident of larger magnitude or impact, particularly those in which an active response of many dedicated personnel is required for several days, The Company can activate the Sustained Response Team (Figure 3-2).

The Sustained Response Team members are drawn from the San Luis Obispo office and from trained personnel from other Company areas of the Northern Pipeline organization. These employees can respond to the Command Center location at the San Luis Obispo office within one to twelve hours after notification, prepared for assignments in the Sustained Response Team.

The Sustained Response Team organization is a large scale expansion of the Immediate Response Team, as illustrated in Figure 3-2. Upon arrival, agency officials have the authority to assume the role of a representative in the Unified Command. The Unified Command will have overall authority for the response effort, and may direct the efforts of a team of Company and Agency personnel.

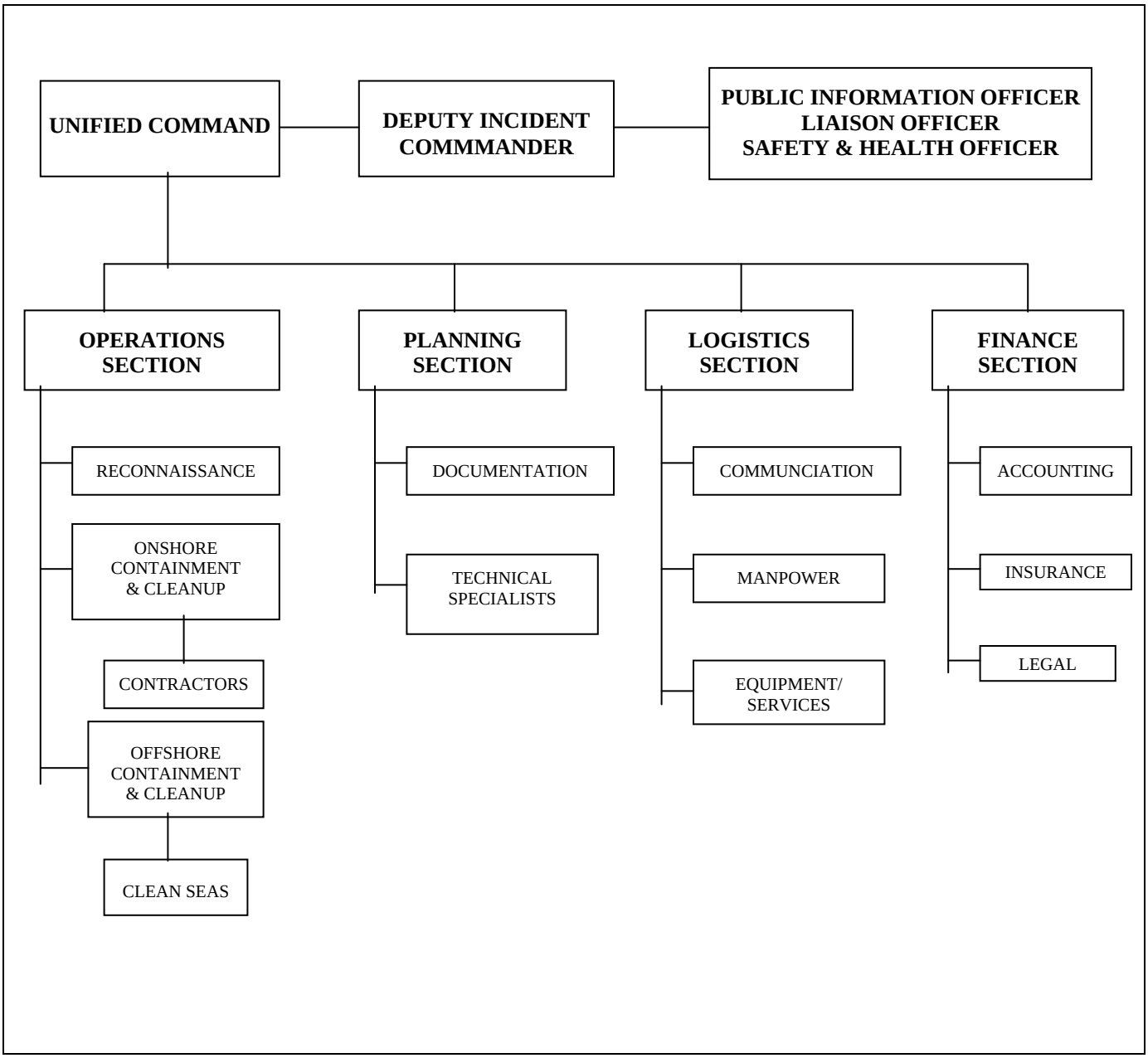
The Sustained Response Team includes specialized teams and positions adequate to manage all but the largest incidents. This organization would be expected to manage “reasonable worst case” incidents.

In a Level Two Sustained Response, a Command Center will be established at the San Luis Obispo office, or other appropriate location chosen by the Unified Command. The Command Center will be staffed by supervisors specializing in their respective response functions, available to advise the Unified Command and members of the Sustained Response Team on matters in their specialty areas. The Command Center staff will be assigned by the Unified Command, who will have the flexibility to include personnel appropriate to key aspects of the sustained response effort.

Citizens groups and others may wish to offer their services as volunteers, possibly in wildlife protection and clean-up activities. The Public Information Officer will act, or appoint other personnel, to coordinate volunteer activities. The location of a volunteer reporting and assignment area will be identified for coordination of volunteer resources. This assembling area will be located away from the Command Center and any logistics staging areas.

The action checklists presented in Section Five of the Plan is intended to be a guide and checklist for key members of the Sustained Response Team identified in Figure 3-2. These action checklists do not supplant the use of common sense and judgment, based on the actions that may be required due to the circumstances of a particular emergency situation.

FIGURE 3-2: SUSTAINED RESPONSE TEAM



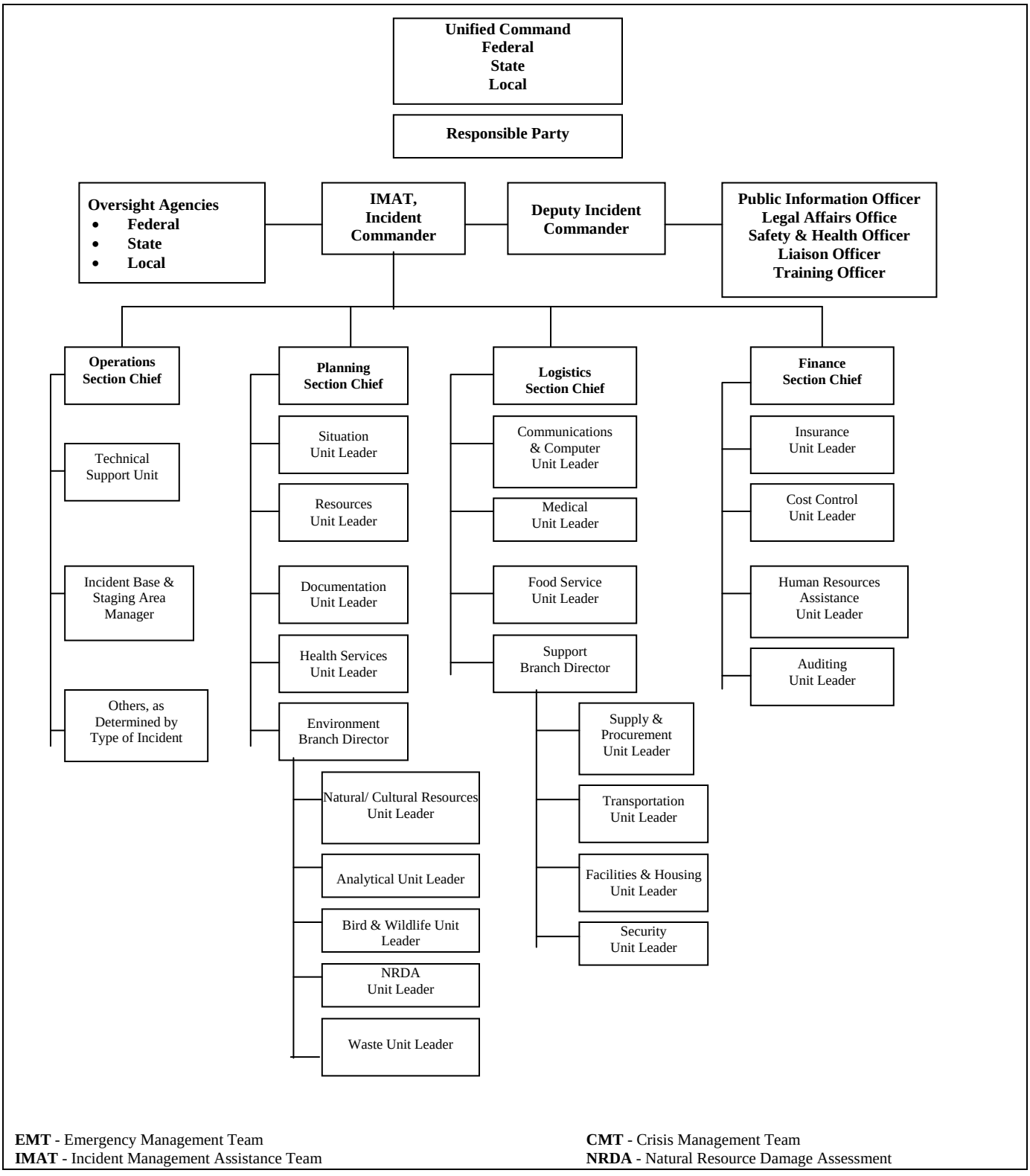
3.4 COMPANY RESPONSE TEAM

In the event that an emergency incident is very extensive, with the potential for widespread impacts to the environment, specialized personnel from other organizations in the Company's corporate structure are ready to be called upon for response effort. These corporate resources augment and build upon the Sustained Response Team organization, as needed in particular functional areas. The organization is designed to accommodate the strength of the organization by utilizing the best specialists and professionals available, regardless of their permanent assignments. It permits dedication of personnel to particular areas of concern and the supervision of vast contractual resources.

The Company can utilize Clean Seas to provide The Company with trained team experts to support local managers in their response to pollution incidents, and to help reduce risks to public health and the environment. Clean Seas provides emergency response management services and they have trained personnel that can fill all positions in the Incident Command System. The team is capable of rendering support and response anytime and anywhere required. Its members provide expertise in a wide range of disciplines that may not be readily available to the Division Manager and Unified Command.

Clean Seas Response is based on the Incident Command System, which provides a flexible response depending on the level of support required. Clean Seas involvement may be as little as a telephone consultation given to on-site response personnel by one Clean Seas specialist, or as great as the immediate mobilization of the entire Team to the Santa Maria Area location. In an extended deployment, the Team provides for alternate members to relieve the primary members in each discipline.

FIGURE 3-3: COMPANY INCIDENT MANAGEMENT ASSISTANCE TEAM (IMAT)



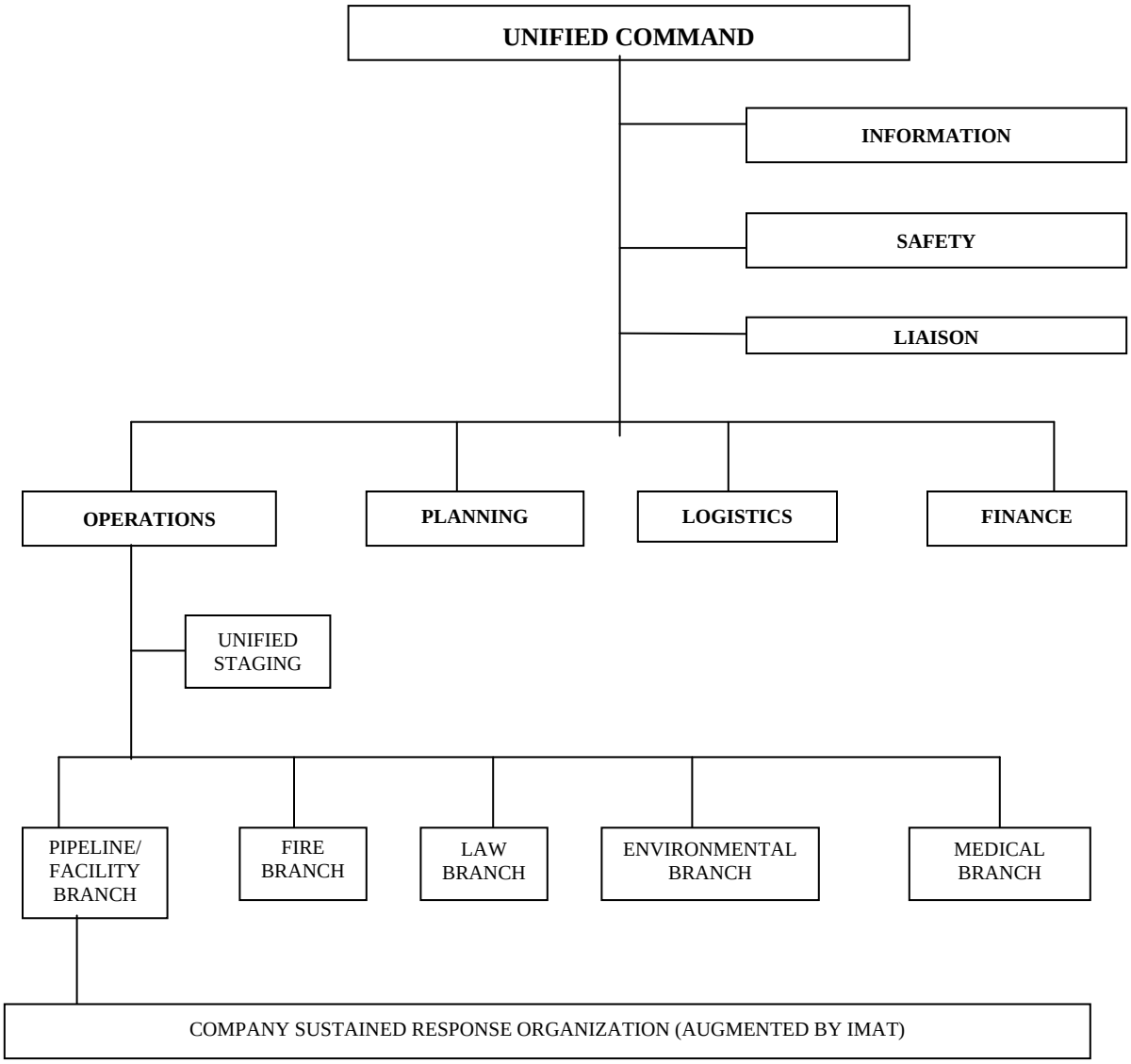
EMT - Emergency Management Team
IMAT - Incident Management Assistance Team
CMT - Crisis Management Team
NRDA - Natural Resource Damage Assessment

3.5 COUNTY EMERGENCY ORGANIZATION

The direct involvement of Santa Barbara County Office of Emergency Services and/or the Santa Barbara County Fire Department depends upon the extent of the emergency situation. Government Agencies responding to a spill situation coordinate their Incident Command organizational structure with their counterparts in the Company Response Team. This coordination of industry and agency personnel results in Unified Command of the response effort.

The Unified Command has authority for the response effort after obtaining information on the status and extent of the response effort. The Company will continue to coordinate activities with Unified Command. A possible Emergency Organization for a Level Three emergency incident is shown in Figure 3-4, coordinating with the Company Response Team. Position duty definitions for a Level Three response organization are given in Table 3-1.

FIGURE 3-4: TYPICAL UNIFIED COMMAND LEVEL THREE EMERGENCY ORGANIZTION



NOTE: During a Level Three Incident, the Unified Command should determine whether to activate the Area Oil and Gas Emergency Response Plan (P-4 Plan), which includes the Industry Mutual Aid Agreement

TABLE 3-1: POSITION DUTY DEFINITION FOR LEVEL THREE COUNTY EMERGENCY ORGANIZTION

Unified Command	Responsible for incident activities including the development and implementation of strategic decisions, and for approving the ordering and releasing of resources
Information Officer	Responsible for compiling and releasing information to the media, public and other interested parties
Liaison	Interfaces with other agencies, with support from the Company Information Officer
Safety	Ensures that emergency operations are conducted safely, and has the authority to stop unsafe operations
Operations	Responsible for managing emergency response activities, including fire and HazMat response in coordination with Safety
Planning	Responsible for providing expertise regarding hazards, risks, and for predicting potential occurrences and outcomes of the incident; provides "plans" and "drawings" regarding facilities, hazardous materials, and other aspects of the response effort; estimates and recommends resources needed by the response team
Logistics	Orders, receives, and holds resources (equipment and people) for use by Operations
Staging	Holds and keeps track of resources which are received from Logistics for immediate use (personnel, vehicles, and equipment): directs incoming resources to their destinations
Finance	Handles fiscal concerns, purchase orders, overtime, contractor time cards, equipment rental, authorizations and other matters
"Branch"	The branches are the major entities and functions which are part of the emergency response effort, under the direction of Operations; branches may be divided and assigned to particular aspects locations of a large emergency incident

The Incident Command System permits a Unified Command approach to be implemented Unified Command involves Company and Agency personnel working together. Landowners, facility representatives, and other Agency authorities may participate in the formulation of an Incident Action Plan, as well as common Incident objectives, strategies and priorities through their respective member of the Unified Command.

3.6 FUNCTIONAL RESPONIBILITIY MATRIX OF TASKS

Task	Facility Area Supervisor	Employee/ Operator	Fire Dept.	Sheriff	Highway Patrol	Ambulance
Level # 1 Command	S	P*	P			
Level # 2 Command	P*		S			
Level # 3 Command	P*		S			
Call 9-1-1	S	P				
Evacuation Decision	P	P	P			
Shutdown Decision	P	P	P			
Bomb Search				P		
Civil Disorder Command				P		
Mobilize Off-Duty Workers	P	S				
Traffic Control				P	P	
First Aid		P	S			
Medical Evacuation/ Medical Treatment		P	P			S
Fight Fire	P	S	P			
Stop Leak/ Spill	P	P	S			

*** Until arrival and formal assumption of command by Fire Department.**

P = Primary S= Secondary

3.7 GUIDANCE MATRIX FOR EMERGENCY INCIDENT TRANSITION

(This table may be utilized by responders in association with Section 4 - Notifications.)

LEVEL OF EMERGENCY	CRITERIA	INCIDENT COMMANDER	TYPICAL FIRE DEPT. RESPONSE	NOTIFICATION
LEVEL 1 Initial Response Minor On-Site Incident	1. Oil Spill or produced water spill> 1 bbl outside secondary containment designated for that vessel, system or pipeline, or ≥ 5 bbl inside secondary containment designated for that vessel, system or pipeline, unless it impacts or potentially impacts state or marine waters, in which case go to level III. 2. Two combustible gas or fire eye alarms 3. Verified high level combustible gas (50% LEL) alarm 4. Single hand held detector with a LEL reading ≥50% 5. Smoke investigation 6. Fire reported out 7. Hazardous material release outside secondary containment designed for that vessel, system or pipeline. 8. Bomb or extortion threat	Highest ranking on-duty operations person until relieved by Fire Dept.	One Engine Code 2	**9-1-1** **See Facility's Notification Section**
LEVEL 2 Sustained Response Major On-Site Incident	1. Oil Spill or produced water spill> 5 bbl. Unless it impacts or potentially impacts state or marine waters, in which case go to level III. 2. Any toxic gas release > 10 ppm by fixed or handheld monitor. 3. More than 2 combustible gas or fire eye alarms 4. Fire 5. Hazardous materials release requiring hazardous materials emergency response from emergency rescue personnel or contractors. 6. Sour gas in sales line 7. Earthquake or flooding damages 8. Activation of Emergency Shut Down for plant and/or pipeline	Highest ranking on-duty operations person until relieved by Fire Dept.	1st alarm 3 engines, Chief Officer Code 3	**9-1-1** • **Off duty personnel** • **Community Notification** • **Agency Notification as required** **See Facility's Notification Section**
LEVEL 3 Major Incident With Public Exposure Potential (off-site impacts)	1. Oil spill or produced water spill impacting or potentially impacting state or marine waters, or threatened release of oil or produced water impacting or potentially impacting state or marine waters. 2. Fire with potential for spreading 3. Explosion 4. Hazardous materials release or gas leak with off-site potential 5. Civil disturbance 6. State of War 7. Highway 101 closure or impact on other significant access routes or roads	Highest ranking on-duty operations person until relieved by Fire Dept. And potentially: • Responsible Party • Sheriff's Dept. • CHP • Federal On Scene Coordinator • State On Scene Coordinator	2nd alarm or greater, additional engines and/or specialized equipment/ resources 2 Chief Officers	**9-1-1** • **Off duty personnel** • **Community Notification** • **Agency Notification as required** **See Facility's Notification Section**

Note: The Company must satisfy other reporting requirements.

Guidance Matrix for Emergency Incident Transition
Definition of Terms

These definitions are provided to define terminology in the guidance Matrix for Emergency Incident Transition ("matrix").

Combustible gas: A gas that burns, including the fuel gases, hydrogen, hydrocarbon, carbon monoxide, or a mixture of these.

Emergency rescue personnel: Any public employee, including, but not limited to, any fireman, firefighter or emergency rescue personnel, or personnel of a local EMS agency, or a poison control center, who responds to any condition caused, in whole or in part, by a hazardous material that jeopardizes, or could jeopardize, public health or safety or the environment.

Hazardous material: Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material for which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if release into the workplace or the environment.

Hazardous material emergency response: Includes, but not limited to, assessment, isolation, stabilization, containment, removal, evacuation, neutralization, transportation, rescue procedures, or other activities necessary to ensure the public safety during a hazardous materials emergency.

Marine waters: Those waters subject to tidal influence.

Oil: Any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues therefrom, including but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oil mixed with waste and liquid distillates from unprocessed natural gas.

Oil spill: Any release of oil or produced water.

Potential release: See "Threatened release."

Produced water: The water remaining after being separated through oil and gas processing.

Release: Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

Secondary containment: Containment designated for that vessel, system or pipeline.

Sour gas: Natural gas that contains corrosive, sulfur bearing compounds, such as hydrogen sulfide (H_2S) and mercaptans.

Threatened release: A condition creating a probability of harm, when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment.

Toxic gas: Gases that are extremely hazardous and may be fatal if inhaled or absorbed through skin.

Waters of the state: Any surface water or groundwater, including saline waters, within the boundaries of the state.

3.8 EMERGENCY COMMAND CENTER

The Emergency Command Center will be located at the Santa Maria office at 1580 E. Battles Road, or other safe location upwind/upslope of the incident, as directed by the Unified Command. The Unified Command will be provided access to any drawings that may be needed. Offices and phones with outside lines will be made available for use by the Unified Command. The Command Center will have radio contact with operators around the site.

3.9 EQUIPMENT STAGING AREA

A staging area shall be established as needed during any incident. The purposes of this area are to marshall and hold all incoming vehicles, equipment and personnel not immediately assigned to a task.

A staging area manager shall be appointed by the Operations Section Chief to direct incoming resources to the area, log them in, and dispatch them when requested by the person in charge of on-site operations.

The staging area shall be designated by the Operations Section Chief in cooperation with local authorities.

3.10 INDUSTRIAL MUTUAL AID

In the event that emergency assistance is needed, The Company has formal relationships with other firms and organizations in the local petroleum industry.

In response to a Level 3 (see Section 3.7) emergency incident, the Area Oil and Gas Industry Emergency Response Plan (P-4 Plan) may be activated during an emergency which involves more than one onshore facility, or which threatens or involves offsite impacts to the public, livestock, property, or the environment. The P-4 Plan will be activated when the required response to an emergency incident is beyond the capabilities of the responsible Company to mitigate effectively. The P-4 Plan may also be activated at any time that industry mutual assistance is required. Mutual aid will be requested via the agreed upon P-4 mutual aid agreement.

The P-4 Plan is to be utilized by Industry in coordinating its response, sharing resources, and functioning within the governmental command system at an incident. It is activated at the discretion of the Company or Agency Unified Command in command of emergency response activities.

The Company is a member of Clean Seas, and can call upon the organizations' resources. If an oil spill were to occur at the Sisquoc River crossing at a time when the river has enough flow to carry oil toward the ocean via the Santa Maria River, assistance would be obtained from Clean Seas for containment and cleanup operations at the coastline.

Other companies operating in the Santa Maria Basin area include Shell, Texaco, Arguello Inc. and Nuevo. Personnel from these petroleum operators can also be called upon if assistance in needed.

Industry contacts and telephone numbers are found in Section Eight of the Plan.

3.11 CONTINUITY OF BUSINESS MANAGEMENT

The Company maintains offices in Santa Maria, Santa Margarita, Coalinga, and Taft, with personnel that can be called upon to continue all aspects of business management under emergency conditions. In addition, personnel from other Company facilities (i.e., Santa Maria Refinery, corporate office and in the control center personnel), would be available to provide support for maintaining business operations in a sustained emergency.

The decision for restart of the oil pipeline, after shut down following an emergency situation, is made by the Division Director or Pipeline Division Manager. The criteria for restarting the flow of oil may include the completion of field inspections, repairs, verification of repair work, stand up pressure tests, verification of SCADA system operations, and any other prudent measures necessary to confirm the integrity of the pipeline. The order to restart is given only after the integrity of the pipeline is confirmed and the safety of personnel and property is assured.

Emergency shutdown and startup procedures are maintained in the System Operating Manual. For more information please refer to Section 4 of the Systems Operating Manual.

Statement for Emergency Response Plans:

A Business of Continuity plan has been developed by The Company to address how critical operational and safety functions will be maintained should there be up to a 30% reduction in work force, for an extended period of time. A copy of this plan is maintained by the Director or Emergency Preparedness, Response and Security located at 600 North Dairy Ashford, TR-2000, Houston, TX 77079.

Considerations for Continuity of Business Plan:

Continuity of Business Plans should be flexible and should be tailored towards your particular business models/program/services and customer needs.

The plan should include procedures that assess the impact that a significant business disruption would have on businesses with which you have an on-going relationship concerning support of your operations.

Plan should emphasize having multiple levels of coverage with adequate depth of cross-trained staff and outsourced services, up-to-date technology for back-up facilities, a variety of telecommunications options, testing of plans and time recovery standards.

When preparing, updating, and maintaining your plan, please dedicate resources to periodically assess risk factors so that plans remain viable and effective in light of evolving circumstances.

1. Identify employees, with contact information, job performed and critical functions.

2. Identify your main business function. Of those identified, what are the most important business functions that must be kept operational during a situation when possibly 30-40% of your workforce is unable to get to work for a potential timeframe lasting 18 months and supplies are scare?

3. For each Mission Critical Business Function complete the following:
   - Staffing Issues
   - Minimal staffing needs
   - Skill set required to perform business function
   - Are staff members adequately cross-trained
   - How often are these skill practiced?
   - Can business function be performed remotely through telecommuting? If yes, has telecommuting been set up? If no, why can't this be performed through telecommuting?
   - Can this business function be performed at another location?
   - Do you currently track employee contact information?
   - Do you currently track employee special skills or licenses?
   - Are there dependencies within your facility, other facilities or external related to staffing for this business function?

4. Supply Issues
   - Identify the key supplies needed to perform this business function.
   - Is adequate inventory on hand for a 3 month supply?
   - If no, how much time is needed to build the inventory or ensure adequate supplies will be available?
   - Is there a particular threshold at which supplies are reordered? If yes, can this threshold be changed to maintain an adequate inventory at all times?
   - Do you have adequate storage if you increase your inventory?
   - Is a single vendor the sole source of these supplies? If yes, have you considered using multiple vendors to decrease the risk of supplies being unavailable?
   - Have you worked with your vendors to ensure they have a Business Continuity Plan in place?
   - Are there dependencies within your facility, other facilities or external related to supplies for this business function?

5. Client Issues
   - Identify the key issues pertaining to your client population

6. Disaster Plans and Staff Awareness
   - Is your staff aware of what is expected of them when an emergency has occurred?
   - Do you have policies and procedures in place that address this business function in an emergency situation?
   - Are policies and procedures addressed regularly? Exercised?
   - How often are these policies and procedures reviewed and updated?

   .

SECTION 4

NOTIFICATIONS

SECTION FOUR
NOTIFICATIONS

TABLE OF CONTENTS

4.0 NOTIFICATIONS

In the event of an emergency, the response activities depend upon notifying others of the incident. Notification procedures are essential to activate the response organizations, alert company management, obtain assistance and cooperation of agencies, mobilize resources, and comply with local, state and federal regulations.

The order of notification is based on the premise that those parties who can rapidly render assistance in controlling or minimizing the impacts of an incident be notified before those that are remote from the scene. The notification process encompasses the following areas:

- ☐ Response Team Activation (including 9-1-1)
- ☐ Company Notification
- ☐ Agency Notification
- ☐ Third Party Notification
- ☐ Notification of Other Interested Parties
- ☐ Notification of Families of Team Members
- ☐ Periodic Progress Updates and Reports
- ☐ Accident / Casualty Notification

The first steps in the notification sequence for emergency incidents are given in Section Five of this Plan, and begin with:

1. Closing valves to stop the source of liquid or gas release *(without delaying step 3 below)*
2. Assuring the safety of Company personnel and the public
3. Notifying the Santa Barbara County Fire Department and the Office of Emergency Services for assistance: **9-1-1** within Santa Barbara County; refer to Table 4.1 for number outside of Santa Barbara County.
4. Assessing the situation in detail, and making Company notifications to activate the Immediate Response Team.
5. Making agency notifications (Refer to Table 4.1)

SECTION FOUR
NOTIFICATIONS

Table 4.1 - Emergency Notification Matrix

(Refer to Section 3.7 – Guidance for Emergency Incident Transition & Company Emergency Response Plan volumes for additional information.

TYPE OF EMERGENCY	PERSONS & AGENCIES TO BE NOTIFIED	TELEPHONE	NOTIFICATION CRITERIA	NOTIFICATION TIME FRAME	INFORMATION TO REPORT
Fire Explosion Bomb Threat	Company Duty Officer	(800) 231-2551	Any Smoke Investigation, Any Fire. Any Fire reported out. Any Bomb or Extortion Threat. Any Explosion. Fire Eye Alarms. Earthquake or Flooding Damage.	**Call 9-1-1 NOW!** Immediately perform rescue, ESD, evacuation, etc. **Follow Checklist**	1. Type of fire 2. Name of facility 3. Address 4. Your name & phone
	Company Control Center Hot Line	(877) 267-2290			
	Company Area Supervisor	**(805) 925-5795 or (805) 438-6201**			
	Fire Department	**9-1-1**			
	County Office of Emergency Management	(805) 560-1081[1]			
Gas Release (Toxic or Non-toxic)	Company Duty Officer	(800) 231-2551	2 combust ble gas alarms. Verified reading of ≥50% LEL. 1 Toxic gas release at **> 10 ppm.** ESD, H_2S in sales gas or off-site potential	**Call 9-1-1 NOW!** Immediately perform rescue, ESD, evacuation, etc. **Follow Checklist**	1. Location of release or threatened release 2. Name of facility 3. Address 4. Your name & phone
	Company Control Center Hot Line	(877) 267-2290			
	Fire Department	**9-1-1**			
	Company Area Supervisor	**(805) 925-5795 or (805) 438-6201**			
	County Fire Hazardous Materials Unit (HMU)	(805) 686-8170 (805) 683-2724[1]	Same as Fire above		
	County Office of Emergency Management	(805) 560-1081[1]	Same as Fire above		
	CA State Warning Center	1-800-852-7550	All significant or threatened releases		
	NRC (EPA/USCG)	1-800-424-8802	Reportable Quantities (RQ)		
Oil/Produced Water Spill	Company Duty Officer	(800) 231-2551	1 bbl+ outside a secondary containment. 5 bbl+ inside secondary containment. ESD. Offsite potential, impacts or potentially impacts state or marine waters.	**Call 9-1-1 NOW!** Immediately after shutdown. **Follow Checklist**	1. Location of release or threatened release 2. Quantity released 3. Name of facility 4. Address 5. Your name & phone
	Company Control Center Hot Line	(877) 267-2290			
	Company Area Supervisor	**(805) 925-5795 or (805) 438-6201**			
	Fire Department	**9-1-1**			
	County Fire Hazardous Materials Unit (HMU)	(805) 686-8170 (805) 683-2724[1]	Same as Fire above	ASAP	
	County Office of Emergency Management	(805) 560-1081[1]	Same as Fire above	ASAP	
	CA State Warning Center	1-800-852-7550	All significant or threatened releases	ASAP	
	NRC (EPA/USCG)	1-800-424-8802	Reportable Quantities (RQ)	ASAP	
HAZMAT Release (Including ignitable liquids, e.g. NGL, gasoline, diesel, etc.)	Company Duty Officer	(800) 231-2551	Any HazMat spill outside secondary containment designed for that vessel, system or pipeline. Requires Emergency Rescue personnel. Offsite potential	**Call 9-1-1 NOW!** Immediately after shutdown. **Follow Checklist.**	1. Type of hazardous material 2. Estimate of quantity involved. 3. Potential hazards of the material 4. Name of facility 5. Address 6. Your name & phone
	Company Control Center Hot Line	(877) 267-2290			
	Company Area Supervisor	**(805) 925-5795 or (805) 438-6201**			
	Fire Department	**9-1-1**			
	County Fire Hazardous Materials Unit (HMU)	(805) 686-8170 (805) 683-2724[1]	Same as Fire above	ASAP	
	County Office of Emergency Management	(805) 560-1081[1]	Same as Fire above	ASAP	
	CA State Warning Center	1-800-852-7550	All significant or threatened releases	ASAP	
	NRC (EPA/USCG)	1-800-424-8802	Reportable Quantities (RQ)	ASAP	
Spill Entering Storm Drain, Creek, Ocean, or other Waterway	Company Duty Officer	(800) 231-2551	All spills with the potential to, or impacting creeks, state or marine waters.	Immediately **Follow Checklist**	1. Location of release 2. Type of material & quantify 3. Name of facility 4. Address 5. Your name & phone
	Company Control Center Hot Line	(877) 267-2290			
	Company Area Supervisor	**(805) 925-5795 or (805) 438-6201**			
	Fire Department	**9-1-1**			
	County Fire Hazardous Materials Unit (HMU)	(805) 686-8170 (805) 683-2724[1]	Same as Fire above	ASAP	
	County Office of Emergency Management	(805) 560-1081[1]	Same as Fire above	ASAP	
	CA State Warning Center	1-800-852-7550	Any substantial threat	ASAP	
	NRC (EPA/USCG)	1-800-424-8802	Reportable Quantities (RQ)	ASAP	
Medical Emergencies	Company Duty Officer, as needed Company Area Supervisor	(800) 231-2551 **(805) 925-5795 or (805) 438-6201**	Medical assistance and/or transport required	ASAP **Follow Checklist**	1. Type of injury/ illness 2. Location 3. Condition 4. Action taken 5. Name of facility 6. Address 7. Your name & phone
	Fire Dept/Ambulance/Life Flight	**9-1-1**			
	County Office of Emergency Management	(805) 560-1081[1]	Same as Fire above	ASAP	

[1] 24-hour telephone number (or 9-1-1 Dispatch). Written follow-up reports may be required.

4.1 SANTA BARBARA COUNTY - HAZARDOUS MATERIALS MINOR SPILL & RELEASE INCIDENT REPORT GUIDE

<<Replace in PDF>>

4.2 SANTA BARBARA COUNTY - GUIDELINES FOR INCIDENT ASSESSMENT

<< INSERT pdf form>>

4.3 SANTA BARBARA COUNTY - INCIDENT REPORTING FORM INSTRUCTIONS

<< INSERT pdf form>>

FORM 4.1: SANTA BARBARA COUNTY - INCIDENT REPORT FORM

<< INSERT PDF Form >>

4.6 COMPANY NOTIFICATION

The following Company notifications should be made immediately after assuring the safety of workers and the public, and calling for assistance using 9-1-1. Refer to Table 4.1 for additional contact information.

Company personnel and County organizations should be notified as soon as the fire department and/or paramedic notification has been completed. Twenty-four hour telephone service to Company supervisory personnel is also provided via the Company Control Center. Refer to Table 4.1 for additional contact information.

This Plan will be activated when an emergency occurs. The senior Company person on site will be in charge. If a more senior employee arrives on site, the more senior employee will assume command. During non-workday hours, the Company Pipeline Controller may assume command until arrival of Division personnel.

4.7 AGENCY NOTIFICATION

The Fire Department, Paramedic, and Sheriff Department HOTLINE TELEPHONE NUMBER is 9-1-1**.** Information to be provided when notifying government agencies is given in Table 4-1, contact information is provided in Table 4-2.

Refer to Table 4.2 for contact information to report non-emergency situations to the County Fire Department Administrative Center, during daytime business hours and during non-business hours.

4.8 SANTA MARIA AREA NOTIFICATION

The Company Santa Maria Area, operates associated pipelines and facilities in the region, and can be called upon to provide assistance with manpower, equipment and materials. Section Eight of the Plan lists resources available from Company Santa Maria Area in the event that their assistance is needed.

Alternatively, the duty roster of Santa Maria Area personnel is maintained at the Company Control Center (refer to Section 4.3)

4.9 NOTIFICATION OF ALL AMERICAN PIPELINE SISQUOC PUMP STATION

In the event of an incident occurring inside the All American Pipeline (AAPL) Sisquoc Pump Station, the AAPL Emergency Response Plan takes precedence. However, in the event that a Company employee is first on the scene, the Company employee will make all agency notifications, notify AAPL, and begin mitigation measures to the extent possible prior to the arrival of AAPL personnel on the scene.

In the event of an emergency incident along the Sisquoc to Santa Maria Pipeline that could potentially affect the AAPL Sisquoc Pump Station, AAPL is notified following initial Agency and Company contacts. AAPL personnel may be contacted by using the 24-hour telephone number for

emergencies, refer to Table 4.2 for contact information.

In addition, the AAPL Control Center may be contacted from the Company Control Center using the Company's satellite phone.

4.10 NOTIFICATION OF OTHER INTERESTED PARTIES

Although other notifications are not an urgent or a mandatory requirement, courtesy and cooperative reporting will normally assist in maintaining public and agency goodwill. Others that should be considered in this category are:

- The Mayor's Office in the affected municipalities
- Owners and operators of petroleum and other commercial businesses in the vicinity
- Utilities in the area of any excavations
- Agencies listed for other reporting criteria
- Other Company facilities in the vicinity
- Oil spill cooperatives offices
- Police and Fire Departments not on the list of required notifications

These notifications can be made after other notification procedures are complete, and should be explained as courtesy notifications. It should be made clear that the required agencies have already been notified.

4.11 NOTIFICATION OF FAMILIES OF TEAM MEMBERS

Once the official notifications and mobilization have been completed, a call should be made to the family of each of the Team Members by the Incident Commander, or other Company personnel directed to do so. The caller should indicate that an emergency response is in progress and that the Team Member will likely be involved beyond normal working hours, and may not be able to directly communicate with their family until a later time. A brief description of the emergency should be given, and questions answered if the information is available. The family should be given a number to call if they have an emergency or must get an urgent message to the Team Member.

4.12 ALERTING AND MOBILIZING EMPLOYEES

Employees are mobilized by the Incident Commander directly on the telephone

The Incident Command system allows the Incident Commander to mobilize selected functions in an emergency response organization, and to assign available employees to the various functions in a flexible manner. Employees assigned to particular organization functions would vary depending upon the nature of the incident.

4.13 EMPLOYEE MOBILIZATION ROSTER

NAME	ADDRESS	PHONE	ASSIGNMENT IN ORGANIZATION
Butch Lemos	1580 East Battles Santa Maria, CA 93455	(805) 925-5795	Incident Commander / Operations
Jeremy Wilson	1580 East Battles Santa Maria, CA 93455	(805) 925-5795	Alt. Incident Commander / Operations
Mike Walker	3900 Kilroy Way, Suite 210 Long Beach, CA 90806	(562) 290-1515	Safety
Steve Colclasure	1580 East Battles Santa Maria, CA 93455	(805) 349-9629	Logistics
Jeremy Willett	1580 East Battles Santa Maria, CA 93455	(805) 614-3808	Finance
Chrystal Shiarla	3900 Kilroy Way, Suite 210 Long Beach, CA 90806	(562) 290-1543	Planning
Jim Adams	3900 Kilroy Way, Suite 210 Long Beach, CA 90806	(562) 290-1516	Environmental
Bill Stephens	3010 Briarpark Drive Houston, TX 77042	(281) 293-1958	Public Relations

4.14 EMERGENCY ORGANIZATION POSITION MOBILIZATION ROSTER

POSITION	PRIMARY	ALTERNATE	ALTERNATE
Incident Commander	Butch Lemos	Jon Cornell	Mark Mitchell
Operations	Jeremy Wilson	Val Flores	John Garner
Logistics	Steve Colclasure	Jeremy Wilson	(Corporate)
Planning	Chris Hicks	Benn Lee	(Corporate)
Finance	Jeremy Willett	Jeremy Wilson	(Corporate)
Safety	Mike Walker	Trinidad Hernandez	(Corporate)
Liaison / Industry Rep.	Travis Wilke	Jim Adams	(Corporate)
Information / Public Relations	Bill Stephens	Rich Johnson	(Corporate)

4.15 ALERTING VISITORS, NEIGHBORS AND PUBLIC

In the event of an emergency situation threatening people or property along the pipeline route, the Incident Commander will dispatch personnel to alert the appropriate people that may be affected. The local law enforcement agencies may provide assistance in the notification of any affected persons.

4.16 ACCIDENT / CASUALTY NOTIFICATION

In any injury accident involving Company personnel, Contractor personnel, or the public, the first consideration is to provide first aid and seek medical attention for all injured persons.

Assistance of paramedics and transportation to emergency room services is obtained by calling 9-1-1. First aid treatment will be administered immediately, prior to the arrival of medical assistance. Company personnel are trained in emergency first aid and CPR as discussed in Appendix D of the Plan.

Emergency medical assistance will transport casualties to the nearest hospital or emergency care facility. Area hospitals that may be used in an emergency are noted in Appendix C of the Plan.

It is imperative to report casualties to the Incident Commander as soon as possible. The Incident Commander will notify the Division Manager for follow-up on behalf of the Company.

For injuries involving third parties, the Incident Commander shall direct the Company claims adjustor to notify insurers. This would include automobile accidents or other casualty to persons who are not Company employees, when there is any possibility of a claim against the Company. The notification of the injured person's family will be made by the treatment facility or the local police. A written report of a third party incident and circumstances shall be prepared by the senior employee present, and forwarded to the Incident Commander at the earliest opportunity.

The Incident Commander will be responsible for notifying an injured employee's family, and telling them where the injured person has been taken for treatment. Transportation will be arranged, and all possible accommodations will be made for the family.

TABLE 4.2: AGENCY/COMPANY EMERGENCY CONTACTS LIST/NOTIFICATIONS LOG

4.2.1 EMERGENCY RESPONSE NUMBERS

Agency/Company Contact	Telephone	Person Notified	Date & Time	Notified By
Company Control Center Hotline, 24-hr	(877) 267-2290			
Local Emergency Services	9-1-1			
- from outside Santa Barbara County	*(805) 683-2724*			
Note: When calling 9-1-1 from a cellular phone, the Highway Patrol will answer, and you should ask the dispatcher to connect you with Santa Barbara County 9-1-1.				
Company Duty Officer, 24-hr	(800) 231-2551 (Fax # 580-767-7429)			
National Response Center, 24-hr (NRC, USCG, EPA, DOT)	(800) 424-8802 *or* *(202) 267-2675*			
Company Crisis Management Hotline, 24-hr	(800) 342-5119 *or* *(281) 293-1877*			
Company PTRRC – Emergency Claim Center, 24-hr	(800) 766-6362			

4.2.2 QUALIFIED INDIVIDUAL/INCIDENT COMMANDER CONTACTS

QI/IC Name & Location *Notify ONE of the following:*	Telephone O/Office, C/Cell, F/Fax, H/Home		Person Notified	Date & Time	Notified By
Butch Lemos – QI/IC Area Supervisor *Santa Maria & Line 300* *1580 E. Battles Road* *Santa Maria, CA 93454*	O C F H	(805) 925-5795 (805) 331-6965 805-925-8753 (b) (6)			
Mark Mitchell – QI/IC Area Supervisor *Santa Margarita & Line 400* *18781 El Camino Real* *Atascadero, CA 93422*	O C F H	(805) 438-6201 (805) 391-3713 805-438-6200 (b) (6)			
Jeremy Wilson – Alt. QI/IC Maintenance Coordinator *Santa Maria & Line 300* *1580 E. Battles Road* *Santa Maria, CA 93454*	O C F H	(805) 349-7628 (805) 331-6967 805-925-8753 (b) (6)			
Daniel French – Alt. QI/IC Technician *Line 400 & Santa Margarita* *18781 El Camino Real* *Atascadero, CA 93422*	O C F H	(805) 438-6210 (805) 391-3811 805-438-6200 (b) (6)			

4.2.3 COMPANY DIVISION & CORPORATE RESPONSE RESOURCES

Name & Position		Telephone O/Office, C/Cell, F/Fax, H/Home	Person Notified	Date & Time	Notified By
Travis Wilke	O	(562) 290-1502			
Division Manager	C	(580) 401-0047			
Rob Yarbrough	O	(832) 765-1693			
EPR&S Contact	C	(281) 627-3177			
	H	(b) (6)			
Dave Hiscott	O	(281) 293-2632			
Alt. EPR&S Contact	C	(817) 715-8951			
	H	(b) (6)			
Michela Moreland	O	(832) 765-1694			
Alt. EPR&S Contact	C	(832) 288-6249			
Jim Adams	O	(562) 290-1516			
Environmental Contact	C	(714) 329-8290			
	H	(b) (6)			
Jim Phelan	O	(281) 293-3715			
Alt. Environmental Contact	C	(580) 761-3233			
	H	(b) (6)			
Brad Hendrix	O	(918) 661-0140			
H&S Contact	C	(918) 977-0137			
	H	(b) (6)			
Brian Gibbs	O	(562) 290-1511			
DOT Contact	C	(909) 241-3358			
	H	(b) (6)			
Todd Tullio	O	(832) 379-6255			
Alt. DOT Contact	C	(405) 371-1477			
	H	(b) (6)			

4.2.4 COMPANY EMERGENCY RESPONSE CONTRACTOR RESOURCES

Contractor	24-HrTelephone	Person Notified	Date & Time	Notified By
Clean Seas; Ventura County, CA (Full service emergency response)	(805) 648-3838			
Patriot Environmental Services	(800) 624-9136			
NRC	(800) 337-7455			
Marine Spill Response Corp. (MSRC) & STARS Contractors (Full service emergency response)	(800) 645-7745, (800) 259-6772, or (703) 326-5609			
Johnson Vacuum (Vacuum trucks)	(661) 765-2048			
Kern Vacuum (Vacuum trucks)	(661) 589-5220			
ARB Inc. (Heavy equipment/workers)	(925) 432-3563			

4.2.5 AGENCY/OTHER CONTACTS

Agency/Group	Telephone	Person Notified	Date & Time	Notified By
Federal				
USCG, Sector LA/LB	(415) 399-3547			
US EPA, Region 9	(415) 947-4400			
US Fish & Wildlife Service (USF&WS)	(916) 414-6464			
National Weather Service (NWS)	(916) 979-3051			
FBI (Bomb Threat)	9-1-1, (805) 934-2444 or (310) 477-6565			
State				
CA OES, Region 1	(805) 445-1166			
CA State Fire Marshall	(562) 497-9100			
CA Highway Patrol	9-1-1 (805) 349-8728 (SB) (805) 549-3619 (SLO)			
CA Trans (Impacts to roadways)	(805) 922-1987 (SB) (805) 549-3318 (SLO)			
CA Dept. of Fish & Game (OES)	(916) 445-0045 *or* *(213) 620-4700 - after 5pm & Sat/Sun*			
CA State Warning Center	(800) 852-7550			
- CA Oiled Wildlife Care Network (OSPR)	(877) 823-6926			
- Northern Coast Dist. (San Luis Obispo County)	(707) 944-5588			
- Southern District (Santa Barbara County)	(909) 484-0167			
State Lands Commission	(562) 590-5201			
Dept. of Toxic Substances Control, Burbank	(818) 551-2800			
CA Division of Oil & Gas, Ventura	(805) 654-4761			
Dept. of Parks & Recreation, Office of	(916) 653-6621			

Historic Preservation				
Local				
Fire Department, Santa Barbara County Non-Emergency (N/E)	911 (805) 681-5500			
Sheriff, Lompoc Substation - Santa Maria Substation	(805) 934-6150 (805) 934-6128			
County Petroleum Division	(805) 896-9598			
Fire Prevention Division	911 N/E: 805-681-5523			
County Fire/Haz-Mat Unit (HMU), Santa Barbara	(805) 961-8800			
Regional Air Pollution Control Dist.	(805) 886-7165			
Planning Development Dept., Energy & Minerals Division – Santa Barbara County	(805) 259-8433			
All American Pipeline - Sisquoc Pump Station	(805) 781-5544 (805) 781-4550			
San Luis Obispo County Health (San Luis Obispo County Spills, 24 hr)	(805) 781-5011			
Office of Emergency Management, - San Luis Obispo County - Kern County - San Luis Obispo County - Santa Barbara County, 24 hr	(661) 868-5200 (805) 781-5011 (805) 560-1081			

Table 4.3: County, state, and federal agency telephone numbers, and criteria for notification:

Fire Prevention Division		
• Notification in event of an oil spill or release of any hazardous material into the environment	Buellton- Santa Barbara- 24 Hour-	(805) 686-8170 (805) 681-5500 (805) 683-2724
County Petroleum Department	Business Hours	(805) 934-6128
• Oil spill notification only	Cell	(805) 896-9598
County OES	*Business Hours -*	(805) 560-1081
• Notify only if emergency has		
County Planning and Development Department, Energy & Minerals Division		
• Notify immediately in the event of any release which results in, or creates the potential for, a risk to humans, property, or environment		(805) 259-8433
State Office of Emergency Services (OES)	*24 Hours -*	(800) 852-7550
• Notify immediately in the event of any release which results in, or creates the potential for, a risk to humans, property, or environment		(916) 427-4990
California State Fire Marshall		(562) 497-9100
• Notify in the event of a spill of more than one barrel on water, or more than five barrels on land.		
Air Pollution Control District		(805) 961-8800
• Notify in the event of air pollution		
Department of Fish & Game		
• Notify in the event of an oil spill entering water resources		(916) 323-0635
United States Coast Guard / EPA	*24 Hours -*	(800) 424-8802
• Notify in the event of an oil spill		

All agency notifications should be documented on the Table 4.2: Agency/Company Emergency Contacts List & Notification Log. Indicate the agency person contacted, the date and time of the notification, and your name in the spaces provided on the log.

TABLE 4.4: FORMAT FOR ORAL & WRITTEN NOTIFICATION OF GOVERNMENT AGENCIES

- ☐ Your Name, Company, and Position
- ☐ Name of Facility
- ☐ Address
- ☐ Phone Number
- ☐ Location of Spill
- ☐ Date and Time of Spill
  - Time spill began, if known, or estimated time of spill
  - Duration of spill (continuing or stopped)
- ☐ Cause of Spill (if known)
- ☐ Extent of Spill
  - Material spilled
  - Volume spilled, if known, or estimated spill volume (report method used to estimate)
  - Effect on navigable waterway or shoreline
  - Property or equipment that may be affected
- ☐ Personal Injuries
- ☐ Property Damage (report type of damage *only*, not dollar value)
- ☐ Measures Taken
  - For shut down or control of source
  - For containment
  - For clean-up
- ☐ Agencies or Persons Already Notified
  - Record the name of the representative of all agencies contacted

SECTION 5

ACTION CHECKLISTS

SECTION FIVE
ACTION CHECKLISTS

TABLE OF CONTENTS

SECTION FIVE
ACTION CHECKLISTS

This section contains the step-by-step responses necessary for emergencies which may arise from the pipeline system. Specific emergency responses are given according to the type of emergency, as follows:

5.1	Oil Spill and Fire
5.2	Facility Gas Fire
5.3	Oil Spill – No Fire
5.4	Gas Release – No Fire
5.5	Earthquake
5.6	Accidents Causing Injury or Damage
5.7	Demonstrations, Threats of Violence, or Civil Disorder *including Bomb Threats*
5.8	Accident Investigations
5.9	Electrical Power Loss
5.10	SCADA Failure
5.11	Flood
5.12	Wildland or Adjacent Property Fire
5.13	Fire Protection System Failure
5.14	Hazardous Material Release

Note that the only gas at the Santa Maria Pump Station Facility and the Orcutt Pump Station Facility is utility gas used for fueling boilers and gas engines.

The Guidance Matrix for Emergency Incident Transition and the Emergency Notification Matrix are repeated here for ease of reference. This section of the Plan may be removed for use during an emergency.

5.0 HOW TO ACTIVATE THIS PLAN

INITIAL ACTIONS:

- **TAKE COMMAND**
- **ASSURE SAFETY OF RESPONDERS, WORKERS AND PUBLIC** (SHELTER-IN-PLACE AND/OR EVACUATE, IF APPROPRIATE)
- **ASSESS THE SITUATION** (TYPE OF EMERGENCY, LOCATION, MAGNITUDE, SEVERITY, THREAT)
- **MAKE AGENCY NOTIFICATIONS**

All Emergencies:	HAZMAT Incidents	HAZMAT Incidents:
LOCAL	**STATE OES**	**FEDERAL (NRC)**
9-1-1	**(800) 852-7550**	**(800) 424-8802**
(805 683-2724, IF CALLING FROM OUT OF COUNTY ON CELL PHONE)	**(POTENTIAL OR SIGNIFICANT RELEASES)**	**(REPORTABLE QUANTITIES)**

- **REFER TO APPROPRIATE RESPONSE CHECKLIST**
- **ACTIVATE AN INCIDENT COMMAND SYSTEM**
- **ISOLATE, CONTAIN, CONTROL AND MITIGATE THE EMERGENCY IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGUATIONS**

NOTE: *If industry support is needed, activate the "Area Oil & Gas Industry Emergency Response Plan" listed in P-4 of the Sisquoc Pipeline Project.*

WARNING

THE OIL MAY CONTAIN UP TO 4 % SULFUR AND UP TO 1PPM H_2S. THE H_2S IS NOT IN HIGH ENOUGH CONCENTRATIONS TO PRESENT A DANGER; HOWEVER, WORKERS WILL WEAR PERSONAL PROTECTION EQUIPMENT AND BREATHING APPARATUS IN THE AREA OF A SPILL OR FIRE.

BURNING SULFUR PRODUCES SULFUR DIOXIDE (SO_2), WHICH IS TOXIC. THE OIL HAS A FLASH POINT OF 74° F AND IS HEATED, AND HENCE SHOULD BE TREATED AS A CLASS I FLAMMABLE LIQUID. THE POSSIBILITY OF IGNITION OF AN OIL SPILL IS HIGH.

SECTION FIVE
ACTION CHECKLISTS

GUIDANCE MATRIX FOR EMERGENCY INCIDENT TRANSITION

Refer to Section 3 – Organization, Table 3.7: Guidance Matrix for Emergency Incident Transition

DEFINITION OF TERMS

Refer to Section 3 – Organization, Table 3.7: Guidance Matrix for Emergency Incident Transition

EMERGENCY NOTIFICATION MATRIX

Refer to Section 4 – Notifications, Table 4.1: Emergency Notification Matrix

5.1 OIL SPILL AND FIRE ACTION CHECKLISTS

5.1.1 OIL SPILL AND FIRE – CONTROL CENTER CHECKLIST

- notified of a fire along the pipeline system or a pump station

WARNING: Burning oil produces Sulfur Dioxide (SO_2), H_2S and other toxic gases.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or (805) 683-2724 -Notify County Emergency Center	Senior Operator	_____ Completed
Confirm who is in Command and briefly assess situation: • obtain the name and phone number of the person reporting fire • location and extent of fire • extent of injuries and people or resources threatened	Senior Operator	_____ Completed
Secure the Source - Shut down the system Division personnel will be dispatched by the Incident Commander to close valves on the Santa Maria to Summit pipeline segment, if necessary.	Senior Operator	_____ Completed
Notify Area Supervisor on duty using current duty roster, and confirm that Area Supervisor is in command and is notifying County agencies • take command until confirmation is made, and notify agencies (refer to Incident Commander checklist) • maintain communications with Incident Commander once contact is established	Senior Operator	_____ Completed
Notify AAPL, if necessary: (800) 322-7473	Senior Operator	_____ Completed
Notify LOGP, if necessary: (805) 733-5174	Senior Operator	_____ Completed
Attempt to notify affected Pump Station.	Senior Operator	_____ Completed

5.1.2 OIL SPILL AND FIRE – EMPLOYEE CHECKLIST

– upon notification or discovery of an oil spill and fire at a pump station or along the pipeline.

WARNING: Burning oil produces Sulfur Dioxide (SO_2), H_2S and other toxic gases

THE EMPLOYEE SHOULD NOT ATTEMPT TO EXTINGUISH BLAZE!

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or 805-683-2724 • **Alert County Emergency Center for assistance from Sheriff & Fire Department (divert traffic)**	Employee	_____ Completed
Take Command and briefly assess situation. • obtain the name and phone number of the person reporting fire • location and extent of fire • extent of injuries and people or resources threatened	Employee	_____ Completed
Secure the Source: • Notify The Company Control Center • Shut down pipeline activate ESD	Employee	_____ Completed
Notify Area Supervisor – if unavailable remain in command and refer to the IC checklist until relieved.	Employee	_____ Completed
Notify AAPL, if necessary: **(800) 322-7473**	Employee	_____ Completed
Notify LOGP, if necessary: (805) 733-5174	Employee	_____ Completed
Notify persons occupying structures near the pipeline	Employee	_____ Completed
Evacuate facility, if necessary	Employee	_____ Completed
Remain in area of fire, at safe distance (upwind) • wear personal protection equipment and SCBA in the fire area • provide information to fire department and Company personnel • close block valves if directed to do so, only after testing the vault atmosphere in accordance with confined space entry procedures	Employee	_____ Completed
For Large fires including Oil Tank Fire • Activate foam system and monitors for an Oil Tank Fire, only if it can be done safely, to cool exposures • wear personal protection equipment and SCBA in the fire area	Employee	_____ Completed

5.1.3 OIL SPILL AND FIRE – INCIPIENT STAGE, SMALL FIRE EMPLOYEE CHECKLIST
– upon notification or discovery of an oil spill and fire at a pump station or along the pipeline.

Warning: Burning oil produces Sulfur Dioxide (SO_2), H_2S and other toxic gases

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or 805-683-2724.	Employee	_____ Completed
Take Command and briefly assess situation.	Employee	_____ Completed
Secure the Source: • Activate ESD system, shut off source of flow. • Notify The Company Control Center.	Employee	_____ Completed
Notify Area Supervisor - if unavailable, remain in command and refer to Incident Commander checklist.	Employee	_____ Completed
Attempt to extinguish fire using dry chemical fire extinguishers, if it is safe to do so. • wear personal protection equipment and SCBA in the fire area.	Employee	_____ Completed
Activate monitors or use hose reel, only if it can be done safely, to cool exposures. • wear personal protection equipment and SCBA in the fire area.	Employee	_____ Completed
Evacuate facility, if necessary.	Employee	_____ Completed
Remain in area of fire, at a safe distance (upwind). • provide information to fire department and Company personnel. • close block valves if directed to do so, only after testing the vault atmosphere in accordance with confined space entry procedures.	Employee	_____ Completed

5.1.4 OIL SPILL AND FIRE – INCIDENT COMMANDER CHECKLIST

– upon notification or discovery of an oil spill and fire at a pump station or along the pipeline.

Warning: Burning oil produces Sulfur Dioxide (SO_2), H_2S and other toxic gases
PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENT	STATUS
Call 9-1-1 or **(805) 683-2724** or verify that it has been done.	Incident Commander	_____ Completed
Take Command and briefly assess situation: • verify that ESD activated • verify that appropriate actions have been taken • dispatch personnel to confirm emergency	Incident Commander	_____ Completed
Dispatch personnel to notify people at residences in the vicinity of a fire: refer to residence marked on Sisquoc Pipeline map (figure 2-1), and refer to Thomas Guide maps (section nine) • assist people to move to a safe area (upwind)	Incident Commander	_____ Completed
Call 9-1-1 to update County Emergency Center • if the roadway is exposed to fire, alert County Emergency for assistance from County Sheriff (divert traffic and protect the public)	Incident Commander	_____ Completed
Verify Source is Secure: • Shut in pipeline and all block valves • direct The Company Control Center • direct field personnel to close valves, if necessary	Incident Commander	_____ Completed
In the case of an Oil Tank Fire at the Santa Maria Pump Station or the Orcutt Pump Station, direct the use of hose reels and monitors, if it can be done safely • spray cooling water on adjacent equipment until Fire Department arrives on the scene • use foam to suppress a large fire	Incident Commander	_____ Completed
Notify AAPL, if necessary: **(800) 322-7473**	Incident Commander	_____ Completed
Notify LOGP, if necessary: (805)-733-5174	Incident Commander	_____ Completed
Activate the Oil Spill Contingency Plan	Incident Commander	_____ Completed
Make all agency notifications (Confirm with Control Center) - refer to the Emergency Notification Matrix.	Incident Commander	_____ Completed
Maintain communications with The Company Control Center	Incident Commander	_____ Completed

5.2 FACILITY GAS FIRE ACTION CHECKLISTS

Note that the only gas present is utility gas used to fuel boilers

5.2.1 FACILITY GAS FIRE - CONTROL CENTER CHECKLIST

– if notified of a gas fire at a pump station

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call **(805) 683-2724 to** Notify County Emergency Center	Senior Operator	_____ Completed
Confirm who is in command and briefly assess situation: • obtain the name and phone number of the person reporting fire • location and extent of fire • extent of injuries and people or resources threatened	Senior Operator	_____ Completed
Secure the Source - Shut down the pipeline system. If fire is a gas fire, line to facility may have to be shut off, call local gas utility company (800) 427-2200	Senior Operator	_____ Completed
Notify Area Supervisor on duty using current duty roster, and confirm that Area Supervisor is in command and is notifying County Agencies • take command until confirmation is made, and notify agencies (refer to Incident Commander checklist) • maintain communications with Incident Commander once contact is established.	Senior Operator	_____ Completed
Attempt to notify Santa Maria Pump Station or Orcutt Pump Station	Senior Operator	_____ Completed

5.2.2 FACILITY GAS FIRE – EMPLOYEE CHECKLIST

– upon notification or discovery of a gas fire at a Pump Station

THE EMPLOYEE SHOULD NOT ATTEMPT TO EXTINGUISH BLAZE

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call **9-1-1** or **(805) 683-2724** to Notify the County Emergency Center.	Employee	_____ Completed
Take command and briefly assess situation.	Employee	_____ Completed
Secure the Source: • Activate Emergency Shut Down (ESD) system. • Shut off source of gas, only if it can be done safely. • wear personal protection equipment and SCBA in the fire area. • Notify The Company Control Center.	Employee	_____ Completed
If fire is suspected to be a gas fire, gas line to facility may have to be shut off - call gas utility company: **(800) 427-2200**.	Employee	_____ Completed
Notify the Area Supervisor - if unavailable, remain in command and refer to Incident Commander checklist.	Employee	_____ Completed
Evacuate facility, if necessary.	Employee	_____ Completed
Remain in area of fire, at a safe distance (upwind). • Provide information to fire department and Company personnel. • Close block valves if directed to do so, only after testing the vault atmosphere in accordance with confined space entry procedures.	Employee	_____ Completed

5.2.3 FACILITY GAS FIRE - INCIDENT COMMANDER CHECKLIST

– upon discovery or notification of a gas fire at a Pump Station

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or **(805) 683-2724** or verify that it has been done.	Incident Commander	_____ Completed
Take Command and briefly assess situation: • verify that ESD activated • verify that appropriate actions have been taken • dispatch personnel to confirm emergency	Incident Commander	_____ Completed
Secure Source - Shut in pipeline and all block valves. • Direct The Company Control Center. • Direct field personnel to close valves, if necessary.	Incident Commander	_____ Completed
If fire is suspected to be a gas fire, gas line to facility may have to be shut off - call utility gas company: **(800) 427-2200**	Incident Commander	_____ Completed
Confirm that agency notifications have been made, if not make all agency notifications - refer to the Emergency Notification Matrix.	Incident Commander	_____ Completed
Maintain communications with The Company Control Center.	Incident Commander	_____ Completed

5.3 OIL SPILL – NO FIRE

5.3.1 OIL SPILL – NO FIRE – CONTROL CENTER CHECKLIST

– if notified of a spill along the pipeline system or at a pump station

Warning: Oil has a flash point of 74º F and should be treated as a Class I Flammable Liquid – the possibility of ignition is high.

NOTE; Hydrogen Sulfide vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Confirm who is in Command and briefly assess situation: • obtain the name and phone number of the person reporting • location and size of spill • Resources threatened by spill • Fire danger • Inform caller of safety precautions to prevent ignition of the spill (no smoking)	Senior Operator	_____ Completed
Call **911** or **(805) 683-2724** to notify Santa Barbara County Emergency Center	Senior Operator	_____ Completed
Secure the Source - Shut down the system, and close block valves	Senior Operator	_____ Completed
Notify the Area Supervisor on duty using current duty roster, and confirm that Area Supervisor is in command and is notifying County Agencies • take command until confirmation is made, and notify agencies (refer to Incident Commander checklist) • maintain communications with Incident Commander once contact is established	Senior Operator	_____ Completed
Notify AAPL, if necessary: **(800) 322-7473**	Senior Operator	_____ Completed
Notify LOGP, if necessary: (805)-733-5174	Senior Operator	_____ Completed
Attempt to notify Santa Maria Pump Station or Orcutt Pump Station.	Senior Operator	_____ Completed

5.3.2 OIL SPILL – NO FIRE – EMPLOYEE CHECKLIST

– upon discovery or notification of a spill along the pipeline or at a pump station

Warning: Oil has a flash point of 74º F and should be treated as a Class 1 Flammable Liquid – the possibility of ignition is high.

NOTE: Hydrogen Sulfide vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take command and briefly assess situation: • obtain the name and phone number of the person reporting spill • location and size of spill • Resources threatened by spill • Fire danger • Inform caller of safety precautions to prevent ignition of the spill (no smoking)	Employee	_____ Completed
Call **9-1-1 or 805-683-2724** • If a roadway is exposed to spill vapors, alert County Emergency Center for assistance from Sheriff (divert traffic and protect the public)	Employee	_____ Completed
Secure source - Shut off all sources of ignition within area of spill: • Activate the ESD system • do not operate autos or trucks; if spill vapors engulf the roadways, attempt to stop traffic • do not start vehicles • no smoking	Employee	_____ Completed
Notify The Company Control Center to shut down system and close block valves	Employee	_____ Completed
Notify Area Supervisor - if unavailable, take command and follow incident command checklist.	Employee	_____ Completed
Notify AAPL, if necessary: **(800) 322-7473**	Employee	_____ Completed
Notify LOGP, if necessary: (805) 733-5174	Employee	_____ Completed
Remain at spill location (upwind) • Notify people and assist them to a safe location, if necessary. • Wear personal protection equipment and SCBA in the spill area, and use gas detectors. • Provide information to fire department. • Close block valves if directed to do so, only after testing the vault atmosphere in accordance with confined space entry procedures.	Employee	_____ Completed
Establish fire watch • Wear personal protection equipment and SCBA in the spill area. • Deploy nearest hose reel or monitor with personnel standing by with hose, coat spill with foam, if necessary. • Deploy two dry chemical extinguishers to upwind side of spill with personnel standing by.	Employee	_____ Completed
Check containment curbs & pit - install additional dikes, if necessary	Employee	_____ Completed

5.3.3 OIL SPILL – NO FIRE – INCIDENT COMMANDER CHECKLIST

– upon notification or discovery of a spill along the pipeline system or at Pump Stations

Warning: Oil has a flash point of 74º F and should be treated as a Class 1 Flammable Liquid – the possibility of ignition is high.

NOTE: Hydrogen Sulfide vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take command and assess situation: • ensure that ESD, call to 9-1-1 and other appropriate actions have been taken • dispatch personnel to confirm emergency	Incident Commander	_____ Completed
Dispatch personnel to notify people at residences in the vicinity of a fire: refer to Thomas Guide Maps (Section Nine) • assist people to move to a safe area (upwind)	Incident Commander	_____ Completed
Call **9-1-1 or 805-683-2724** to update County Emergency Center • if a roadway is exposed to vapors, request assistance from County Sheriff (divert traffic and protect the public)	Incident Commander	_____ Completed
Secure Source: • Shut in pipeline and all block valves, if necessary • direct The Company Control Center • direct field personnel to close valves, if necessary	Incident Commander	_____ Completed
Notify AAPL, if necessary: **(800) 322-7473**	Incident Commander	_____ Completed
Notify LOGP, if necessary: (805)-733-5174	Incident Commander	_____ Completed
Activate the Oil Spill Contingency Plan - mobilize response team and order equipment and materials for spill response from particular storage locations	Incident Commander	_____ Completed
Activate the Oil Spill Contingency Plan - mobilize response team and order equipment and materials for spill response from particular storage locations	Incident Commander	_____ Completed
Confirm that agency notifications have been made, if not, make all agency notifications - refer to the Emergency Notification Matrix	Incident Commander	_____ Completed
Maintain communications with The Company Control Center	Incident Commander	_____ Completed

5.4 GAS RELEASE – NO FIRE

Note that the only gas present is utility gas used to fuel boilers.

5.4.1 GAS RELEASE – NO FIRE – CONTROL CENTER CHECKLIST

– if notified of a gas release or a gas leak at a Pump Station

NOTE: Hydrogen Sulfide vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or **(805) 683-2724 to n**otify Santa Barbara County Emergency Center	Senior Operator	_____ Completed
Confirm who is in Command and briefly assess situation: • obtain the name and phone number of the person reporting the spill • location of release or leak • extent of release (activate ESD system if leak is within or threatening the pump station) • extent of injuries • people or resources threatened • Inform caller of safety precautions to prevent ignition of the gas (no smoking)	Senior Operator	_____ Completed
Secure Source: Shut down the system and close block valves, if necessary.	Senior Operator	_____ Completed
Notify Area Supervisor on duty using current duty roster, and confirm that Area Supervisor is in command and is notifying County Agencies • take command until confirmation is made, and notify agencies (refer to Incident Commander checklist) • maintain communications with Incident Commander once contact is established	Senior Operator	_____ Completed
Attempt to notify Santa Maria Pump Station or Orcutt Pump Station	Senior Operator	_____ Completed

5.4.2 GAS RELEASE – NO FIRE – EMPLOYEE CHECKLIST

– upon notification or discovery of a gas release or a gas leak at a Pump Station

EMPLOYEE SHOULD NOT ATTEMPT TO EXTINGUISH BLAZE IF GAS IGNITES!

NOTE: Hydrogen Sulfide vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or **(805) 683-2724 to n**otify Santa Barbara County Emergency Center (in the event of a significant or sustained leak).	Employee	_____ Completed
Take Command and briefly assess situation: • obtain the name and phone number of the person reporting the spill • location of release or leak • extent of release (activate ESD system if leak is within or threatening the pump station) • extent of injuries • people or resources threatened • Inform caller of safety precautions to prevent ignition of the gas (no smoking)	Employee	_____ Completed
Secure Source: • Activate Emergency Shut Down System • Shut off all sources of ignition in the area of the leak - do not operate autos or trucks - do not start vehicles in parking lot - no smoking	Employee	_____ Completed
Shut off source of gas, only if it can be done safely • wear personal protection equipment and SCBA in the area of the release, and use gas detectors • If gas supply block valve cannot be closed at the station, gas line to facility may have to be shut off - call utility gas company: **(800) 427-2200**	Employee	_____ Completed
Notify The Company Control Center • shut down system and close blocks, if necessary	Employee	_____ Completed
Notify the Area Supervisor - if unavailable, take command until relieved by a senior employee and follow the incident commander's checklist.	Employee	_____ Completed
Evacuate facility, if necessary, and remain near location of release (upwind) • notify people and assist them to move to a safe location, if necessary • wear personal protection equipment and SCBA in the area of a gas release, and use gas detectors • provide information to the fire department	Employee	_____ Completed

5.4.3 GAS RELEASE – NO FIRE – INCIDENT COMMANDER CHECKLIST

– upon notification of a gas leak at a Pump Station

NOTE: Hydrogen Sulfide vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call 911 or (**805) 683-2724 or** verify that it has been done.	Incident Commander	_____ Completed
Take command and assess the situation • ensure that ESD, call 9-1-1 and other appropriate actions have been taken • dispatch personnel to confirm emergency	Incident Commander	_____ Completed
Notify The Company Control Center - shut down the pump station, if necessary	Incident Commander	_____ Completed
If gas supply block valve cannot be closed at the station, gas line to facility may have to be shut off - call utility gas company: **(800) 427-2200**	Incident Commander	_____ Completed
Confirm that agency notifications have been made, if not, make all agency notifications - refer to the Emergency Notification Matrix.	Incident Commander	_____ Completed
Maintain communications with The Company Control Center	Incident Commander	_____ Completed

5.5 EARTHQUAKE IN THE SANTA BARBARA COUNTY AREA

5.5.1 EARTHQUAKE – CONTROL CENTER CHECKLIST

– upon notification of an earthquake

IF AN EARTHQUAKE CAUSES AN OIL SPILL OR FIRE, REFER TO APPROPRIATE CHECKLIST!

WARNING: Expect aftershocks

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINEDASSIGNMENTS	STATUS
Take command until relieved by on-site personnel	Senior Operator	_____ Completed
Assess situation • if facilities do not shut down automatically, do not shut them down • if facilities shut down automatically, do not restart them	Senior Operator	_____ Completed
Call 911 or **(805) 683-2724** if an earthquake has caused or is suspected to have caused an oil spill or fire	Senior Operator	_____ Completed
Notify Area Supervisor on duty using current duty roster	Senior Operator	_____ Completed
Notify AAPL: **(800) 322-PIPE**	Senior Operator	_____ Completed
Notify LOGP, if necessary: (805)-733-5174	Senior Operator	_____ Completed
Monitor SCADA system for abnormalities	Senior Operator	_____ Completed
If earthquake occurs at the Company Control Center • check status of communications • notify Area Supervisor if problems with communications are found (personnel to be dispatched to man the pump station)	Senior Operator	_____ Completed

5.5.2 EARTHQUAKE – EMPLOYEE/ INCIDENT COMMANDER

– upon notification of an earthquake

REFER TO APPROPRIATE CHECKLIST, IF AN EARTHQUAKE CAUSES AN OIL SPILL OR FIRE

WARNING: Expect aftershocks

NOTE: All Company personnel should report to their place of work after assuring the safety of their family

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take command until relieved by a more senior employee	Employee	_____ Completed
Assess situation • if pipeline does not shut down automatically, do not shut it down • if pipeline shuts down automatically, do not restart it	Employee	_____ Completed
Notify The Company Control Center	Employee	_____ Completed
Notify Area Supervisor • if radio and telephone are inoperative, dispatch personnel to notify authorities	Employee	_____ Completed
Alert AAPL: **(800) 322-PIPE If necessary**	Employee	_____ Completed
Alert LOGP, if necessary: (805)-733-5174	Employee	_____ Completed
Division employees to put on appropriate personal protective equipment, and conduct a thorough inspection of all piping and valves for damage • order aerial survey of pipeline, and direct employees to drive the entire line and check the pump stations • damage may be assumed if any release or leak is seen, or if cracks are noted in any foundation, flange, pipe work, etc.	Employee	_____ Completed
Continue to man pump station and closely monitor flow and pressure readings	Employee	_____ Completed
Isolate and repair any damage detected	Employee	_____ Completed
Perform a standup pressure test, if necessary	Employee	_____ Completed
Restart system, if no damage is detected	Employee	_____ Completed

5.6 ACCIDENTS CAUSING INJURY OR DAMAGE

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take command until relieved by senior employee or fire department personnel	Employee	_____ Completed
Call **911 or** (**805) 683-2724 -** notify County Emergency Center	Employee	_____ Completed
Administer First Aid (do not delay calling **9-1-1**)	Employee	_____ Completed
Notify The Company Control Center, if necessary	Employee	_____ Completed
Warn neighboring public as appropriate	Employee	_____ Completed
Cooperate with government authorities	Employee	_____ Completed
Provide technical information to assist emergency response teams	Employee	_____ Completed
Isolate and control any source of danger	Employee	_____ Completed

5.7 DEMONSTRATIONS, THREATS OF VIOLENCE, OR CIVIL DISORDER, INCLUDING BOMB THREAT

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take Command and assess situation • use procedures on following page • do not search for explosive devices	Employee	_____ Completed
Call **9-1-1** (or 805-683-2724 from outside Santa Barbara County) to notify local law enforcement agency	Employee	_____ Completed
Refrain from radio use in the area of the threat. Some devices are detonated by radio transmission	Employee	_____ Completed
Notify District Supervisor • if unavailable, take command until relieved by a senior employee	Incident Commander	_____ Completed
If it is safe to do so, photograph demonstrating crowds, threatening individuals, and damaged facilities		

5.7.1 COMPANY PROCEDURES FOR HANDLING DEMONSTRATIONS, THREATS OF VIOLENCE, OR CIVIL DISORDER

(b) (7)(F), (b) (3)

[redacted]

5.8 ACCIDENT INVESTIGATIONS

The Area Supervisor will be required to prepare a written report of the circumstances surrounding any accident or emergency event after the incident. All employees are instructed to assist the Area Supervisor in the collection of information and description of circumstances for the required report. The primary value of accident reports is to prevent future accidents, and to reduce the potential danger to human life and property from any future accidents.

ADMONITION: Release of information regarding accidents or accident investigations by Company employees to news media or any other person must be done only after clearance by the Division Manager. See Section Seven of the Plan.

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Prepare written report and submit to Area Supervisor: - First indication of abnormal operation or emergency event. - Time of initial event or accident causing emergency. - Size of oil spill, fire. - Probable cause of the event. - Actions taken by Company personnel and others at the scene. - Persons and regulatory agencies notified, and time of notification. - Injuries. - Responses from agencies called for assistance. - Time that the emergency situation or abnormal event was brought under control.	On-Site Employee / Area Supervisor	___Completed

5.9 ELECTRICAL POWER LOSS

Warning: Watch for downed power lines. Contact with downed power lines can lead to serious injury or death.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take Command and assess situation	On-Site Employee	___Completed
Notify The Company Control Center	On-Site Employee	___Completed
Notify District Supervisor	On-Site Employee	___Completed
Call the electric utility company (PG&E) at (805) 922-1711 - confirm problem with public utility - obtain estimate for time to restore power	On-Site Employee	___Completed
Notify AAPL: **(800) 322-7473,** If necessary.	On-Site Employee	___Completed
Notify LOGP, if necessary: (805)-733-5174	On-Site Employee	___Completed
If problem is not with utility company, analyze and correct the failure.	On-Site Employee	___Completed
Inspect pump stations for process upsets.	On-Site Employee	___Completed
Notify Area Supervisor and The Company Control Center when power is restored.	On-Site Employee	___Completed

5.10 SCADA FAILURE

A failure of the Supervisory Control and Data Acquisition (SCADA) system will sound an alarm at the Company Control Center.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take Command and assess situation • direct workers to determine the nature of the problem from all available data	Employee / Senior Operator	___Completed
Notify the County Fire Department: **(805) 683-2724 (week days)** - explain that the computer system that monitors the pipeline is down	Employee / Senior Operator	___Completed
Notify District Supervisor - if unavailable, take command until relieved by a senior employee	Incident Commander	___Completed
Notify The Company Control Center	Incident Commander	___Completed
If warranted, shut down the pipeline - direct Control Center	Incident Commander	___Completed
If warranted, order closure of appropriate pipeline valves • close valves remotely, if possible close other valves at valve vaults, only after testing the vault atmosphere in accordance with confined space entry procedures	Incident Commander	___Completed
Confirm and repair the problem	Incident Commander	___Completed
Verify repairs with the Company Control Center	Senior Operator/ Incident Commander	___Completed

5.11 FLOOD

REFER TO APPROPRIATE CHECKLIST IF A FLOOD CAUSES AN OIL SPILL, FIRE, OR INJURIES REQUIRING MEDICAL ATTENTION

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take Command and assess the situation • dispatch personnel to pump stations and to the Garey Bridge to monitor flood conditions that may pose a danger to normal pipeline operations • check dike drains and tank roof drains at pump stations	Incident Commander / On-Site Employee	___Completed
Notify District Supervisor - if unavailable, maintain command until relieved by a senior employee	Employee	___Completed
Notify The Company Control Center	Incident Commander	___Completed
Shut down the pipeline system, if necessary • if necessary, dispatch crew to close other valves at valve vaults, only after testing the vault atmosphere in accordance with confined space entry procedures	Incident Commander	___Completed
Notify AAPL, if necessary: **(800) 322-7473**	Incident Commander	___Completed
Notify LOGP, if necessary: (805)-733-5174	Incident Commander	___Completed
Conduct thorough inspection of all piping and valves for damage • damage may be assumed if any release or leak is seen, or if cracks are noted in any foundation, flange, pipe work, etc.	On-Site Employee	___Completed
Isolate and repair any damage detected	On-Site Employee	___Completed
Perform a standup pressure test, if necessary	Area Supervisor	___Completed
Restart system, if no damage is detected	Area Supervisor	___Completed

5.12 WILDLAND OR ADJACENT PROPERTY FIRE

IF A WILDLAND FIRE CAUSES AN OIL SPILL, FIRE, OR GAS RELEASE, REFER TO APPROPRIATE CHECKLIST

IF A WILDLAND FIRE CAUSES INJURIES REQUIRING MEDICAL ATTENTION, REFER TO APPROPRIATE CHECKLIST

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Call **9-1-1 or** (805) 683-2724 from outside County) • notify County Emergency Center	On-Site Employee	___Completed
Take Command and briefly assess the situation • location of fire • estimated size of fire • extent of injuries • general circumstances • potential danger to normal pipeline operations	On-Site Employee	___Completed
Notify The Company Control Center	On-Site Employee	___Completed
Notify District Supervisor • if unavailable, take command until relieved by a senior employee	On-Site Employee	___Completed
Control any source of potential fuel for the fire that may be originating from the pipeline system • shut down the pipeline, if it is providing a source of fuel for the fire (otherwise, flow must be maintained to cool the steel pipe)	Incident Commander	___Completed
Assist Fire Department personnel, as requested	On-Site Employee	___Completed

5.13 FIRE PROTECTION SYSTEM FAILURE

5.13.1 FIRE PROTECTION SYSTEM FAILURE – ON-SITE PERSONNEL CHECKLIST BREAK IN THE FIRE LOOP MAIN OR FIRE PUMP DOWN

– Upon discovering a failure in the fire protection system at a pump station

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take Command and assess the situation	On-Site Employee	___Completed
Notify the County Fire Department: **(805) 686-2724** • **Will determine if continue to operate or shutdown**	On-Site Employee	___Completed
Isolate break by operating appropriate valves	On-Site Employee	___Completed
Notify District Supervisor - if available, maintain command until relieved by a more senior employee	On-Site Employee	___Completed
Notify The Company Control Center	Incident Commander	___Completed
Post "out-of-service" notice on the failed part of the system - tag valves used for isolation of damaged section	On-Site Employee	___Completed
Place portable pump in place until repairs are complete	On-Site Employee	___Completed
Repair or replace failed portion of system as soon as possible	Incident Commander	___Completed

5.13.2 FIRE PROTECTION SYSTEM FAILURE – ON-SITE PERSONNEL CHECKLIST WATER TANK LESS THAN 75 PERCENT FULL

– upon discovering a failure in the fire protection system at a Pump Station

TASK	PREDETRERMINED ASSIGNMENTS	STATUS
If water is low due to leak or rupture in system:		
Notify the County Fire Department: **(805) 683-2724** • Fire Department will determine whether facility can continue to operate or must be shut down	Employee	___Completed
Notify Area Supervisor	Employee	___Completed
Notify The Company Control Center	Employee	___Completed
Repair damage and refill water tank	Employee	___Completed
If water is low due to failure of the level maintenance system:		
Notify the County Fire Department: **(805) 681-5500** weekdays **(805) 683-2724** after hours / weekends • Fire Department will determine whether facility can continue to operate or must be shut down	Employee	___Completed
Notify Area Supervisor	Employee	___Completed
Notify Control Center	Employee	___Completed
Override automatic system and fill water tank under manual control	Employee	___Completed
Tag system as down, and maintain level under manual control	Employee	___Completed
Repair or replace system components as soon as possible	Employee	___Completed

5.14 HAZARDOUS MATERIAL RELEASE

5.14.1 HAZARDOUS MATERIAL RELEASE – CONTROL CENTER CHECKLIST

– if notified of a hazardous material release along the pipeline system or at a pump station

Warning: ***Until material has been identified by appropriate personnel treat as a worst case scenario.***

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Confirm who is in command and briefly assess situation: • obtain the name and phone number of the person reporting the spill; ascertain from the caller: • location of spill • size of spill • resources threatened by spill • fire danger • Inform caller of safety precautions to prevent ignition of the spill (no smoking)	Senior Operator	___Completed
Call **911** or **(805) 683-2724 to n**otify Santa Barbara County Emergency Center	Senior Operator	___Completed
Notify District Supervisor on duty using current duty roster, and confirm that District Supervisor is in command and is notifying County agencies • take command until confirmation is made, and notify agencies (refer to Incident Commander checklist) • maintain communications with Incident Commander once contact is established	Senior Operator	___Completed
Notify AAPL, if necessary: **(800) 322-7473**	Senior Operator	___Completed
Notify LOGP, if necessary (805)-733-5174	Senior Operator	___Completed
Attempt to notify Santa Maria Pump Station or Orcutt Pump Station	Senior Operator	___Completed

5.14.2 HAZARDOUS MATERIAL RELEASE – EMPLOYEE CHECKLIST

– upon notification or discovery of a hazardous material release along the pipeline or at a pump station

Warning: Until material has been identified by appropriate personnel treat as a worst case scenario.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take command and briefly assess situation • obtain the name and phone number of the person reporting the spill • location of spill • size of spill • resources threatened by spill or fire danger • inform caller of safety precautions to prevent ignition of the spill	Employee	___Completed
Call **911 or (805) 683-2724 to n**otify Santa Barbara County Emergency Center - if a roadway is exposed to spill vapors, alert County Emergency Center for assistance from County Sheriff (divert traffic and protect the public)	Employee	___Completed
Secure Source: • shut in source of spill, if the source is the Company pipeline • activate the ESD system, if necessary • shut off all sources of ignition within area of spill • do not operate autos or trucks; if spill vapors engulf the roadways, attempt to stop traffic • do not start vehicles • no smoking • Notify The Company Control Center to shut down system and close block valves	Employee	___Completed
Notify Area Supervisor - if unavailable, take command until relieved by a senior employee	Employee	___Completed
Notify AAPL: **(800) 322-7473**	Employee	___Completed
Notify LOGP, if necessary (805)-733-5174	Employee	___Completed
Remain at spill location (upwind) • notify people and assist to a safe location • wear personal protection equipment and SCBA in the spill area, and use gas detectors • provide information to fire department • close block valves if directed to do so, only after testing the vault atmosphere in accordance with confined space entry procedures	Employee	___Completed
Establish fire watch • wear personal protection equipment and SCBA in the spill area • deploy nearest hose reel or monitor with personnel standing by with hose, coat spill with foam, if necessary • deploy two dry chemical extinguishers to upwind side of spill with personnel standing by	Employee	___Completed
Check containment curbs & pit - install additional dikes, if necessary	Employee	___Completed

5.14.3 HAZARDOUS MATERIAL RELEASE - INCIDENT COMMANDER CHECKLIST

- upon notification of a spill along the pipeline or at a pump station.

Warning: Until material has been identified by appropriate personnel treat as a worst case scenario.

NOTE: Harmful vapors may be present. Toxic/flammable gas detectors should be used before attempting offensive mitigation actions.

PROTECT WORKERS AND PUBLIC FIRST!

TASK	PREDETERMINED ASSIGNMENTS	STATUS
Take command and assess situation • ensure that ESD, call to 9-1-1 and other appropriate actions have been taken • dispatch personnel to confirm emergency	Incident Commander	___Completed
Dispatch personnel to notify people at residences in the vicinity of a fire: Refer to Thomas Guide Maps (Section Nine) Assist people to move to a safe area (upwind)	Incident Commander	___Completed
Call **9-1-1 or (805) 683-2724** or to update County Emergency Center - if a roadway is exposed to vapors, request assistance from County Sheriff (divert traffic and protect the public)	Incident Commander	___Completed
Secure the Source - Shut in pipeline and all block valves, if necessary • direct The Company Control Center • direct field personnel to close valves, if necessary	Incident Commander	___Completed
Notify AAPL, if necessary: **(800) 322-7473**	Incident Commander	___Completed
Notify LOGP, if necessary (805)-733-5174	Incident Commander	___Completed
Activate the Oil Spill Contingency Plan - mobilize response team and order equipment and materials for spill response from particular storage locations	Incident Commander	___Completed
Confirm that agency notifications have been made, if not, make all agency notifications - refer to the Emergency Notification Matrix	Incident Commander	___Completed
Maintain communications with The Company Control Center	Incident Commander	___Completed

SECTION 6

COMMUNICATIONS

TABLE OF CONTENTS

6.0 COMMUNICATIONS

Effective and efficient communications systems are a central requirement for emergency response at every level. The communications system will be utilized to gather information and status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/diversion, repair, traffic control, security, evacuation and restoration.

Several communications systems will be available and utilized by the Company emergency response team in a response effort. The primary systems are:

- Cellular telephone system.
- Public telephone systems.
- Facsimile via public telephone system or cellular system.
- Contractor UHF and/or VHF two-way radio systems.
- Spill Cooperative UHF and VHF two-way radio networks.

These systems may be augmented by the following other communications systems as required:

- Public address systems.
- Marine VHF radio system.
- Air to ground VHF radio system.
- Local amateur radio operators.

The Company emergency response team is trained to utilize any or all of the available communications systems to implement emergency response.

6.1 TIPS FOR SUSTAINED USE OF CELLULAR PHONES

- ☐ Place unit in charging unit for any period of non-use.
- ☐ Step into a clear area out of doors for improved reception, as appropriate.
- ☐ Turn unit completely off when unused.
- ☐ Keep a spare battery in the charging unit.

6.2 CELLULAR TELEPHONES

Recent developments in the cellular telephone system permit unprecedented flexibility and access to the public telephone system from remote and mobile locations. The cellular systems are so widespread that there are few areas in California that cannot be reliably served by these networks. Units can be mounted in vehicles or hand carried to provide for the receipt or initiation of telephone calls.

Note than when calling 9-1-1 from a cellular phone, the Highway Patrol will answer, and the caller should ask the Highway Patrol dispatcher to connect with Santa Barbara County 9-1-1.

This extensive system provides a semi-private mode of telephone use that is a valuable tool for emergency

response. It permits immediate telephone service at non-connected locations such as in an Emergency Response Command Center or at remote strategic deployment areas.

In the event of a sustained response effort, additional vehicular mobile and hand-held cellular telephones can be purchased, installed, and activated to establish a more secure network of communications between the Command Center and remote work locations, and to provide direct access to the commercial telephone system. The Communications Supervisor will coordinate all requests for additional cellular telephones and other communications gear. A directory of the personnel issued cellular telephones will be tracked using the format in Table 6-1.

6.3 SATELLITE TELEPHONE COMMUNICATIONS SYSTEM

The Santa Maria District is equipped with a satellite telephone system. This system can be used if any or all of the other communication systems fail. It provides the capability of contacting the Company Control Center, All American Pipeline, contractors and government agencies in the event of an upset condition.

Telephone Number 8816-5142-9394

*NOTICE: Cellular telephone conversations can be intercepted and monitored by outsiders equipped with scanning receivers. Due to complicated switching and multiple frequency paths, deliberate monitoring of any specific parties is extremely difficult and is **unlikely** to occur. However, such monitoring is **possible**. Cellular telephones should be used with the understanding that privacy is **not** absolute.*

TABLE 6.1 - DIRECTORY FOR INCIDENT CELLULAR/SATELLITE TELEPHONES

Position	Location	Assignee	Telephone Number

6.4 INSTRUCTIONS FOR CELLULAR TELEPHONE USE

6.4.1 MAKING A CALL:

- ☐ Be sure the unit is turned on.
- ☐ Dial telephone number.
- ☐ Depress the CALL or SEND button.
- ☐ Wait for ringing sound and answer.
- ☐ Use like a regular telephone.
- ☐ When call is complete, depress STOP or END button to disconnect.

6.4.2 RECEIVING A CALL:

- ☐ Unit will ring.
- ☐ Pick up handset and depress the CALL or SEND button.
- ☐ Use like a regular telephone.
- ☐ When call is complete, depress STOP or END button to disconnect.

6.4.3 OPERATOR ASSISTED CALLS:

- ☐ Dial 0. Note: You may have to dial **1** and the **Area Code** if the phone is numbered from another area - even for local calls.

6.4.4 OTHER FEATURES (consult instruction for use):

- ☐ Auto-dialing pre-programmed numbers - allows one or two number dialing of numbers in memory.
- ☐ Redial last number - Allows re-dialing the last number dialed.
- ☐ Follow Me Roam Service - Allows incoming calls to be received if you are in the area of another service.

NOTE: In the event of a widespread event affecting local power distribution and telephone service, cellular telephones may not continue to operate if the cellular repeater power source was affected. Some repeater sites are provided with backup systems. It is likely, but not assured, that cellular telephones will be in service and usable on some occasions when local telephone service has been disrupted.

6.4.5 MOBILE PHONE SERVICE PROVIDER

Mobile Phone Service Provider can provide a GOPAC system that consists of a high-impact molded plastic case containing five transportable cellular telephones, a facsimile machine and a three-way power supply. The case is equipped with a control panel which houses appropriate metering and power supply protection circuitry along with a 24-hour digital clock and internal lighting for night operation.

Equipment included in the GOPAC includes:

- ☐ Five identical transportable phones, each supplying two hours of talk time and 32 hours of standby capacity.
- ☐ Sequential telephone numbers.
- ☐ Narrow-band format transmit capacity.
- ☐ Speech scrambler system equipped.
- ☐ RJ-11 data/facsimile interface.
- ☐ Choice of 3 db or 5 db antennas to match operation demands.
- ☐ Highly directional antennas available for fixed base operation.
- ☐ Portable, DC powered facsimile machine.
- ☐ 3-way power supply, each unit fuse protected.
- ☐ 23" x 21" rugged case equipped with internal lighting for night facsimile operation.
- ☐ Complete modular and self-supporting unit designed to withstand transportation and operation in a field environment.

Two GOPAC units are maintained in southern California, one in Santa Barbara County and the second in San Luis Obispo County. They are available on a first-come, first-serve basis for emergency communications needs. Although designed for public service agencies, they have been used in response to oil spill situations in Los Angeles and Orange Counties.

The Mobile Phone Service Provider Emergency Response Team will begin dispatch of the GOPAC system within one hour. The GOPAC system and associated cellular equipment will be set up by the responding Mobile Phone Service Provider technician. The Mobile Phone Service Provider four-wheel-drive emergency vehicle is equipped with electronic equipment that allows the operator to determine the best locations for command posts, communications units, etc.
Onsite training in the use of the equipment will be given by the Mobile Phone Service Provider technician. Training will be given to field commanders or their designated representatives, who in turn can pass the information to others. The training will consist of how to use the main features of the phones, battery care and charging both in and out of the GOPAC system, use and care of the facsimile machine, use of the internal features of the GOPAC system, and other pertinent information related to the requirements for satisfactory performance of the phones.

Field conditions during an emergency may cause a phone or other component in the GOPAC system to become unusable. Should this occur, contact the Mobile Phone Service Provider technician. The responding technician is equipped and available as needed to stay on site as long as required to provide technical backup for the equipment.

6.4.6 OBTAINING GOPAC FOR EMERGENCIES

☐ Communications Supervisor recommends procurement, and obtains authorization from Incident Commander.

☐ Communications Supervisor requests purchase and activation from the Cost Accounting / Procurement Supervisor, if possible. Otherwise:
- Call Mobile Phone Service Provider Kevin White (805) 441-000 / 441-0070/ or 444-0000
- or Mobile Phone Service Provider Area Manager: (805) 544-1565 between 8:00 am and 6:00 pm or call 441-0001

☐ Provide the following information:
- Name of the requesting officer
- Name of the requesting agency
- Contact telephone number for the Communications Supervisor and Command Center
- Location and nature of the emergency

☐ A member of the Mobile Phone Service Provider Emergency Response Team will return the call to ascertain when and where the equipment is needed and ETA onsite.

☐ The Communications Supervisor will log the names of personnel receiving phones, and their cellular phone numbers.

6.5 REGULAR TELEPHONE SERVICE

6.5.1 SANTA MARIA PUMP STATION

There is a commercial telephone line available for use at the Santa Maria Pump Station, in addition to the radio communication capabilities of on-site employees: **(805) 925-1661** - *commercial*

6.5.2 SISQUOC PUMP STATION METER FACILITY

There is a commercial telephone line available for use at the Company Meter Facility at the AAPL Sisquoc Pump Station, in addition to the radio communication capabilities of on-site employees:

(805) 925-9749 - *commercial*

6.5.3 ORCUTT PUMP STATION (UNMANNED)

(805) 937-6121 - *commercial*

6.5.4 SUMMIT PUMP STATION

(805) 489-7877 - *commercial*

6.5.5 SANTA MARIA DISTRICT PIPELINE OFFICE

(805) 925-1468 - *commercial*

6.5.6 ALL AMERICAN PIPELINE COMPANY

The AAPL emergency notification telephone number is:

(800) 322-7473 – *commercial*

6.5.7 NUEVO ENERGY COMPANY LOMPOC O&GP (FACILITY MANNED 24-HRS)

(805) 733-5174 - *commercial*
(805) 733-5095 - *commercial*

6.5.8 COMPANY CONTROL CENTER (MANNED 24 HOURS A DAY)

(877) 267-2290 – *Emergency Hotline*
(800) 231-2551 – *Duty Officer*

During response to a large incident, the Command Center may be expanded through the addition of a temporary building and equipped with a multi-station, multi-line telephone system that can be connected for sustained response. The system could be designed to accommodate six (6) outside lines and twelve (12) stations within the Command Center. Outside termination boxes could accommodate up to six (6) additional telephone lines for facsimile, additional outgoing lines, dedicated "hot" lines, and computer data links.

The Command Center will be at the San Luis Obispo Pipeline Division office, or other location in the vicinity of an incident, as selected by the Incident Commander. Telephone service should be requested immediately upon a decision to move the Command Center.

6.6 FACSIMILE

Communication of documents, maps, diagrams, reports, correspondence, and other material can be accomplished quickly and accurately via facsimile over commercial telephone lines from stationary and mobile cellular phones.

A facsimile machine should be available in the event of a sustained incident response, capable of automatic mode selection, and operating at 9600 baud. It should be capable of transmitting normal text operated in "fine" or "detail" mode to enhance graphic images. Detailed instructions for the use of the machine will be located in the Command Center.

If a facsimile machine must be operated over a cellular telephone, a device known as an acoustical coupler is needed. If this is required, the request should be made to the Communications Supervisor.

All facsimile transmissions should be accompanied by a facsimile cover sheet. The cover sheet should be clearly marked as an emergency response transmission, not to be left in an empty office.

6.7 CONTRACTOR UHF AND VHF RADIO SYSTEMS

Contractors likely to be employed in an emergency response effort frequently have vehicles equipped with VHF or UHF FM mobile radio systems. While these systems are not compatible with the other systems described, they will provide communications between work groups from the same contractor and the contractor's office. Additionally, many of the foremen and supervisory personnel have cellular telephones in their vehicles. These radio systems can be utilized to augment the operational radio in response efforts. Messages for contractor work groups, or for their Company representative, can be relayed through the

contractor's office or their vehicles.

6.8 COOPERATIVE RADIO SYSTEMS

An extensive radio system is available and can be utilized through Oil Spill Cooperatives. These radios operate on Federal Communications Commission frequencies that are specifically reserved and assigned for oil spill response.

The system consists of two separate networks that can be employed for tactical and operations coordination. Both systems have the ability to operate in either a repeater or direct communications mode. The systems do not allow communications between the networks. However, messages may be relayed between networks by parties who have control of a unit from each network. Normally the Communications Supervisor will handle message coordination between the cooperative's networks. The Incident Commander will also have access to units from both networks.

The Tactical Network will be utilized to provide communications to those members of the Response Team involved in the management, procurement, supply, and coordination of the incident. The Operational Network will be reserved to provide communications for those directly involved with the reconnaissance, diversion and containment, repair, cleanup and restoration functions which are known as field functions.

6.9 CORPORATE RADIO SYSTEMS

The Company maintains transportable communications systems for emergency response at various other production and pipeline locations. These systems are mobilized by the Incident Commander.

6.10 COMMUNICATIONS COORDINATION

The use of the combined communication resources provides a number of redundant paths for communications between the various Company offices and the other elements and resources likely to be employed in any large-scale response effort. The systems and their networks will be configured and used in a manner which best serves the incident at hand.

The Company’s regular operational radios will be utilized for initial response. If expanded or sustained response is required, the Cooperative UHF and VHF systems will be activated, freeing the regular system for the support of regular non-emergency operations needs. The system can then be augmented with equipment mobilized by corporate management.

The Communications Supervisor will be responsible for coordinating the distribution and operation of the units. The Communications Supervisor will also be responsible for maintaining assignment records for the hand-held units and chargers.

The units should not be swapped or given to others for extended use without notifying the Communications Supervisor. Units requiring repair or maintenance should be turned in to the Communications Supervisor, who will log the unit as returned and issue a replacement unit. The defective unit will be tagged with a repair tag immediately upon return. The tag should be taped to the unit and turned over to the Company

repair technician or sent to a repair shop for service.

6.11 MARINE VHF RADIO

Should an emergency occur that involves a spill into the ocean, the marine VHF radio system provides local communications between vessels and between a vessel and the shore. The oil spill response vessels of the Oil Spill Cooperatives (Clean Coastal Waters, Clean Seas, and Clean Bay) are all equipped with multi-channel marine VHF radios. Channel 16 is usually used and monitored by all vessels as a designated emergency and hailing frequency. Use Channel 16 to gain contact with a vessel, then change to a mutually agreed-upon channel for communications. This keeps the emergency and hailing frequency clear for other users. The U.S. Coast Guard port offices and vessels continuously monitor Channel 16 and can be contacted on this frequency.

When coordination and communications between vessels and the shore is required, hand-held 80-channel marine VHF transceivers or 80-channel base stations may be used. The Communications Supervisor will obtain these units, as necessary, in the event that marine operations dictate their use. Hand-held and base units are readily available at marine chandlery stores in almost every southern California port.
Marine VHF radios operate on a "line of slight" principle between stations. The signal does not bend around mountains or over the horizon. Antenna height is the single most important factor in the range of the units. Accordingly, reliable communications can be accomplished by relative low-power hand-held units if you are above the level of the sea and have a clear path. The hand-held units are particularly effective for communicating with vessels operating near the shore in oil spill cleanup operations.

6.12 AIR-TO-GROUND VHF RADIOS

All leased aircraft and helicopters are equipped with VHF air-to-ground radio transceivers. The air-to-ground VHF also operates on a "line of sight" basis. Because the aircraft is operating at altitude, its antenna is at a height which permits communication over a considerable range. Initial communications with aircraft and helicopters can be handled through the aviation contractor who has base units installed. Hand-held radios can be taken aboard aircraft (as well as vessels) to provide coordinated communications with the Response Team. For extended operations, arrangements can be made through the aviation contractor to use specific frequencies to communicate with the aircraft over VHF air-to-ground radios.

6.13 CITIZENS BAND RADIO

The Federal Communications Commission (FCC) provides 40 channels in the 27 MHz range for use by the general public. Licenses for this service are no longer required. The use of these channels is so extensive in some areas that this system is not considered of practical use in an emergency response. The units are readily available in a variety of mobile, base, and hand-held configurations, and might be considered for specialized local and non-critical service during an incident.
The FCC also permits non-licensed low-powered hand-held transceivers that operate in the 49 MHz range. These units can be very effective in providing coordination between networks within a localized area. These units have a range of one-half to one mile, and due to their low power and range, they seldom have interfering use. The units are relatively inexpensive, characteristically are powered by 9 volt, non-rechargeable batteries, and can be quickly put into service. Units are readily available in conventional

hand-held form or in a belt-mounted version with earpiece and microphone. Possible use of these units would be for inter-group coordination of containment and cleanup operations.

6.14 AMATEUR RADIO RESOURCES

Amateur Radio Operators are private citizens who have passed the licensing requirements of the Federal Communications Commission to hold communication privileges on various assigned frequency bands. They own and operate base stations and mobile units primarily as a hobby. Frequently these amateur radio operators, or "hams," establish reliable communication networks and undergo training and drills to establish proficiency in providing emergency communications during disasters when conventional means of communication are out of service. They have a rich history of such assistance and service in times of earthquakes, floods, hurricanes and other natural disasters. Their communications equipment is frequently very modern and very capable.

It is possible that telephone trunk lines, microwave paths, and fiber optics links could be disrupted in an emergency incident. Amateur networks would be a reliable link to communicate with other Company facilities.

There are three different types of emergency networks in operation by amateur radio operators. The first two networks are health and welfare networks that are activated about 48 hours after a disaster. The first type is organized and sponsored by the American Radio Relay League (ARRL) and will accept and transmit radiograms routinely or in times of emergency. The messages should be given a proper priority ("Routine", Urgent", or "Emergency") and delivered by telephone to any operator on the network. Radiogram messages should be in the form of a telegram: brief, abbreviated, and restricted to the essential message.

The second network is called Military Affiliated Radio System (MARS). It is sponsored by the military organization (Army, Air Force, etc.) and networked with powerful radio stations located at military bases. This system is primarily intended to assist personnel in the armed forces, but it will also process radiograms in times of crisis.

The third program sponsored by the AARL is the Amateur Radio Emergency Service. This organization can supply immediate communications support and is capable of both short- and long-range communications. The support can come from a request from the company to the local ARES unit, or through the OES during a declared emergency or disaster.

The ARRL network arranges direct communications if you can go to their station and arrange to have a party at the receiving station. Radiograms are the preferred medium.

6.15 GENERAL RADIO USE

Use of the radio in emergency response is essential to the coordination of the effort. Many Company employees use the radio on a daily basis in the conduct of regular operations and maintenance, and are familiar with its efficient utilization. Other members of the Response Team do not regularly use radios and are not experienced in their use. A brief explanation of efficient radio use may assist the Response Organization to use radios to their full advantage.

6.15.1 RULES FOR EFFICIENT RADIO COMMUNICATION

- ☐ Make sure that you know how to operate the unit you have been assigned. Ask, if you aren't sure.
- ☐ Hold the microphone from 1" to 2" from your lips when you speak; speak clearly and distinctively.
- ☐ Repeat or spell essential or difficult-to-understand phrases such as street names.
- ☐ Identify yourself and the party you are calling at the beginning and end of your conversation.
- ☐ Yield routine calls to any proclaimed emergency.
- ☐ Listen before you transmit to ensure that the frequency is clear.
- ☐ Keep transmissions as brief as possible, do not "ramble on".
- ☐ Use the direct mode to establish communications, if within range. Then move to the repeater mode for longer transmissions (don't forget to put the unit back to direct mode when the conversation is completed).
- ☐ Use the word "OVER" to indicate you are ready for the other party to transmit, then release the Push-to-Talk button promptly.
- ☐ Wait for others to "sign off" before starting your call.
- ☐ Except for unusual circumstances, communications should be "one on one".
- ☐ Clearly indicate your "sign off" so others will know the frequency is clear.
- ☐ Be courteous and considerate of others.
- ☐ Do not use the radio for sensitive or confidential transmissions. **Radio is not secure**. Media personnel can and often do monitor company frequencies during emergencies.

DRIVE CAREFULLY!
Do not let the use of the radio distract you!

6.16 PUBLIC ADDRESS SYSTEMS

A facility-wide loudspeaker system is installed at the Lompoc O&GP Facility. This system may be used to order an evacuation or to alert facility personnel to other information that must be announced immediately. The system is hooked up to the emergency power supply network. It is located in areas not requiring explosion-proof equipment.

Microphone access to the loudspeaker system is available in the Control Room, and in an enclosed box next to the telephones at the O&GP Facility Main Gate.

Other electronically-amplified voice systems can be employed in response to incidents for several purposes:

- ☐ Assist the traffic control.
- ☐ Assist in crowd control.
- ☐ Direct containment or diversion efforts.
- ☐ Direct repair efforts.
- ☐ Address a large gathering of the media.

The most useful system for these tasks is the hand-held hailing horn. It consists of a battery-powered amplifier mounted on a projection horn, with an on/off volume control, a push-to-talk switch, and a microphone mounted on a pistol grip. The units are sturdy, shock and weather resistant, and are designed to operate satisfactorily under adverse conditions. They may be used in marine service.

SECTION 7

PUBLIC RELATIONS

SECTION SEVEN
PUBLIC RELATIONS

TABLE OF CONTENTS

7.0 PUBLIC RELATIONS

Public Relations have always been an important aspect of crisis management. In recent years its importance has increased to the point that the handling of public relations and media coverage often shapes public and agency opinions and reactions more than the physical response to an emergency incident.

An emergency incident along Company pipelines or at Company facilities has the potential to seriously impact areas of high-density population, sensitive recreational areas, sensitive public and commercial assembly areas, and environmentally sensitive areas. Local news coverage is certain, and nationwide coverage is a real possibility.

In any large incident, it is necessary to mobilize the Company's Public Relations professionals who have extensive training, and are experienced in working with the media. Whenever possible, media contacts should be referred to the Public Information Officer or to the Incident Commander.

7.1 WORKING WITH THE MEDIA

Public Relations personnel are to take *immediate* steps to establish liaison with newspaper, television and radio representatives. In a sustained emergency, the Company Incident Commander will appoint a Public Information Officer in the event of a significant casualty or accident. The Public Information Officer will immediately notify Company Corporate Communications and will work with corporate representatives to develop and disseminate information concerning the incident.

The Public Information Officer will establish an agency and media communications and information office at the Company San Luis Obispo office, or at another designated location in the vicinity. This office will be used for all agency coordination and public information. Agencies will be furnished with the Public Information Officer's name and position, and the address and telephone number of the office. The following agencies and media will be notified when the communications and information office is established.

- County Emergency Services — 24-Hour: 805-560-1081
(805) 681-5526
after hours: (805) 683-2724
- County Sheriff's Office - Santa Maria — (805) 934-6150
- County Fire Department Fire Administration Center — (805) 681-5500
- Fire Prevention — (805) 686-8170
after hours: (805) 683-2724
- County Petroleum Department — (805) 934-6128
- Santa Maria Times — (805) 925-2691
- Santa Barbara News Press — (805) 966-3911 or (805) 564-5200

Other public media services that may be contacted to coordinate information are given in Section 7.3 of the Plan.

There will always be someone coordinating information and communications at the Incident Command Post in the field, to interface with agency officials.

Company policy requires dealing with the media in a positive, cooperative manner. The media is to be provided with pertinent factual information so that reports of the incident are not distorted or exaggerated. *Initial statements must be confined to facts that will not be subject to dispute.* Use the following criteria:

Identification of the location or name of the facility.
Time of the incident.
Type of oil, gas, or product involved.
Action being taken to control, clean up, or handle the situation.
Who is involved in cleanup or correction.
Amount of material spilled or released *(if clearly established).*
Cause *(only if unambiguously determined).*
Duration of fire or cleanup *(if known).*

Public Relations personnel, as well as all others directly involved in incident operations, should observe the following rules:

Speculation on any aspects of the incident should be strictly avoided.
Names of seriously injured or deceased persons shall be withheld pending notification of their families by Company management.
Do not attempt to bar photographs or video filming of a spill or fire.
Guide photographers, video cameramen or reporters to safe vantage points, and advise them of personal hazard areas to avoid.

Public Relations personnel are specifically charged with the following duties:

Establish a news media facility with worktables, telephones, and facsimile machines for media personnel assigned to an incident. This facility would serve as a site to make news releases, conduct press conferences and interviews, and coordinate media coverage of an incident. Hot and cold beverages, sandwiches, snacks and other amenities should be provided.

Coordinate media coverage, such as creating pool photographers, reporters, and video crews to satisfy the media without overtaxing resources that are required for other operations.

Provide photographs and videotape illustrating the Company's efforts in the incident.

Provide statistical data regarding the numbers of Company employees, contractors, consultants and others involved in containment, cleanup and restoration.

Arrange for upper management interviews and statement releases as soon as possible.

7.2 TEAM MEMBER RESPONSE GUIDE

During a sustained emergency response, the media may approach almost every member of the Response Team. The Public Information Officer will seek the cooperation of the media to abstain from attempts to get "on-the-scene" interviews with Company response personnel, who are extremely busy in their designated activities, and *not* authorized to make statements to the media. The Public Information Officer will assure the media of prompt and accurate reports of incident response efforts.

Nonetheless, if the media approaches you, you should be guided by the following:

You will be considered to be a Company corporate representative in the eyes of the media audience. As such, you should consider any contact with the media as important.

It is important to communicate that the Company has an Emergency Response Plan and a trained organization to deal with the incident, and that the Team is taking measures to mitigate the impacts of the emergency situation. State your assigned position in the response organization if asked to do so.

You should not withhold information regarding the activities you are performing. It is important that you do not speculate about anything that you do not know. **Do not discuss the nature of environmental impacts or estimate the dollar value of any damage.**

You should not speculate on the cause of the incident; instead, you should indicate that the cause is under investigation. An exception should be made if the cause is very evident, such as outside party damage. If the cause is evident, the question will probably not be asked.

You should not make statements or speculate in a manner that can be considered as commitments by the Company, or assumptions of responsibility. Such questions should be referred to the Public Information Officer or Incident Commander.

TABLE 7-1: A SAMPLE OF TYPICAL MEDIA QUESTIONS

- How big is the incident?
- Is it bigger than *{another incident}*?
- How and when did it occur?
- Whose fault is it?
- Why hasn't the Company done something to keep this from occurring? Why didn't it work?
- What are you doing? What are these men doing?
- Why aren't you doing *{whatever}*?
- Is this incident dangerous to the people living here?
- Has there been loss of life? Injured?
- Will there be an explosion or fire?
- Will hazardous materials go into the river or ocean?
- What's being done to protect wildlife and birds?
- Is this going to worsen?
- Has the source of the emergency been controlled? Why not? When will it be?
- Is there toxic material involved?
- Will the Company return everything like it was before the incident?
- Does the Company take total responsibility for this incident?
- How long will the Company work to mitigate the problem?
- Why are pipelines (or facilities) located here?
- Is the Company prepared and trained to handle this?
- How old is this pipeline (or facility)?
- Have you had problems before? How many times?
- Is this a routine problem?
- I thought the Company was environmentally concerned! What happened?
- How can a responsible company let this happen?
- *{Organization or agency}* says you're doing nothing to prevent *{occurrence}*. Why are you ignoring their concerns?
- Is this under control?
- What are your objectives at this time?
- Has this pipeline (or facility) been safety-checked? When?
- Will the Company accept volunteers to help?

7.3 LARGE AND SUSTAINED INCIDENTS

Media relations should be an important consideration for any sustained or significant incident. Public Relations personnel will be become advisors to the Incident Command staff and will consider the value of any or all of the following:

- Establishing a new update hotline for the media.
- Establishing a news update hotline for Company employees and families of the Emergency Response Team.
- Providing periodic new releases to the media.
- Providing facilities and conducting periodic news conferences.
- Providing scheduled interviews with the Incident Commander or other selected Response Team Members.
- Providing vessels for media tours of spills impacting the ocean.
- Providing aircraft or helicopters for media observation of the incident.
- Providing ground transportation to restricted access areas for media tours of containment and cleanup efforts.
- Conducting tours of Company and volunteer wildlife cleaning and rehabilitation operations.
- Providing maps and graphic illustrations depicting resource employment by the Company.

7.3.1 ADVANTAGES OF SETTING UP A NEWS CENTER

In a large and newsworthy incident, considerable control can be exercised by setting up a large conference room in a nearby hotel as a news center. This will provide a focal point for assigned reporters and camera crews, and will provide a point for news releases by the Company. It will also provide a setting for interviews and news conferences that will depict a businesslike and organized atmosphere, and convey the Company's emphasis and concern.

By maintaining such a center, the responsibility of receiving news releases and other information passes to the media representatives. Advance notices of releases, and particularly news conferences, should be made early enough to allow camera crews to set up and reporters to arrive at the center.

7.3.2 SELECTING THE NEWS CENTER LOCATION

The hotel or other facility selected for the news center should be a moderate and conservative facility. Appearances of undue economy or opulence (large and elaborate chandeliers, etc.) should be avoided.

The hotel should be conveniently located near the incident scene. It is better to use a facility separate from the hotels used to quarter either Company personnel or evacuees. A list of convenient and suitable conference facilities are listed in Section Eight of the Plan.

7.3.3 NEWS MEDIA PARITY

In all fairness, news releases and invitations to news conferences should include, or offer to include, each of the media in the area. A list of local and national news media contacts is provided in Table 7.2. Omissions can offend the media representatives and result in bad media relations. It is acceptable to limit participation to local media, who will provide coverage to their affiliates and networks. If a national network or wire service elects to directly participate, it is usually a good idea to include the other competing services.

It is not necessary to include others for individually requested interviews or coverage, but you must be prepared to provide the same privileges to all groups. Pooling arrangements should be encouraged, particularly for tours conducted by the Company or when the Company provides vessels, aircraft, or helicopters for news and film coverage.

7.4 COORDINATION WITH AGENCIES

All news releases and news conferences, and their content, should be announced to cooperating agencies prior to their actual release. Coordination with the agencies should be directed toward eliminating surprise and to avert subsequent interviews with agency personnel with opposing opinions or discrediting viewpoints.

The news center should be made available for interviews with authorities unless it is a distinctly hostile situation. Joint news conferences with federal, state, or local authorities should be considered.

TABLE 7-2: LOCAL AND NATIONAL NEWS MEDIA CONTACT LIST

Newspapers	Los Angeles Times		(213) 237-7000
	Santa Barbara News-Press		(805) 564-5200
			Or (805) 966-3911
	Santa Maria Times		(805) 925-2691
	Ventura County Star		(805) 655-2900
	Telegram Tribune		(805) 595-1111
News Services	Associated Press International		(213) 746-1200
	United Press International		(213) 580-9898
Radio Stations	ABC	KABC	(310) 840-4900
	NBC	KLAC	(213) 882-8000
	CBS	KNX	(323) 460-3343
	CBS	KSMA	(805) 925-2582
	ABC	KTMS	(805) 962-8731
	Independent	KUHL	(805) 922-7277
	Independent	KVEN	(805) 642-8595
Television Stations	ABC	KABC (7)	(323) 644-7777
	CBS	KCBS (2)	(213) 460-3000
	CBS	KCOY (12)	(805) 925-1200
	ABC	KEYT (3)	(805) 882-3933
	NBC	KNBC (4)	(818) 840-4444
	NBC	KSBY (6)	(805) 349-7910
	FOX	KTTV (11)	(213) 856-1000
	GWT	KTLA (5)	(213) 460-5500
	CNN		(213) 460-5000

7.5 WORKING WITH SPECIAL INTEREST GROUPS

In a large-scale or sustained incident, real or imagined impacts to special interest groups are likely. These groups of citizens can be informed groups of residents in the area, landowners, or others who consider that they have been individually or collectively impacted by the incident.

Other vocal and highly organized groups of environmentalists, anti-growth advocates, wildlife protection groups, and anti-oil industry organizations may become involved. Their participating may include active picketing, crashing of news conferences, participation in critical news interviews, or other activities that will produce negative news coverage.

It is important that the Company identify these groups, if possible before their reaction, and meet with them to hear and address their concerns. Although it will probably not be possible to prevent all negative press, some groups will be less vocal if they have been truthfully informed, and feel that the Company is addressing their grievances. Also, positive press can be achieved when it is announced that the Company has met with special interest groups and is aware of their issues and concerns (or at least indicate a willingness to meet with the group for that purpose).

If extremely hostile and militant groups surface and appear likely to interfere with Company activities, security measures may be required to restrict attendance or interference. Local law enforcement agencies may be requested to provide assistance, or private security personnel may be employed. Any observed indications of such activities should be reported immediately to the Incident Security Officer.

SECTION 8

RESOURCES / LOGISTICS

SECTION EIGHT
RESOURCES / LOGISTICS

TABLE OF CONTENTS

8.0 RESOURCES AND LOGISTICS

The effective response to emergency situations depends on the availability of many types of services, equipment and materials. These resources come from within the Company, the industry at large, industry cooperatives, private contractors and local, state and federal agencies. This section lists the Resources available for emergency response operations, and contains Logistics information for outside services.

The Incident Commander or the Logistics Officer orders company resources in an emergency response effort. The logistical aspect of getting Company resources to the scene of an emergency incident is relatively straightforward. Many Company personnel are assigned, or have access to, pickup trucks and other vehicles capable of carrying response gear. In addition, trucks are equipped with trailer hitches that match the connections provided on emergency response trailers that contain equipment that may be ordered in an emergency incident. The resources contained at various company locations, and the contents of the emergency response trailers stationed at the Santa Maria Pump Station and Santa Margarita Pipeline Office are listed in this section. A cache of equipment designed to accommodate the Sisquoc Pipeline Project and other Company pipelines is stored in a response trailer and in a storage container at the Santa Maria Pump Station, for use in the event of an emergency incident.

The Company is a member of Clean Seas, and can call upon this organization's resources. If an oil spill were to occur into the Sisquoc or Santa Maria River at a time when the river has enough flow to carry oil or produced water toward the ocean, assistance would be obtained from Clean Seas for containment and cleanup operations at the coastline.

Other companies operating in the Santa Maria Basin area include Nuevo and CalResources. Personnel from these petroleum operators can also be called upon if assistance is needed.

SECTION EIGHT
RESOURCES / LOGISTICS

8.1 COMPANY RESOURCES

The resources of the Company Northern Pipeline are listed here. These are resources available to the Company in the first hours of an emergency response. Resources from the Company Santa Maria Area are also listed, and may be called upon in the initial stages of an emergency, if needed. The Company resources are also available for emergency response through corporate management.

The location and telephone numbers for Company facilities having emergency response equipment is given below, and the equipment inventory is listed on the following pages. If there is no answer at the telephone numbers listed, phone the Company Control Center for assistance at **(877) 267-2290**.

Santa Maria Area Office **(805) 925-5797**
1580 E. Battles Road
Santa Maria

Creston Pump Station **(805) 238-4498**
North of the town of Creston

Shandon Pump Station **(805) 238-4989**
Highway 46 (15 miles east of Paso Robles)

Santa Margarita Pump Station **(805) 438-6201**
El Camino Road (Old Highway 101, 1 mile north of Santa Margarita)

8.2 COMPANY NORTHERN PIPELINE EMERGENCY RESPONSE EQUIPMENT

8.2.1 SANTA MARGARITA

Equipment Location: Santa Margarita Pump Station; 18781 El Camino Real; Atascadero, CA 93422					
Inspection Date:		**Inspector:**			
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Year Purchased**	**Comments****
*****Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)**					
Emergency Response Trailer #1					
1. Trailer		Each	1		
2. Tires		Each	2		
Personal Protective Equipment					
3. Cartridges, Airborne Particle		Each	3		
4. Cartridges, Organic Vapor		Each	3		
5. Face Shield Frame		Each	5		
6. Face Shields (Clear)		Each	5		
7. First Aid Kit		Each	2		
8. Floatation Devices, Personal		Each	1		
9. Pump, Draeger		Each	1		
10. Pump, MSA Combustible Gas		Each	1		
11. Radio (Kept in Main Office)		Each	1		
12. Radio, Portable		Each	4		
13. Respirators	Medium	Each	3		
14. Respirators	Large	Each	1		
15. SCBA Gear		Each	6		
Spill Containment/Absorbant Materials					
16. Absorbent Boom		Bag	5		
17. Absorbent Pads		Bag	8		
ADDITIONAL COMMENTS:					

Equipment Location: Santa Margarita Pump Station; 18781 El Camino Real; Atascadero, CA 93422					
Inspection Date:		**Inspector:**			
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty**	**Year Purchased**	**Comments****
***Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)					
Decon Equipment					
18. Brush, Scrub		Each	3		
19. Buckets		Each	2		
20. Hand Cleaner		Each	1		
21. Pool, Plastic Kiddie		Each	3		
22. Shower		Each	1		
23. Tubs		Each	3		
Emergency Response Trailer #2					
24. Trailer		Each	1		
25. Tires		Each	2		
Personal Protective Equipment					
26. Absorbent Boom, Large		Each	6		
27. Absorbent Boom, Small		Each	3		
28. Absorbent Pads		Bag	6		
29. Anchor		Each	10		
30. Boom, Containment		Feet	500		
31. Can, Gasoline (5-Gallon)		Each	1		
32. Face Shield (Clear)		Each	6		
33. Life Vests		Each	13		
34. Rope, 600’		Roll	1		
35. Sponge, Scrub		Each	38		
36. Stretcher		Each	1		
37. T-Posts		Each	6		

ADDITIONAL COMMENTS: _____

Equipment Location: Santa Maria Pump Station; 1580 East Battles Road; Santa Maria, CA 93454						
Inspector:						
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
***Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
Emergency Response Trailer #1						
1. Trailer		Each	1			
2. Tires		Each	2			
Response Equipment						
3. Calibration Station, 4-Way		Each	1			
4. Generator, EB 5000	Honda	Each	1			
5. Sample Kit		Each	1			
6. Lights, Work w/ Stand		Each	1			
7. Lights, Portable-Trailer Mounted		Each	4			
8. Radio Base Station		Each	1			
9. Radio, Portable		Each	4			
10. Rope, Poly (500' x ⅜")		Roll	1			
Decon Equipment						
11. Brushes, Scrub		Each	8			
12. Buckets, 5-Gal w/ lids		Each	6			
13. Pool, Small Plastic		Each	3			
Personal Protective Equipment						
14. Eye Wash Station		Each	1			
15. Face Shield		Each	1			
16. First Aid Kit		Each	1			
17. Respirator		Each	6			
18. Respirator Cartridges	Assorted	Each	30			
19. SCBA		Each	6			
20. SCBA, Spare Bottles		Each	4			
21. Vest, Life		Each	6			
Spill Containment/Absorbant Materials						
22. Oil Snare		Each	1			
23. Sorbent Boom		Section	23			
24. Sorbent pads		Bundle	6			

Equipment Location: Santa Maria Pump Station; 1580 East Battles Road; Santa Maria, CA 93454						
Inspector:						
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
***Comments: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
Emergency Response Trailer #1						
Hand Tools						
. Monitor, 4-Way		Each	1			
. Post Driver, "T"		Each	1			
Miscellaneous Materials						
. Battery Charger	120v x 120v	Each	1			
. Fax Machine		Each	1			
. Fax Machine Cartridge		Each	2			
ADDITIONAL COMMENTS:						

8.2.5 TRACY

Equipment Location:	Line 200 Area Office (Tracy); 7551 Carmelo Avenue; Tracy, CA 95304					
Inspection Date:		**Inspector:**				
Equipment Type	**Serial/ Model/ Size**	**Unit**	**Qty Needed**	**Qty Available**	**Year Purchased**	**Comments****
nts: Note Daily Recovery Rate for Skimmers / Containment Sq Ft for Boom / Response Time for Dispersant Equip., fuel last changed, equipment started/tested, purchase date on chemicals, storage location if not in trailer, etc.)						
EMERGENCY RESPONSE TRAILER #1						
Tires		Each	2			
Trailer		Each	1			
SPONSE EQUIPMENT						
3. Absorbent Boom	Type 270	4/Bag	7			
4. Absorbent Boom, 4” x 20’	Type 420	2/Bag	11			
5. Absorbent Pads, 17” x 19”		100/Bag	7			
6. Absorbent Rice Hull, 50 lb.		Bag	1			
7. Fire Extinguisher, 30#	Dry Chemical	Each	1			
8. Hazmat Response Kit, Brass		Each	1			
9. Post, Tee		Each	18			
PERSONAL PROTECTIVE EQUIPMENT						
10. Dräger CMS		Each	1			w/ chips for Benzene & Petroleum hydrocarbon
11. Face Shield		Each	3			
12. Face Shield Headgear		Each	3			
13. Fire Blanket		Each	1			
14. SCBA		Each	3			
15. Shin Guards, Snake		Pair	2			

DECON EQUIPMENT						
16. Brush, Long Handled	Scrub	Each	4			
17. Hose, 50' Garden		Each	1			
. Hose, Water Wand		Each	1			
. Pail, 2-Gallon Plastic		Each	6			
. Polyethylene Sheeting	6-mil	200 sq/ft	3			
. Sprayer, 3-Gallon		Each	1			
. Tub, 50-Gallon		Each	3			
HAND TOOLS						
. Jack, Floor	2 Ton	Each	1			
. Post Driver, Tee		Each	1			
ADDITIONAL COMMENTS:						

8.3 COMPANY CONTACTS

Resources and personnel are available to supplement the Santa Maria Area response assets as required from:

- Other Northern Pipeline Area:
  - Santa Maria
  - Santa Margarita
  - Taft
  - Coalinga
- Southern California Area Pipeline & Terminals Districts
  - L.A. Basin
  - Ventura
- The Company Corporation Response Team

8.4 OTHER COMPANIES OPERATING IN THE AREA

Energy Resources Group (ERG) Operating, LLC
Cat Canyon Production Office …….. (805) 937-7216

Chevron Estero District …… (805) 772-2611

Freeport McMoran
Lompoc Oil and Gas Plant ……. (805) 733-5174

Pacific Coast Energy Company (PCEC)……. (805) 310-1010 *or*
(805) 310-1889

Greka Energy
Santa Maria ……. (805) 347-8700

Plains All American Pipelines
Pipeline Control Room – Midland. …… (800) 322-7473, *or* *24-hr*
(432) 686-1716

Southern California Gas Company ……..(800) 427-2200 *24-hr*

Pacific Gas & Electric
San Luis Obispo, Santa Barbara County …….. (800) 743-5000 *24-hr*

8.5 INDUSTRY COOPERATIVE RESOURCES

As noted at the beginning of Section Eight, the *Area Oil and Gas Industry Emergency Response Plan (P-4 Plan)* may be activated to make additional industry resources available for response to an emergency incident.

The Company is a partner in the Clean Coastal Waters (CCW), Clean Seas (CS), Port San Luis and Estero Bay (PSL&EB), and Oil Spill Services Center (OSSC) cooperatives. These cooperatives provide a means of mobilizing borrowed equipment and manpower in the event of a major oil spill. The resources of these cooperatives are available to the Company, should a leak threaten or enter coastal waters.

Except for Clean Seas, the other cooperative resources would not be needed for the spill scenarios considered in the risk analysis of the Sisquoc to Santa Maria Pipeline, Lompoc O&GP to Summit Pipeline, the Orcutt, or Santa Maria Pump Stations. Clean Seas would be asked to assist the Company in the unlikely event of a significant spill into San Antonio Creek or the Sisquoc River, at one of the infrequent times when the river is flowing sufficiently to carry oil twenty miles downstream to the ocean (via the Santa Maria River).

8.5.1 CLEAN SEAS - SANTA BARBARA

Clean Seas (CS) is a non-profit oil spill response organization formed by member companies in the San Luis Obispo, Santa Barbara and Ventura County areas. The CS area of interest is the public and private properties, beaches, harbors, and offshore islands and waters along the coast of California between and including Cape San Martin to the north, and Point Dume to the south.

Clean Seas can mobilize personnel and equipment to the Santa Maria River in approximately three to four hours. Detailed information for Clean Seas resources is presented in this section.

8.6 ADDITIONAL CO-OP RESOURCES

8.6.1 EQUIPMENT LISTS

The Clean Seas equipment and material inventory is presented in Table 501-1.

TABLE 8.6.1: INVENTORY OF EQUIPMENT & MATERIALS

This List is not intended to correspond to temporary relocation and /or movement of equipment within Clean Seas Area of Response nor to periods when equipment is out of service for repairs or maintenance.

I. CONTAINMENT

a) Boom, Fast Response (Flotation X Skirt)

1) Open Ocean Boom

• Expandi 7000 (28 x 42)	3,050ft.
• Kepner 24" High Seas (28 x36)	1,500ft.
• Goodyear Sea Sentry	2,750ft.
• Expandi 4300 (20 x 23)	4,300ft.
• Oil Stop (18 x 25)	8,900ft.
• OOFF 3,000 ft. (18 x 25)	4,500ft.
Total:	25, 430ft.

2) Offshore/Near Shore/Protective Boom

• American Marine (12 x 18)	1,500ft.
• Kepner Sea Curtain (12 x 18)	7,400ft.
• Kepner Sea Curtain (8 x12)	15,200ft.
• Kepner 8" Fast Current Boom (8 x 12)	1,100ft.
• Troil Boom (8 x 10)	2,000ft.
Total:	27,200ft.

Total Boom Available:	**52,630ft.**

The total boom available will change from time to time as maintenance, cleaning, survey, and replacement occur on a regular basis.

b) Storage

1) T/B Tide-Mar VII – This Tank Barge is 160' x 139' with a storage capacity of 7,840BBLS and is normally moored off Santa Barbara Harbor.

2) Eight (8) 100 barrel Rigid Dracones (barges).

3) Storage Bags/Containers
Three (3) 5,000-gallon (120 BBLS) Kepner Floating Storage Bags
Four (4) 1,200-gallon (28 BBLS) Kepner Floating Storage Bags
One (1) 6,000-gallon (140 BBLS) Dracone Floating Bag
Twelve (12) 2,400-gallon (57 BBLS) Fast Tanks

II. RECOVERY

The following Skimmers are available at the yard, or pre-staged on vessels and near deployment sites.

Name	#	Viscosity	Open Sea Protected	GAS (G) Hydraulic (H)	BPD	Total Capacity BPD	Derated BPD
Acme 39T	1	Light	Protected	G	8,160	8,160	1,632
Acme 51T	2	Light	Protected	G	9,600	9,600	3,840
ODI	4	Heavy	Open	H	25,704	102,816	20,562
GT 185	6	Heavy	Open	H	6,768	40,608	8,121
GT 260	1	Heavy	Open	H	15,096	15,096	3,019
Lori-2	5	Heavy	Open/protect	H	12,360	61,800	12,360
Lori-3	1	Heavy	Open/protect	H	18,552	18,552	3,710
Roto 30	2	Heavy	Open/protect	H	4,800	9,600	1,920
Ro-Boom NetTrawl	2	Heavy	Open	N/A	-	-	-
Lori-5	4	Heavy	Open	H	30.912	123,648	24,729
Desmi DOP 250 Wier Skimmer	2	Heavy	Open/protect	H	15,085	30,170	6,034
					Total:	**429,635**	**85,927**

III. VEHICLES/TRAILERS

a) An assortment of trucks and response vehicles are available for immediate response operations and contracts are in place for additional equipment as needed, including a 12-ton crane truck, semi tractor, box van truck, stake, and pickup trucks, and other vehicles.

b) Enclosed Trailer Vans

Nine (9) 40-foot trailer vans stocked with boom, absorbents, small skimmers, and miscellaneous cleanup equipment. Vans are stored in strategic locations throughout the Clean Seas Area of Response.

c) Mobile Communications Center

One (1) 25-foot mobile center containing communications equipment for a mobile base station or Field Command Post. Equipment includes radios, auxiliary electrical power, and other equipment for a self-contained communications network.

d) Fast Response Harbor Trailers

Nine (9) Fast Response Harbor Trailers (FRHT) equipped with pollution control equipment including near shore protective boom, sorbent materials, and miscellaneous gear.

IV. BOATS/VESSELS

a) Oil Spill Response Vessels (OSRVs)

OSRV's are normally moored near Santa Barbara Harbor and Point Conception. Movement of OSRV'S outside the Area of Response requires concurrence of Federal/State agencies if suck movement significantly reduces cleanup response capability.

Each vessel has: Two Lori Five Brush advancing skimmer units and accessory equipment; 1,500 feet of 70 inch Expandi Boom or Kepner 24-inch High Seas Boom on a hydraulic reel, and 3,000 feet on medium duty boom (Oil Stop Continuously Inflatable and /or 43-inch Expandi Boom with Roto-Pak recovery system), a GT 185/260 and Roto Drum 30 skimmer with power unit, a 10-ton or larger crane, a calibrated dispersant application system with dispersant, ten bags each of absorbent boom and pads, one Desmi 250 heavy oil pump, a site characterization kit, an infrared camera surveillance system, and oil storage.

b) Spill Response Vessels (SRV's), Fast Response Support Boats (FRSB), and Miscellaneous Small Boats

- Two (2) Small Response Vessels:
- "Comet" (32 x 8 feet) is equipped with Lori Two Brush Side Skimmer. "Clean Sweep" (32 x 11 feet) is equipped with Lori Three Brush Skimmer installed in the hull.
- One (1) 32 x 8 foot Fast Response Support Boat with outbound motors (Ajax).
- One (1) 24 foot Rigid Hull Inflatable Boom Boat and three 10 to 18 foot inflatable boats.
- Two (2) 21 foot MonArk Utility boats with outboard for use as work/boom boats.
- One (1) 19 foot boom towing skiff (Clean Pull).
- Eighteen (18) 15 to 18 foot aluminum skiffs with outboard stored at Clean Seas Support Yard.

Note: Individual boats and pieces of equipment are subject to periodic transfer between vessels and the support yard for maintenance an/or training exercises.

V. ABSORBENTS/DISPERSANTS/SPRAY EQUIPMENT

a) Clean Seas maintains a large inventory of absorbents including booms, sweeps, blankets, sheets, bags, and "pom-poms". Inventories are stored in the Carpinteria Yard, on Oil Spill Response Vessels, and in vans situated throughout the Clean Seas Area of Response. Additional quantities are available as back-up supplies from warehouses in the Los Angeles area.

b) Corexit #9527

18,000 gallons of Corexit #9527 dispersnt are stored at the Clean Seas Support Yard, and on the Oil Spill Response Vessels.

c) Helicopter Chemical Dispersant Spray Unit

Two (2) Simplex Model 2000 helicopter dispersant sprayers with 150-gallon buckets and 32 foot booms.

d) Surface Chemical Dispersant Spray Unit

Two (2) surface dispersant spray unit with pump, booms, and mountings for OSRV's. Capability to use five monitors for dispersant application.

e) Transfer Pumps

7 - Desmi Pumps (DOP 250) used as a cargo transfer pump, can move product at a rate of 440 GPM. These submersible pumps feature a modified archimedies screw pump including a built-in rotating sealing disc which interlocks with the screw windings. This allows the pumps to provide up to 150 psi. Hydraulic flow on this model is 42 GPM. Maximum hydraulic pressure is 3,000 psi.

2 - FRAMCO TK-150 Pumps. The TK-150 has the capacity to transfer a product at a rate exceeding 600 GPM. This submersible unit is a single –stage centrifugal portable pump.

3- YanMar diesel powered 2-inch Master Pumps with a rated capacity of 125 BPH provides highly portable and safe pumping capacity.

5- YanMar diesel powered 3-inch diaphragm pumps with a pumping capacity of 114 BPH.

VI. RADIO COMMUNICATIONS SYSTEM

a) A complete radio system consisting of VHF on 159.480/158.445 MHz and UHF on 454.00/459.00 MHz. This provides solid communication throughout the Clean Seas Area of Response. This system consists of:

20	VHF handheld (Motorola) HT 1000
5	UHF Handheld Units (Motorola)
1	VHF/UHF Base Station – Clean Seas Office
1	VHF/UHF Base Station – Clean Seas Support Yard
1	VHF/UHF Base Station – Mobile Communication Center
3	VHF Mobile Units – Mr. Clean & Mr. Clean III
9	Marine VHF radios – Mr. Clean & Mr. Clean III, Ajax, Comet, RHIB, Clean Sweep, Clean Pull
1	UHF Mobile Unit – Mr. Clean
1	Repeater – Santa Ynez Peak (VHF – 158.445 MHz, UHF – 459.00 MHz)
21	Celluar telephones – vessels, vehicles, portables
8	Facsimile machines – Clean Seas Office (2), Clean Seas Support Yard (3), Mr. Clean, Mr. Clean III, portable (cellular) (motor home)

VII. MISCELLANEOUS

a) Large inventory of equipment including forklifts, compressors, pumps, tanks, generators, tools, accessory parts and spares, and other miscellaneous oil spill cleanup equipment located in the Clean Seas Support Yard and other strategic locations in Clean Seas Area of Response.

b) Two (2) ORION Spill Tracking Systems with a total of 10 buoys. One transciever Is located on Mr. Clean III and the other is located in the Clean Seas Support Yard with buoys pre-staged on the Clean Sweep, Mr Clean III, and the Clean Seas Support Yard.

c) Three (3) Vessel of Opportunity Skimming System (VOSS) Jib Arms. Can be used with stationary skimmers mounted on an offshore supply vessel, barge, or other suitable platform to provide additional advancing skimmer capability.

d) One (1) Portable Global Positioning System (GPS) receiver.

e) Five (5) propane-powered wildlife hazing guns.

f) Two (2) All-Terrain Vehicles.

g) 100+ Visual Tracking buoys located on OCS Platforms, Clean Seas, Support Yard and Clean Seas Vessels

8.7 BACKUP CONTRACTORS AND SUPPLIERS USED BY CLEAN SEAS

Clean Seas relies on additional contractors to provide specific support functions to fully utilize the spill response equipment belonging to the members. Contracts with these services range from open purchase orders to specific contracts time charters for equipment, personnel and services. Other supply sources are maintained without specific contracts such as out-of-state suppliers of sorbents, personnel protective equipment and replacement parts. Mutual Aid Agreements with other cooperatives provide a source of specialized equipment and personnel on as-available basis.

8.7.1 PERSONNEL

Clean Seas provides a core of highly trained and experienced personnel to maintain and provide quick response to a spill. However, except for spills of 50 barrels or less, additional personnel are required to operate the amount of equipment needed to mount an appropriate response. The Clean Seas training program is designed to train member company personnel and their contractors to assist Clean Seas Supervisors in oil recovery, protective booming and containment of oil. This program has been proven successful time after time as member company personnel and/or their contractors have quickly been made available to operate equipment under the supervision of Clean Seas in both real spills and numerous agency called drills.

In the event of a spill of over 2,500 barrels, Clean Seas has estimated that more than 100 additional personnel would be required to fully utilize all of Clean Seas' resources, including protective booming. In the event of a large spill, all personnel resources will be in demand and the need to have far more sources available to draw from than is realistic. A limiting factor for personnel resources in the level of OSHA HAZWOPER-trained personnel a company may have. Most individual labor sources that provide workers to the oil and chemical industries are now providing 24-hour HAZWOPER trained personnel. Another factor that is of concern for on-water operations is the level of training in marine operations. Clean Seas has contracted with several sources that can provide personnel that have marine experience. Clean Seas has contracted with Metson Marine to utilize more than 65 experienced HAZWOPER trained vessel operators and marine personnel through CERT. The Crew Emergency Response Team is obligated to provide these response personnel within 12 hours anywhere within California. Additionally, Clean Seas has contracted with several temporary service companies that can provide light industrial workers in large quantities in short periods of time. An 8-hour Post Emergency HAZWOPER course has been developed and utilized by Clean Seas to provide training to low-risk personnel involved in such activities.

Table 8.7-1 outlines sources of personnel that may be available in the event of a need. This listing is a conservative approach and the actual numbers could be much higher depending on the circumstances. Our experience has been that there has been little problem in locating adequate numbers of personnel.

8.7.2 EQUIPMENT

Additional equipment not owned by Clean Seas is available from many commercial sources. Table 8.7-2 is a list of contractors and equipment that is most common to Clean Seas spill responses in the past and provides an indication of the availability of equipment maintained for other commercial and marine uses. This listing is by no means complete and the availability of listed equipment is also subject to other commercial activities taking place at the time of need. Clean Seas intends on developing a localized database that can be accessed by type of equipment needed that will assist member company expediters in locating specific equipment.

8.7.3 CASCADABLE EQUIPMENT FROM OTHER COOPERATIVES

Table 8.6-3 and 8.6-4 are lists of cascadable resources available from other California oil spill response cooperatives. These resources would be readily available to assist in responding to spills with in the Clean Seas Area of Interest.

8.7.4 FISHING VESSEL UTILIZATION

Clean Seas, in conjunction with the Ventura County Commercial Fisherman's Association founded the Fisherman's Oilspill Response Team (FORT) in 1990. Clean Seas provides the financial assistance to maintain an office and coordinator to track and update records of over 280 fishermen who have participated in the Clean Seas Training for Fisherman. Over 160 vessels have been professionally surveyed and have been entered into a database by size, construction, fishery, age, location and owner.

FORT has been utilized to provide booming, logistics and wildlife rescue platforms in three spills over the past three years. Over 150 fishermen have signed contracts with Clean Seas as of January 1996. A copy of the FORT contract has been submitted in the Application for Contractor Approval.

TABLE 8.7.1: PERSONNEL AVAILABLE FOR RESPONSE

Source of Personnel	Telephone #	Labor Hazwoper	Labor Non Hazwoper	Small Vessel Operators	Supervisor	Supervisor (Bilingual)
Adobe Company, Ventura	805-643-1895	X	X		X	X
A.J. Diani Construction, Santa Maria	805-925-9533	X	X	X	X	
Advanced Cleanup Tech, Inc., Carson, CA	310-763-1423	X	X	X	X	X
B&C Welding, Port Hueneme	805-488-3615		X	X	X	X
California Conservation Corps, Ventura	805-484-4345	X	X	X	X	
Clark Engineering, Ventura	805-643-8119	X	X	X	X	X
Crowley Marine Services, Long Beach	310-491-4700	X	X	X	X	X
Metson Marine, Ventura	805-658-2628	X	X	X	X	
Offshore Crane, Ventura	805-648-3348	X			X	
OST Trucking & Crane Service, Ventura	805-643-9963	X			X	X
Pacific Petroleum Corp., Orcutt	805-925-1947	X				
Select Temporaries, Santa Barbara	805-687-1200		X		X	X
Staff America, Santa Barbara	805-963-2442		X		X	X
Trac Tide Marine Corp., Port Hueneme	805-984-8062	X				
VPS Inc. Ventura	805-647-3495	X	X	X	X	X
Western Temporaries, Santa Barbara	805-962-5229		X		X	X

TABLE 8.7.2: CONTRACTORS AND EQUIPMENT AVAILABLE FOR RESPONSE

Contractor	City	Telephone	Equipment Available for Response
Adobe Co.	Ventura	805-643-1895	Heavy earthmoving equipment
Advanced Cleanup Tech. (ACTI)	Carson	310-763-1423	ATVs, Boom, Skimmers, Communications, General Oil spill/hazardous material emergency response
Stoltcomex	Oxnard	805-488-6428	Oilfield diving, Underwater welding and fabrication, Mooring installation, Vessels
Artic Air	Lompoc	805-614-9400	Helicopter services
Aspen Helicopters	Oxnard	805-985-5416	Helicopter services
Associated Pacific Contractors	Morro Bay	805-772-7472	Crane barge, Small tug, Shallow water diving and salvage
Castagnola Tug Services	Santa Barbara	805-963-4961	Small tugs, Workboat with "A" frame (manned)
Clark Engineering	Ventura	805-643-8119	Boom, Earth moving equipment, Shoreline Cleanup
Contractors Equipment Compnay	Oxnard	805-983-3969 800-326-3616	Heavy earth moving equipment, Pumps, Trucks
Crowley Maritime	Long Beach	310-491-4700	Salvage, Large Tugs, Barges, Misc. vessels
Ecology Control Inc. (ECI)	Ventura	805-648-5125 (24hr)	Vacuum trucks, Tank trucks, Waste Bins
Foss Maritime	Long Beach	206-281-3768	Boom, Skimmers, Trucks, Shoreline cleanup, Environmental services

TABLE 8.7.2: Contractors and Equipment Available for Response Continued

Contractor	City	Telephone	Equipment Available for Response
Hertz Equipment	Ventura	805-658-9100	Trucks, Frontloader, Backhoes, Light towers, Misc. equipment
Sterling Communications	Santa Maria	805-739-9259	Two way radio rental
Oceaneering	Santa Barbara	805-656-3224	Oilfield diving
OST	Ventura	805-643-9963	Trucks, Cranes, Forklifts, Waste bins
Pacific Petroleum	Santa Maria	805-925-1947	Vaccuum Trucks, Waste bins, Tank trucks
Tidewater Marine	Port Hueneme	805-271-1313	Crew boats, Supply vessels (manned)
Trac Tide Marine	Port Hueneme	805-984-8062	Boom, Small tug, Other small boats (manned)
T&T Trucking	Ventura	805-648-3348	Trucks, Cranes, Forklifts, Waste bins
VPS	Ventura	805-647-3495	Vacuum trucks, Waste bins, Tank cleaning Portable tanks

8.8 AGENCY RESOURCES

The following agencies may be called upon to assist in an emergency response effort.

California Conservation Corps - Torrance **(310) 516-4570**
700 trained people provided locally within 2 hours. 1,500 within 72 hours.

National Oceanic & Atmospheric Administration (NOAA) **(559) 584-3752**
Local 24-hour weather forecasts through the National Weather Service
Expertise through Scientific Support Coordinators

U.S. Coast Guard Pacific Strike Force **Captain Wright** **(562) 980-4444**
Spill Response Equipment Stored in Marin County

U.S. Navy Supervisor of Salvage – Stockton **(209) 944-0291**
Spill response and salvage equipment stored in Stockton

EPA Environmental Response Team
Expertise in treatment technology, biology, chemistry, hydrology, geology and engineering

National Response Center **(800) 424-8802**

EPA Region 9 **(415) 947-4400**

California State Fire Marshal **(916) 445-8477**

8.9 CONTRACTOR & COMMERCIAL RESOURCES AND LOGISTICS

This section lists companies offering services and resources that may be required during an emergency response incident. As noted at the beginning of Section Eight, the *Area Oil and Gas Industry Emergency Response Plan (P-4 Plan***)** may be activated to make additional industry resources available for response to an emergency incident. The *P-4 Plan* contains additional contractor logistics information.

Section 8.10.1 contains a "short list" of the Company Northern Pipeline contractor resources that would be considered first for assistance in the event of an emergency incident.

Section 8.10.2 contains a list of resources for emergency services in the following categories:

- Accommodations
- Aircraft Leasing
- Automobile Leasing
- Barricade and Traffic Control
- Beach Cleanup
- Boom Services
- Chemical Agents
- Communications Services
- Computer Services
- Concrete Sawing
- Conference Facilities
- Construction & Electrical Services
- Cranes
- Documentation Contractors
- Dump Trucks
- Excavating & Vacuum Trucks
- Hauling Contractors
- Labor
- Laboratory Services
- Lease Services
- Personnel Services
- Pipeline Repair
- Portable Lighting
- Pumps
- Safety Equipment
- Sand and Gravel
- Security Services
- Shoring
- Spill Cleanup
- Transportation
- Warehousing & Storage
- Welding

8.10 COMPANY SHORT LIST

Contractor resources that may be called upon to assist in an emergency response effort are given here. The following pages indicate contractor contacts for Northern California Division Pipeline, in each emergency response specialty.

Given below (pages 8-28 through 8-31) is the "short list" of contractor resources that would be considered first for assistance in the event of an emergency incident. The Company has prior experience with these area contractors, and has verified the requirement of HAZWOPER training for contractor personnel responding to an emergency incident.

General Contractors

A.J. Diani ……... (805) 925-9533 - 24 hr
Manpower, laborers, welders
Heavy equipment, A-frames, flatbeds, pickups, 4-wheel drives, dump trucks
Hand Tools

Engel & Gray, Inc. ……..(805) 925-2771 - 24 hr
Manpower, welders
Heavy and light equipment

Other Contractors

Fesler Construction …….(805) 937-3205

Vacuum Trucks

Speed's Oil Tool Services …….. (805) 925-1369 - 24 hr
55 bbl, 70 bbl, 110 bbl Portable tanks

Pacific Petroleum ……... (805) 925-1947 - 24 hr
70 bbl, 110 bbl Portable tanks (805) 928-1908 - 24 hr

Manpower

California Conservation Corps. …….. (805) 549-3561 - 24 hr
(Answering machine is checked for messages around the clock)

Miscellaneous Clean-up

Clean Seas, Inc. …….. (805) 684-3838 - 24 hr
ASI - Ajit Shah, Inc. ……... (323) 436-0211 - 24 hr

Contamination Assessment

OEC …….. (805) 922-4772 - 24 hr
Earth Systems Environmental …… (805) 541-5983
Geoservice ……. (805) 546-9100

Hazardous Materials Clean-up

Industrial Waste Utilization …… (805) 925-0391 - 24 hr
Calpi, Inc. ……..… (805) 925-2231 - 24 hr
R. Baker, Inc. ……. (805) 489-8711

Bird Guns (compressed air noisemakers)

Clean Seas, Carpinteria Yard ……. (805) 684-3838 - 24 hr

Suppliers

Bakersfield Pipe and Supply …….. (661) 589-9141
Pipe, fittings, pipe clamps, etc.

Cuesta Equipment …….. (805) 544-2540 - 24 hr,
Hand Tools, hardware, etc. *(805) 543-8584, or*
(805) 925-8688

Hayward Lumber ……... (805) 543-0825,
Hardware, roll plastic, lumber, plumbing *(805) 489-8354, or*
(805) 928-8557

Team, Inc. …….. (415) 676-0390 - 24 hr
On-stream leak repair service, hot tapping and line stopping

Others

Coast Rock ……. (805) 925-2505

Coast Welding ……... (805) 928-3621 *or*
(805) 346-9175 - pager

Farm Supply Company …….. (805) 543-3751 - 24 hr
(805) 922-2737, or
(805) 238-1177

Hanson Chemicals ……. (805) 438-5778

Hazardous waste disposal sites for oily wastes and other hazardous materials are:

Kettleman Disposal Facility …… (800) 222-2964 - 24 hr
Chemical Waste Management, Inc. …… (559) 386-9711

Office:
P.O. Box 1104; Coalinga, California 93210
(559) 386-2711

Disposal Site:
P.O. Box 471; Kettleman City, California 93239
Four miles southwest of Kettleman City; six miles northwest of Avenal, entrance is three miles south of Highway 41, Kern County.

8.11 CATEGORIZED RESOURCE AND LOGISTICS DATA

The following additional contractor resource and logistics information has been developed to assist Company personnel in the event of an emergency incident. Also refer to the logistics information in the **P-4 Plan**.

8.11.1 ACCOMMODATIONS (average daily rate)

Bay View Lodge …… (805) 772-2771
225 Harbor Street; Morro Bay, CA 93442

Best Western Big America …… (805) 922-5200
1725 N. Broadway St.; Santa Maria, CA 93454

Best WesternVandenberg Inn ……. (805) 735-7731
940 E. Ocean Avenue; Lompoc, CA 93436

Best Western Tradewinds ..…… (805) 772-7376
225 Beach Street; Morro Bay, CA 93442

Best Western El Rancho .…… (805) 772-2212
2460 Main Street; Morro Bay, CA 93442 *(Restaurant)*

Best Western San Marcos …… (805) 772-2248
250 Pacific Avenue; Morro Bay, CA 93442

Breakers Motel ……. (805) 772-7317
Morro Bay & Market; Morro Bay, CA 93430

Cypress Tree Motel …….. (805) 995-3917
125 S. Ocean Avenue; Cayucos, CA 93430 *(Suites)*

Quality Inn …….. (805) 922-5891
210 S. Nicholson Street; Santa Maria, CA 93454

El Morro Masterpiece …… (805) 772-5633
1206 Main Street; Morro Bay, CA 93430 *(25 rooms & 3-suites)*

Embarcadero Inn ……. (805) 772-2700
456 Embarcadero; Morro Bay, CA 93442

Estero Bay Motel ……. (805) 995-3614
25 S. Ocean Avenue; Cayucos, CA 93430 *(Suites)*

Americas First Value Inn ……. (805) 925-2551
839 E. Main St.; Santa Maria, CA 93454

Days Inn Harbor House at Morro Bay …… (805) 772-2711
1095 Main Street; Morro Bay, CA 93430

Holiday Inn …… (805) 928-6000
2100 N. Broadway Street; Santa Maria, CA 93454

Roadway Motel ……. (805) 772-7503
540 Main Street; Morro Bay, CA 93442

Econo Lodge - Morro Bay ……..……. (805) 772-5609
1100 Main Street; Morro Bay, CA 93442

Motel 6 Santa Maria North …….. (805) 928-8111
2040 North Preisker Lane; Santa Maria, CA 93454

Best Value Inn ……..…….. (805) 735-3737
1200 North "H" Street; Lompoc, CA 93436

Radisson - Santa Maria …… (805) 928-8000
3455 Skyway Drive; Santa Maria, CA 93455

The Historic Santa Maria Inn ……. (805) 928-7777
801 S. Broadway St.; Santa Maria, CA 93454

Ascot Suites ……. (805) 772-4437
845 Morro Avenue; Morro Bay, CA 93442

The Twin Dolphin …….. (805) 772-4483
590 Morro Avenue; Morro Bay, CA 93442

Days Inn ……..……. (805) 735-7744
1122 North "H" Street; Lompoc, CA 93436

Villager Motel …… (805) 772-1235
1098 Main Street; Morro Bay, CA 93442

8.11.2 AIRCRAFT LEASING

Aspen Helicopters, Inc. …….. (805) 985-5416
2899 West 5th Street; Oxnard, CA 93030 *(Aerial application of dispersants)*

Arctic Air Service Inc. ……. (805) 964-0684
302 Moffett Place; Goleta, CA 93117
(Observation, aerial photography, transport, cargo, heavy cargo, equipped for Medivac)

8.11.3 AUTOMOBILE LEASING

Avis ……..(805) 544-0630 *or*
901-2 Airport Drive; San Luis Obispo, CA 93401 *(800) 331-1212*

Avis …… (805) 392-4160 *or*
9841 Airport Blvd.; Bakersfield, CA 93308 *(800) 331-1212*

Budget Car & Truck Rental ……. (805) 541-2722 *or*
901.3 Airport Drive #10; San Luis Obispo, CA 93401 *(800) 527-0700*

Budget Car & Truck Rental ……. (805) 922-2158 *or*
3249 Skyway Drive; Santa Maria, CA 93455 *(800) 527-0700*

Enterprise Rent-A-Car …… (805) 349-9552 *or*
1738 S. Broadway; Santa Maria, CA 93454 *(800) 325-8007*

Hertz …….. (805) 781-3380 *or*
901.5 Airport Drive; San Luis Obispo, CA 93401 *(800) 654-3131*

8.11.4 BARRICADE AND TRAFFIC CONTROL

Highway Technologies, Inc. …….. *24-hour* (805) 647-9716
10999 Nardo; Ventura, CA 93004
(Arrow trailers, blinker lights, cones, traffic signs, traffic plates, K rail, barricades, delineators, vests, flags, crane trucks, 1" steel rail)

United Rentals ……..(805) 922-2151
1935 North Preisker; Santa Maria, CA 93454

Ventura Rental Center …… (805) 648-2819
3072 Telegraph Road; Ventura, CA 93003
(Barricades, traffic delineators, construction signs, vests, traffic plates, cones, flags)

Pacific Petroleum ……(805) 925-1947
1571 Betteravia Road, Santa Maria, CA 93454
(blinker lights, cones, traffic signs, k-rails barricades, delineators, hydro-cranes, flagmen)

8.11.5 BEACH CLEANUP

ACTI *24-hour* (310) 763-1423
18414 Santa Fe Ave.; Rancho Domingues, CA 90221
(Advance cleanup of oil spills for ocean purposes)

Pacific Construction ……. (805) 525-2144
1350 E. Santa Paula Street; Santa Paula, CA 93060
(Vacuum trucks, Cat loaders, John Deere loaders, backhoes, Deere excavators, low-bed trailer, pickups, generators, lights, booms, pads, sorbents, pumps, A-frame trucks, tilt bed trailers)

8.11.6 CHEMICAL AGENTS

BetzDearborn ……..…… (800) 736-2389
P.O. Box 3002; Trevose, PA 19053-6783
(OSD/LT - dispersant, low toxicity, biodegradable, licensed by U.S. EPA. Small quantities in various locations on west coast, large quantities can be manufactured quickly)

Kidda Fire Company ……. (610) 363-1400
150 Gordon Drive; Exton, PA 91341

8.11.7 CONCRETE SAWING

Penhall Company ……. *24-hour* (805) 482-4634
554 Dawson Drive; Camarillo, CA 93010 *(323) 321-6131 or (714) 772-6450*

8.11.8 CONFERENCE FACILITIES

Sands Motel - San Luis Obispo ……..… (805) 544-0500
1930 Monterey; San Luis Obispo, CA 93401 *(Conference room, overhead projector, projection screen, audio system)*

Historic Santa Maria Inn ……(805) 928-7777
801 S. Broadway; Santa Maria, CA 93454 (*Conference room, meeting room, projection screen, overhead projector)*

Radisson - Santa Maria ……(805) 928-8000
3455 Skyway Drive; Santa Maria, CA 93455

8.11.9 CONSTRUCTION & ELECTRICAL SERVICES

Taft Electric Company ……(805) 688-0121
650 Alamo Pintado Road, Suite 201; Solvang, CA 93463-2266
Contact: Robert Jeppesen Email: rjeppesen@taftelectric.com
(Specializing in Commercial, Industrial electrical installation and repair. Motor/power system testing, electrical system construction, electrical system trouble shooting, motor control work, motor installation, oil field electrical installation and service, special item location/ordering, schematic electrical engineering & drawing for small systems)

Lahr Electric Motors, Inc. ……(805) 922-8326
119 W. Mill Street; Santa Maria, CA 93454
(Electric motor repair)

Pacific Construction ……. (805) 525-2144
1350 E. Santa Paula Street; Santa Paula, CA 93060
(Oil field construction, excavation, HazMat hauling, spill cleanup and containment)

8.11.10 CRANES

Briles Wing & Helicopter …… *24-hour* (818) 994-1445
16303 Walterman Drive; Van Nuys, CA 91406 *(Aircrane specialist - 5000 lb. capacity)*

Specialty Crane & Rigging …….. *24-hour* (805) 922-8077
1555 East Betteravia Road.; Santa Maria, CA 93454
(Heavy Rigging, Construction, Clamshell & Dragline, Tilt UPS, Rip Rap, Machinery Moving, Pile Driving, Custom Fabricated Spreader Bars & Rigging Equipment, Certified Sling Testing, Steel Erection, Trucking, Steel

O S T Trucks & Cranes ……*24-hour* (805) 643-9963
P. O. Box 237 or 2951 North Ventura Avenue; Ventura, CA 93033
(Hydraulic & conventional cranes - 5 to 150 ton. Forklifts, end dumps, boom - 50' to 300', hazardous waste, stinger trucks - roll off trucks & box)

Rob Peterson …….. *24-hour* (805) 688-0800
1120 Mission Drive #12; Solvang, CA 93463

8.11.11 BULLDOZERS

Specialty Crane & Rigging …….. *24-hour* (805) 922-8077
1555 East Betteravia Road.; Santa Maria, CA 93454
(Hydraulic cranes, slings, manbasket, lowbed truck, 100-ton truck crane, flatbed trucks, spreader bars)

8.11.12 DOCUMENTATION CONTRACTORS

Fugro West ……. (805) 658-0455
Land and Sea Surveys Division
2259 Portola Road; Ventura, CA 93003
(A.L.T.A. surveys, rig and barge positioning, well locations, pipeline surveys, aerial control, acoustical positioning, differential G.P.S. surveys, hydrographic surveys, offshore navigation)

Pacific Western Aerial Surveys ……... (805) 963-0382
329 South Salinas; Santa Barbara, CA 93103 *(Aerial photography)*

Reese-Chambers Systems Consultants, Inc. ……. (805) 386-4343
P. O. Box 8 or 3379 Somis Road, Suite G; Somis, CA 93066
(Risk analysis, air quality modeling/analysis, probability analysis, plans, and programs)

8.11.13 DUMP TRUCKS

O S T Trucks & Cranes ……*24-hour* (805) 643-9963
P. O. Box 237 or 2951 North Ventura Avenue; Ventura, CA 93033
(End dump trucks, flatbed trucks, pilot car service, bin transfer trucks, 100' stinger trucks)

Pacific Petroleum …… (805) 928-1908
P.O. Box 2646; Orcutt, CA 93457 or 1571 East Betteravia Road; Santa Maria, CA 93454
(E*nd dumps, vacuum trucks, bottom dumps, etc.)*

8.11.14 EXCAVATING & VACUUM TRUCKS

A. J. Excavating ……. (805) 466-0300
4990 Traffic Way; Atascadero, CA 93422 *(Paving, grading, underground utilities)*

American Welding Company ……. (805) 653-5541
1070 N. Ventura Avenue; Ventura, CA 93001
(Welding, pipeline freezing, backhoes, industrial construction, pipeline repair, hot tapping, consulting)

A. J. Diani Construction ……. (805) 925-9533
295 N. Blosser; Santa Maria, CA 93454 *(Bulldozers, scrapers, backhoes, etc.)*

ECI Oilwell Service …… (805) 648-5123
136 E. Telegraph; Filmore, CA 93015 *(Vacuum trucks, storage tanks, roll off trucks, flatbed trailers, end dumps)*

Engle & Gray, Inc. …… *24 hour* (805) 925-2771
745 W. Betteravia Road; Santa Maria, CA 93456
(Backhoes, dozers, labor, pipeline construction/repair, welding, HazMat hauling, loaders)

G. F. Garcia & Sons, Engineering Contractors …… (805) 995-3548
PO Box 525 or 123 Park Avenue; Cayucos, CA 93430 (*Earth moving)*

Negranti Construction ……..... (805) 995-3357
1424 Old Creek Road; Cayucos, CA 93430
(Vacuum trucks, loaders/backhoes/rear gannons, excavators, dumps, pickups, compressors, lights, trailers, sorbents, booms, pads, generators)

Pacific Petroleum …… (805) 928-1908
P.O. Box 2646; Orcutt, CA 93457 or 1571 East Betteravia Road; Santa Maria, CA 93454
(E*nd dumps, vacuum trucks, bottom dumps, etc.)*

8.11.15 HAULING CONTRACTORS

Barnett Trucking Inc. - Barnett Vacuum Truck Service …… *24 hour* (805) 524-2377
136 East Telegraph Road; Fillmore, CA 93015
(60-bbl vacuum trucks, 100-bbl vacuum trucks, 700-bbl vacuum tanks, flatbed trailers, tractors, flatbeds, lowbed, tractor-mounted crane)

ECI Oilwell Services …… *24 hour* (805) 648-5123
136 E. Telegraph; Filmore, CA 93015 *(Vacuum trucks, flatbed trailers, storage tanks, end dumps, rolloff trucks)*

Engle & Gray, Inc. …….. *24 hour* (805) 925-2771
745 W. Betteravia Road; Santa Maria, CA 93456
Backhoes, dozers, welding, pipeline construction/repair, HazMat hauling, dump trucks, loaders, labor

Western Rigging …….. *24 hour* (805) 653-0184
1800 North Olive; Ventura, CA 93001 (*forklifts, crane, low-beds, flatbeds)*

Olivera's Towing & Repair Service …… (805) 688-4113

611 Avenue of the Flags; Buellton, CA 93427 (*2-ton tow truck, flatbed tow truck, 1-ton tow trucks)*

Pacific Construction, Inc. …….. *24 hour* (805) 525-2144
1350 East Santa Paula Street; Santa Paula, CA 93060
60-bbl, 110-bbl, and 120-bbl vacuum trucks, loaders, excavators, backhoes, low-bed and tilt bed trailers, dump trucks, A-frame trucks, pickups, generators, lights, booms, pads, sorbent, pumps

Pacific Petroleum …… (805) 928-1908
P. O. Box 2297; Orcutt, CA 93457 *24 hour* (805) 925-1947
End dumps, 110-bbl & 70-bbl vacuum trucks, bottom dumps

Speed's Oil Tool Service …… …… (805) 925-1369
P. O. Box; Santa Maria, CA 93456 *(110-bbl & 70-bbl vacuum trucks)*

8.11.16 LABOR

California Conservation Corps (805) 549-3561
P. O. Box 1380; San Luis Obispo, CA 93406

Gaviota Maintenance Co. (805) 653-6473
1430 N. Ventura Avenue; Ventura, CA 93001
Approximately 75 laborers (no restrictions)

Robert Heeley Inc. (805) 239-1010
2919 Union Rd Ste B; Paso Robles, CA 93446
Repairs of oil field equipment

Offshore Tanker Service *24 hour* (805) 963-3801
Breakwater; Santa Barbara, CA 93109 (805) 963-3808
Put together crews for workboats

8.11.17 LABORATORY SERVICES

Central Coast Analytical Services (805) 964-7838
751 S. Kellogg, Suite A; Goleta, CA 93117
Air, water, and wastewater analysis, hazardous waste analysis, soil and shellfish analysis, environmental sampling

Chevron Oil Field Research Company (323) 694-7000
1300 Beach Blvd.; La Habra, CA 90632

Coast to Coast Analytical (805) 543-2553
141 Suburban Road; San Luis Obispo, CA 93401
Hazardous waste analysis

Earth Systems Environmental (805) 541-5983
170-A Granada Drive; San Luis Obispo, CA 93401
Environmental testing

ERC (619) 458-9044
5510 Morehouse Drive; San Diego, CA 92121
Soil toxicity testing

FGL Environmental Analytical Chemists (805) 659-0910
853 Corporation Street; Santa Paula, CA 93060
Analyses of wastewater, drinking water, hazardous waste, soil; fish bioassay

Geoservice (805) 546-9100
3437 Empresa Avenue; San Luis Obispo, CA 93401
Environmental testing

Oilfield, Engineering, and Consulting (805) 922-4772
547-C West Betteravia Road; Santa Maria, CA 93455
Environmental testing

8.11.18 LEASE SERVICES

Contractors Equipment Company (805) 983-3969
2101 East Ventura Blvd.; Oxnard, CA 93030 (800) 326-3616
Forklifts, compressors, compactors, generators, cranes, pumps

Harvey's Honeyhuts (805) 927-8554
P. O. Box 805 (800) 222-4887
Cambria, CA 93428
Portable toilets (delivered), sinks available

J W Enterprises (805) 984-6365
1689 Morse (805) 658-2449
Ventura, CA 93003
Portable toilets, 8x12 field offices, temporary power poles

U Rent, Inc. (805) 488-1516
4700 South Saviers Road; Oxnard, CA 93030
Dump trucks, skiploaders, graders, dozers, forklifts, vans with lift gates, rollers, compressors, backhoes, wheel loaders, water trucks, stake trucks, compactors, trenchers, crawler skips, airless sprayers, air tools, discs, pumps, light towers, sandblasters, welders, stump grinders, pressure washers

Ventura Rental Center (805) 648-2819
3072 Telegraph Road; Ventura, CA 93003
Dozers, backhoes, loaders, forklifts, vans, stake and flatbed trucks, water trucks, pickups, cement mixers, boom lift, compressors, pressure washers, welders, generators, barricades, delineators, construction signs, flags, vests

8.11.19 PIPELINE REPAIR

Engle & Gray, Inc. *24 hour* (805) 925-2771
745 W. Betteravia Road; Santa Maria, CA 93456
Backhoes, labor, welding, dump trucks, dozers, loaders, HazMat hauling, pipeline construction/repair

P. E. O'Hair & Co. (805) 922-7391
244 Kathleen Court; Santa Maria, CA 93455
Pipe valves/fittings

8.11.20 PORTABLE LIGHTING

United Rentals (805) 922-2151
2691 Santa Maria Way; Santa Maria, CA 93455
Portable lights

Contractors Equipment Company (805) 659-4346
2101 East Ventura Blvd.; (805) 983-3969
Oxnard, CA 93030
Light towers

Easter Rents (805) 922-3529
830 W. Betteravia; Santa Maria, CA 93454 *Pumps*

Hertz Equipment Rental (805) 658-9100
3560 Market Street; Ventura, CA 93003
Pumps, hand tools

Valley Tool Rental (805) 688-7323
870 N. McMurray Road; Buellton, CA 93427
Portable lights, pumps, backhoes, skiploaders, hand tools, bobcats, Ryder trucks, forklifts, trenchers, posthole diggers, jackhammers, generators

8.11.21 PUMPS

B. T. Maintenance *24 hour* (805) 481-2552
P. O. Box 9012; Arroyo Grande, CA 93421
Service station, general maintenance and repairs, underground piping included

Burlington Environmental, ChemPro Division (323) 491-4750
Pier 1, Berth 47 – 49; Long Beach, CA 90802
Two M15 pumps, 12 small pumps, 10 M8 pumps

Easter Rents (805) 922-3529
830 W. Betteravia; Santa Maria, CA 93455
Tractors

PSI *24 hour (emergency only)* (805) 647-9229
6650 Crescent Street #3; Ventura, CA 93003
Service station construction

Ventura Petroleum Services, Inc. (805) 647-3495
P. O. Box 6812 (805) 525-9694
Ventura, CA 93006
Portable pumps

8.11.22 SAFETY EQUIPMENT

Cuesta Equipment (805) 544-2540
4540-A Broad Street
San Luis Obispo, CA 93401
Full line of safety equipment supplies

MSA Mine Safety Appliance Company (800) 672-2222
P.O. Box 426
Pittsburgh, PA 15230
Full line of safety equipment supplies

Secorp Industries, Inc. (805) 642-7235
P. O. Box 1149
Ventura, CA 93002
Full line of safety equipment supplies

8.11.23 SAND AND GRAVEL

Buellflat Rock Company (805) 688-3226
1214 Mission Drive; Solvang, CA 93463 *Sand, rock, gravel, asphalt mix*

Coast Rock (805) 925-2505
P. O. Box 5050
Santa Maria, CA 93456
Rock, sand, asphalt, concrete

8.11.24 SECURITY SERVICES

Presidio Security Systems *24 hour* (805) 963-3406
P. O. Box 454
Santa Barbara, CA 93101
Small manpower availability, crowd control, traffic control, patrol, investigations

Romer Guards & Investigators (805) 682-7159
2409 State Street
Santa Barbara, CA 93105
Small manpower availability, traffic control, crowd control, armed or non-armed patrol

Segura Security (805) 349-0550
2325 Skyway Dr.; Santa Maria, CA 93455

Bomar Security (805) 928-5222
111 E Park Ave; Santa Maria CA 93454

Western Protective Enterprises *24 hour* (805) 650-0323
4882 McGrath, Suite 160; Ventura, CA 93003
Small manpower availability, traffic control, crowd control, armed or non-armed patrol

8.11.25 SHORING

Hayward Lumber (805) 543-0825
236 Higuera (805) 489-8354
San Luis Obispo, CA 93401 (805) 928-8557
Lumber supplies

Santa Barbara Mill & Lumber (805) 963-6778
521 E. Haley (805) 967-7571
Santa Barbara, CA 93102
Lumber supplies

Solvang Mill & Lumber (805) 688-6447
1781 Mission Drive; Solvang, CA 93463
Lumber supplies

8.11.26 SPILL CLEANUP

ACTI (805) 334-2284
18414 S Santa Fe Ave.; Rancho Dominguez, CA 90221

Asbury Oil Company *24 hour* (323) 321-1392
2100 North Alameda Street; Compton, CA 90222
Five large vacuum trucks

Cal-Coast (805) 922-8406
1480 W. Stowell Road; Santa Maria, CA 93454 *Irrigation, sprinkler systems, pipes*

Chemical Waste Management, Inc. *24 hour* (209) 386-9711
35251 Old Skyline Road; Kettleman City, CA 93239
Oily waste disposal site located 2.5 miles west of the junction of Interstate 5 and California Highway 41

Donovan Construction (805) 922-4366
P. O. Box 5549; Santa Maria, CA 93456
Boom, cranes, backhoes, dozers, compressors, submersible pumps, steam cleaners, barricades, scrapers, 27 persons with more on call

Global Environmental Systems (805) 589-9391
P. O. Box 5816; Bakersfield, CA 93388
Separate solids from liquids; de-water filter press and centrifuges

J. J. Phelps and Sons *24 hour* (805) 688-6348
P. O. Box 108; Solvang, CA 93484
Bulldozers, loaders, tractors, scrapers, backhoes, dump trucks, generators

NG Chemicals (805) 925-0391
4210 Brookside Place; Santa Maria, CA 93455
Transporters of hazardous waste

RMR Construction *24-hour* (805) 922-4013
P. O. Box 1715; Santa Maria, CA 93456
Absorbents, cranes, backhoes, end dumps, dump trucks, laborers

Ryan Equipment Co. *24-hour* (805) 922-0123
P. O. Box 666
Santa Maria, CA 93456
Bulldozers, loaders, tractors, scrapers, backhoes

8.11.27 TRANSPORTATION

Airport Bus of Bakersfield (800) 858-5000
2530 F Street (805) 327-2157
Bakersfield, CA 93301
Eleven 47-passenger charter buses

Santa Barbara Airbus (805) 964-7759
5755 Thornwood Drive; Goleta, CA 93117
Six 21-passenger mini-buses, three 25-passenger mini-buses, one 10-passenger van, and one 27-passenger mini-bus

8.11.28 WAREHOUSING & STORAGE

Conejo Courier & Cartage (805) 373-6000
1200 Lawrence Drive, Suite 200; Newbury Park, CA 91320
200,000 sq ft of storage space

DWO Distributing, Inc. (805) 522-4991
2279 Ward Avenue; Simi Valley, CA
4300 sq ft of inside storage space with forklift available

Universal Storage (805) 489-9272
464 Leoni Drive; Grover City, CA
Inside and yard storage; storage space for vehicles located outside

8.11.29 WELDING

B & C Welding, Inc. *24-hour* (805) 488-3615
800 Industrial Avenue; Port Hueneme, CA 93041
Portable electric/acetylene welding, heliarc, pressure vessel fabrication, painting

Clark Engineering Construction (805) 643-8119
313 West Lewis; Ventura, CA 93001
Soil remediation/removal, HazMat hauler, welding, laborers

Coast Welding (805) 928-3621
916 West Betteravia; Santa Maria, CA 93455
Industrial supplies

Engle & Gray, Inc. *24-hour* (805) 925-2771
745 W. Betteravia; Santa Maria, CA 93456
Backhoes, dozers, dump trucks, loaders, HazMat hauling, pipeline construction/repair, welding, labor

Marc Brandt (805) 473-2283
329 Old Ranch Road; Arroyo Grande, CA 93420

Tri County Fabricators, Inc. (805) 688-9480
1180 Mission Drive; Solvang, CA 93463
Welders, pipeline welding

VECO, Inc. *24-hour* (800) 548-3838
P. O Box 23050, 325 Rocklite Road (805) 648-1700
Ventura, CA 93002
Steel fabrication, piping, stainless and aluminum, revamps, equipment repair, plasma and arc cutting, blasting and painting, on and offshore

SECTION 9

SISQUOC PIPELINE PROJECT
MAPS AND PLANS

TABLE OF CONTENTS

9.0 SISQUOC PIPELINE PROJECT MAPS AND PLANS

The following pages contain maps and plans for the Company Sisquoc to Santa Maria Pipeline, Nuevo Energy Company Lompoc Oil and Gas Plant (LOGP) to the Company Summit Pump Station and associated pump station facilities.

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

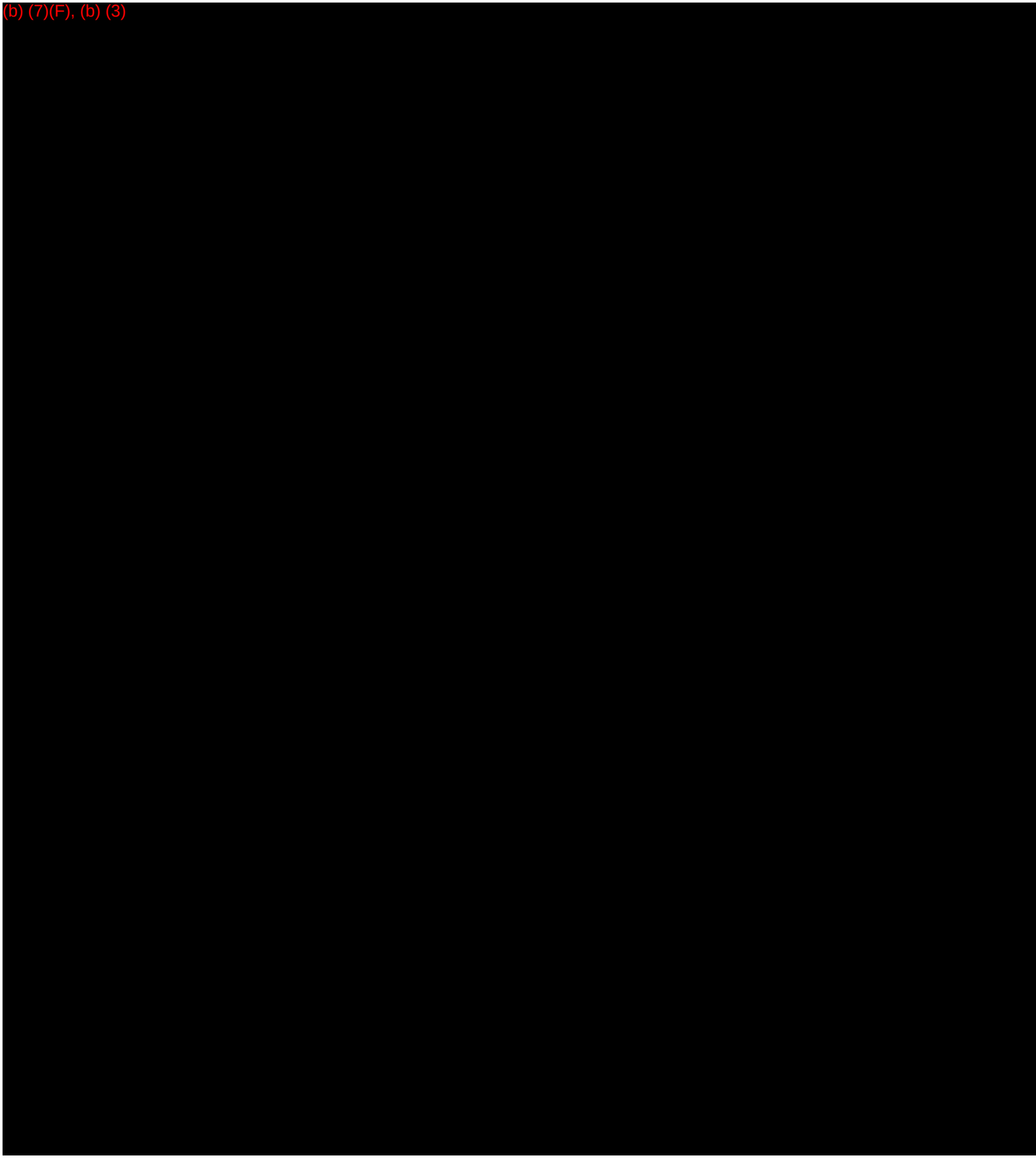
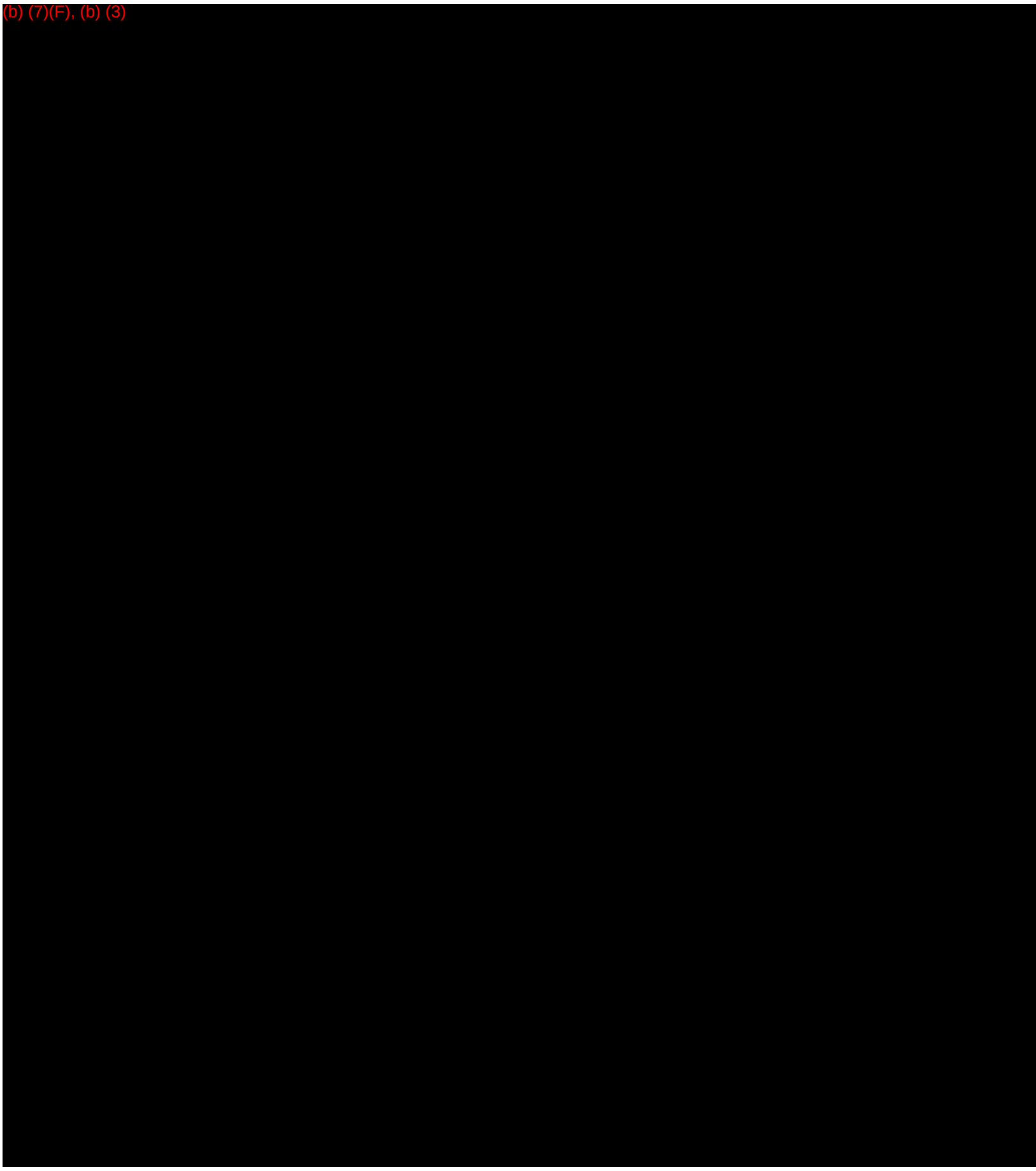


FIGURE 9-3: COMPANY SISQUOC TO SANTA MARIA PIPELINE BLOCK FLOW DIAGRAM

FIGURE 9-4: COMPANY SISQUOC TO SANTA MARIA PIPELINE GROUND ELEVATION PROFILE

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

FIGURE 9-7: HOSPITAL / EMERGENCY MEDICAL FACILITY LOCATION MAP

(b) (7)(F), (b) (3)

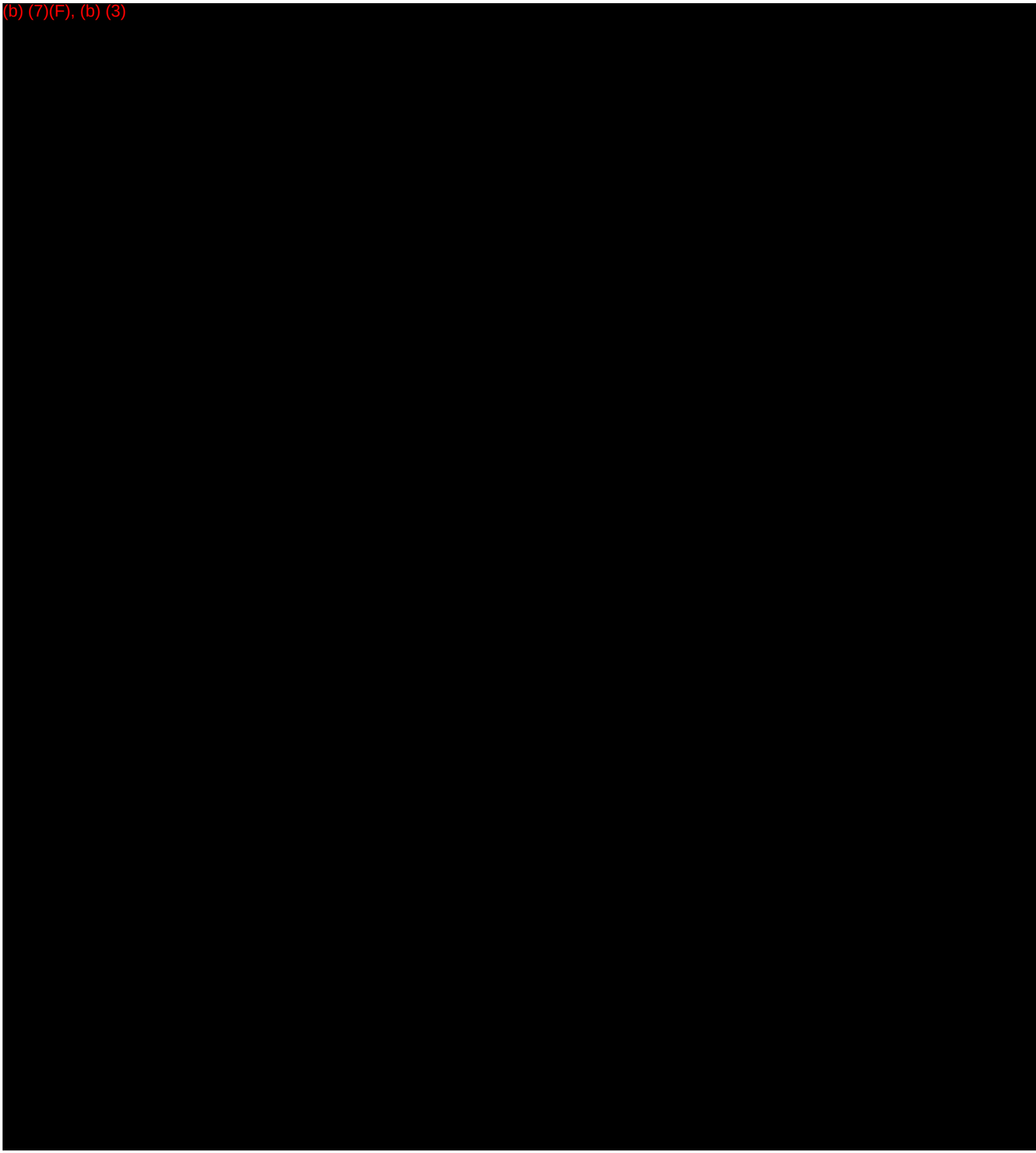


FIGURE 9-8: THOMAS GUIDE MAP X - AREA OF INTEREST IN SANTA BARBARA COUNTY

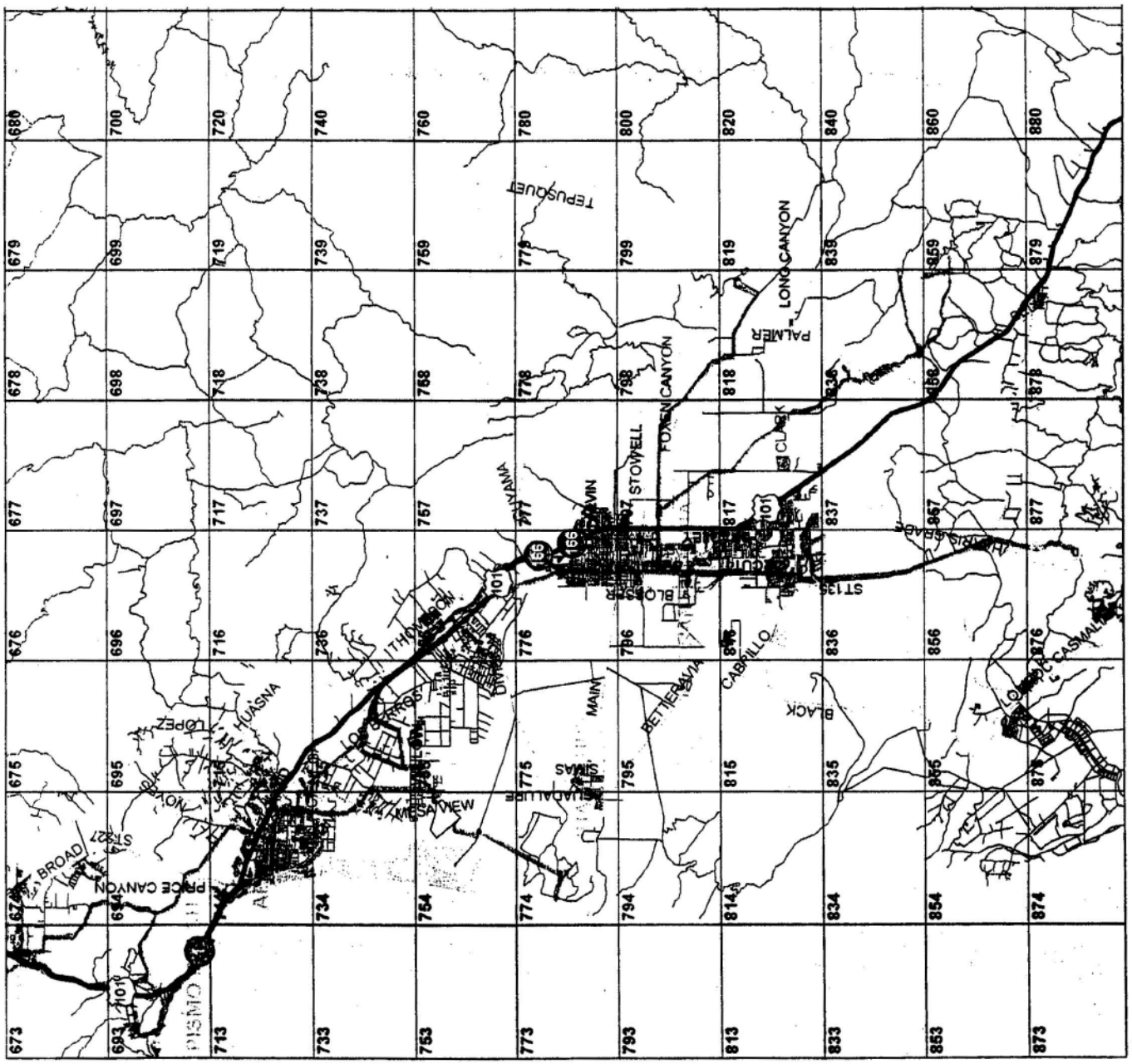
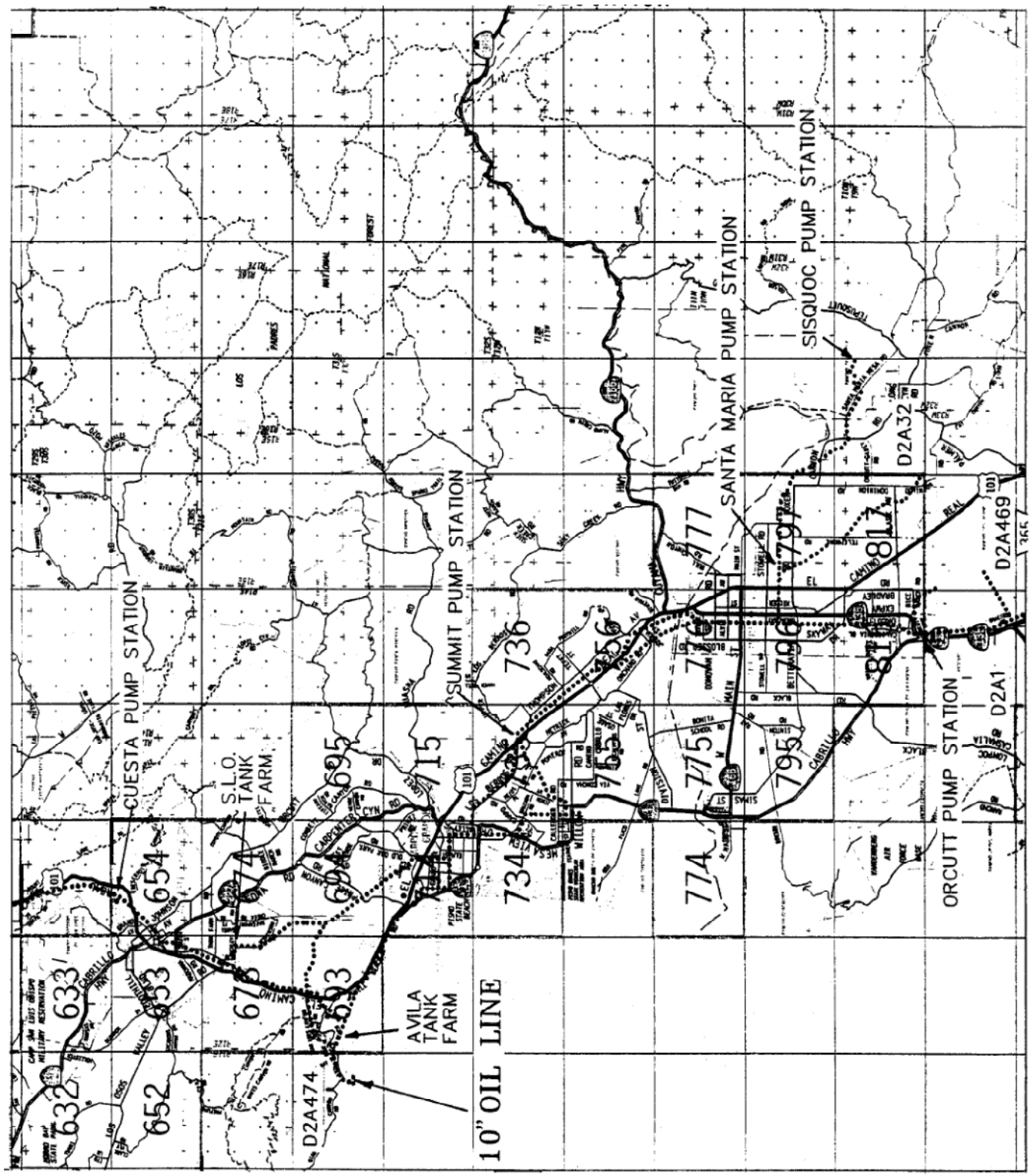


FIGURE 9-9: THOMAS GUIDE MAP 345 - VICINITY OF PIPELINE LOCATION



(b) (7)(F), (b) (3)

[redacted]

FIGURE 9-11: THOMAS GUIDE MAP 736 - SAN LUIS OBISPO COUNTY

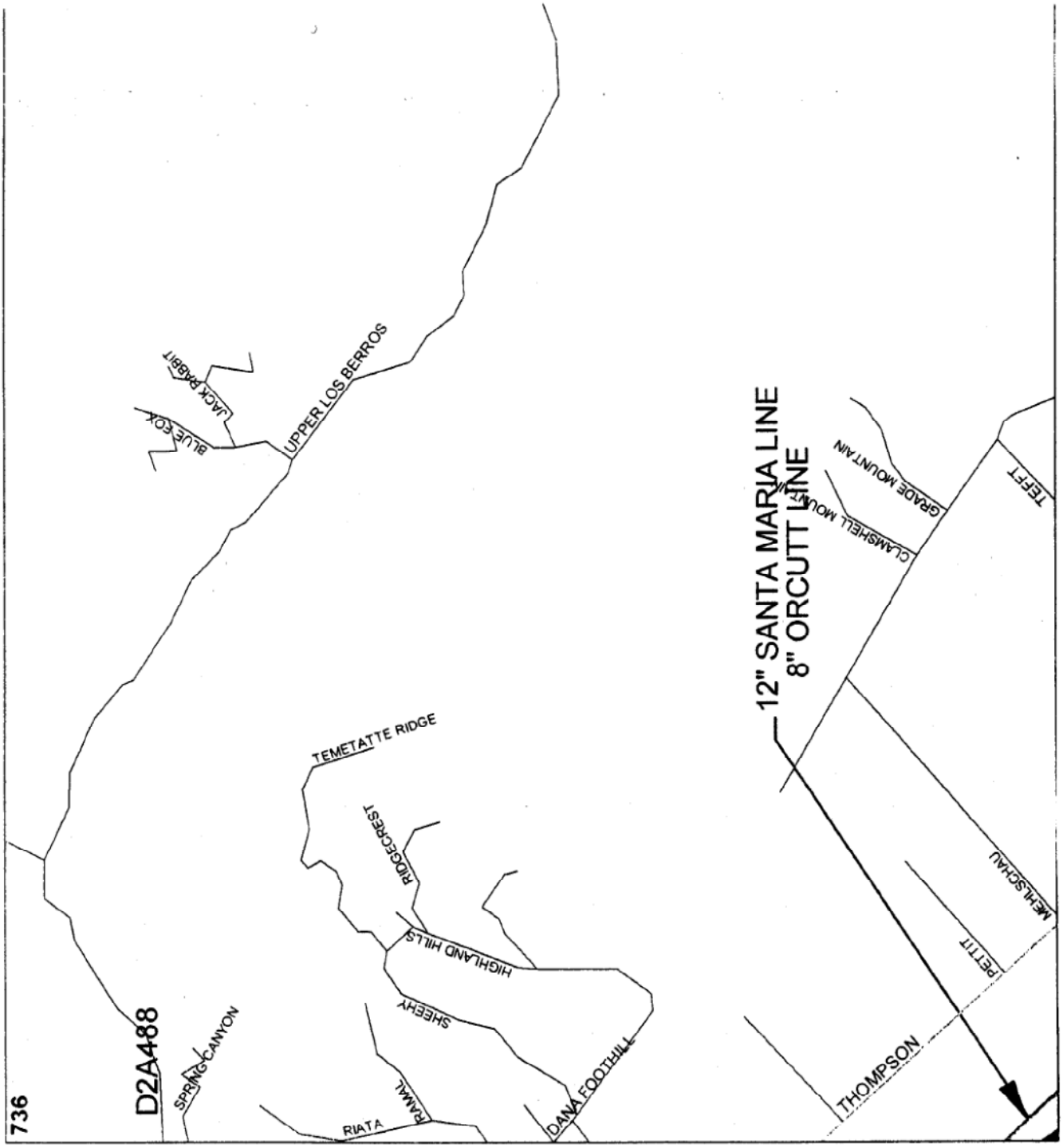


FIGURE 9-12: THOMAS GUIDE MAP 756 - SUMMIT PUMP STATION

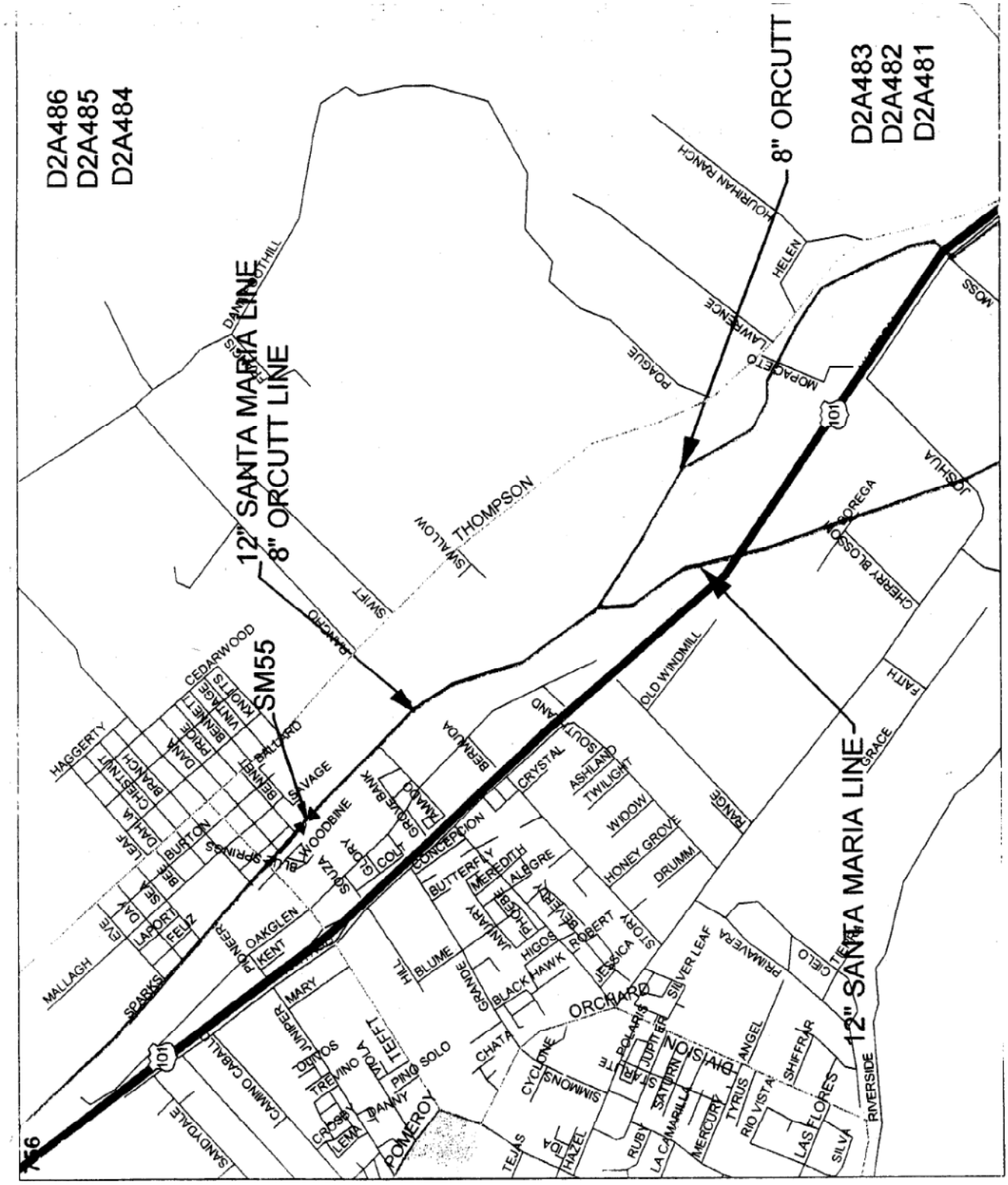


FIGURE 9-13: THOMAS GUIDE MAP 776 - SANTA MARIA RIVER

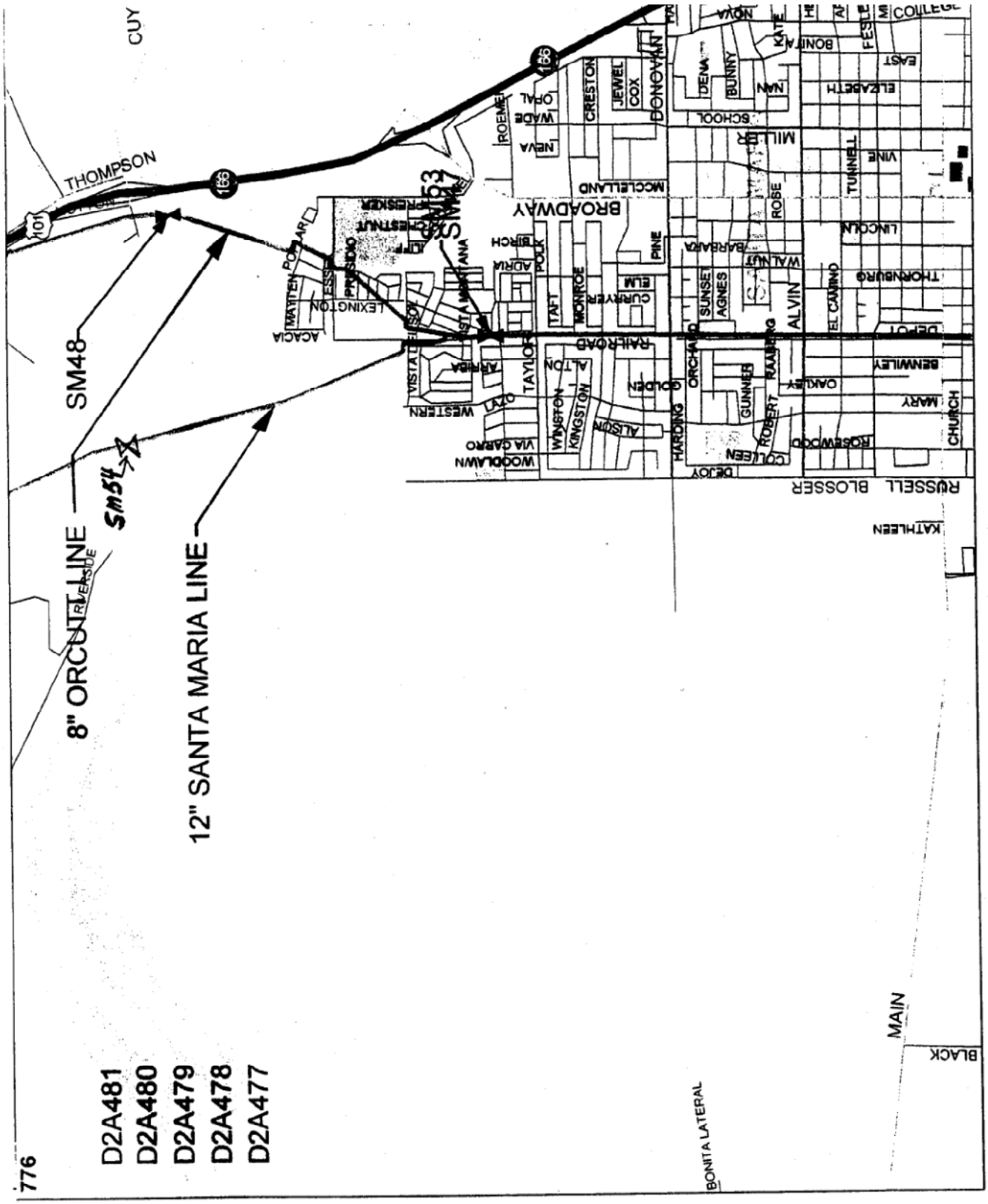
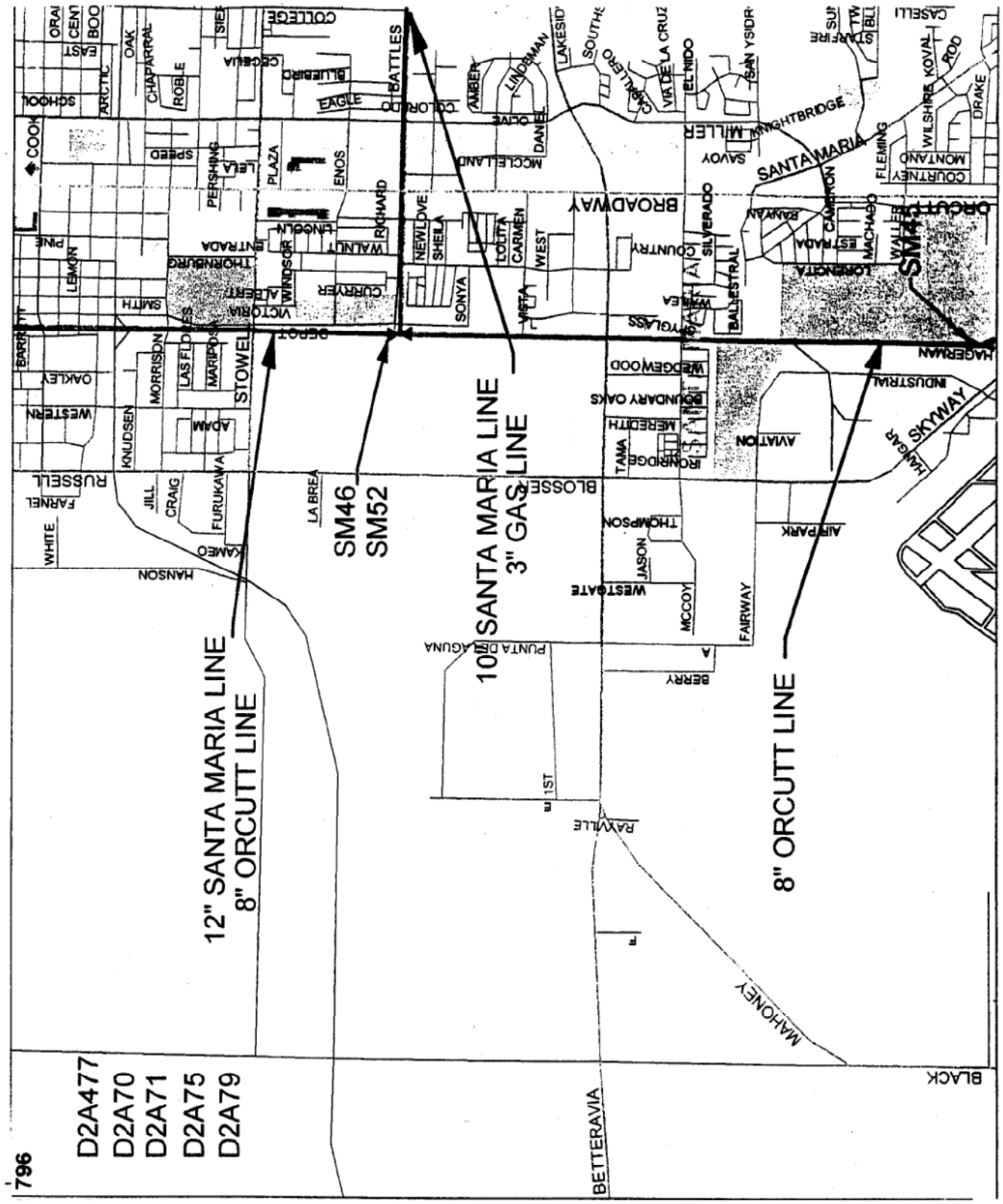


FIGURE 9-14: THOMAS GUIDE MAP 796 - SUEY JUNCTION



(b) (7)(F), (b) (3)

[redacted]

SECTION 10

PT. PEDERNALES PIPELINE PROJECT MAPS AND PLANS

TABLE OF CONTENTS

The following pages contain maps and plans for the Company pipeline between Nuevo Energy Company Lompoc Oil and Gas Plant (LOGP) to the Company Summit Pump Station and associated pump station facilities.

NOTE: The pipeline is shown as a dotted line on some of the Thomas Guide Maps.

FIGURE 10-1: SANTA MARIA BASIN PROJECT

(b) (7)(F), (b) (3)

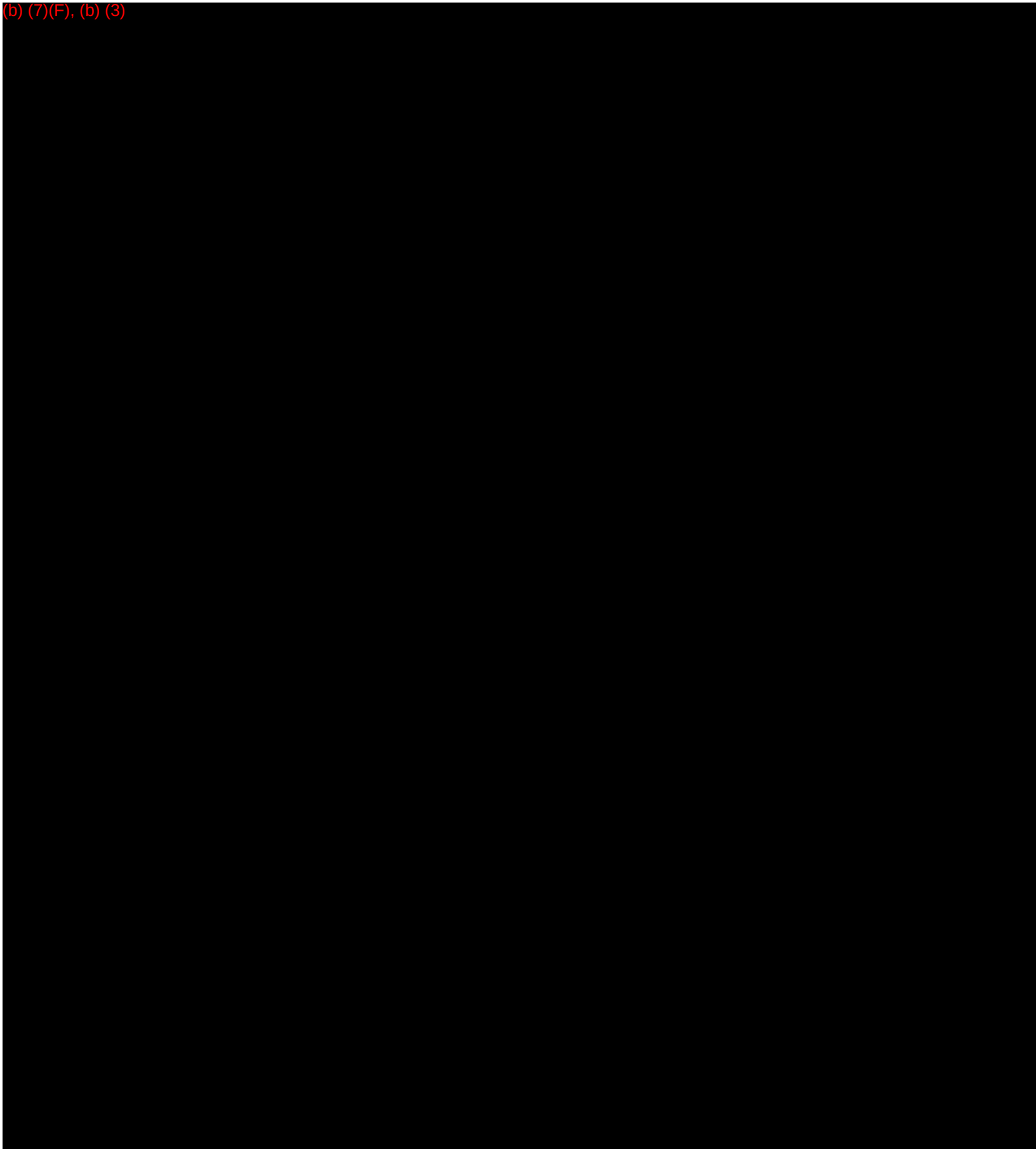


FIGURE 10-2: COMPANY LOMPOC O&GP TO ORCUTT PUMP STATION PIPELINE ALIGNMENT

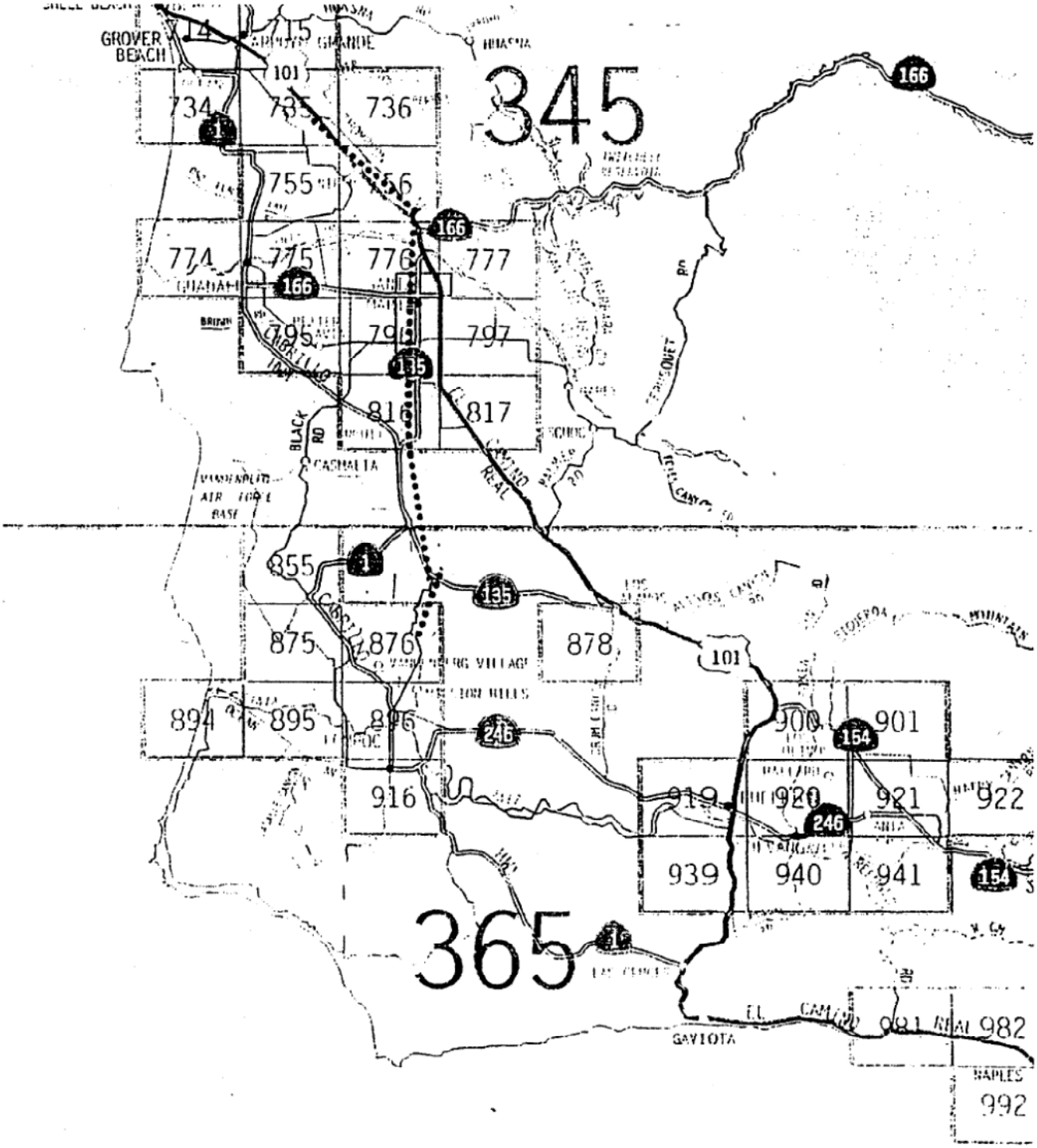


FIGURE 10-3: COMPANY LOMPOC HS&P TO ORCUTT PUMP STATION GROUND ELEVATION

(b) (7)(F), (b) (3)

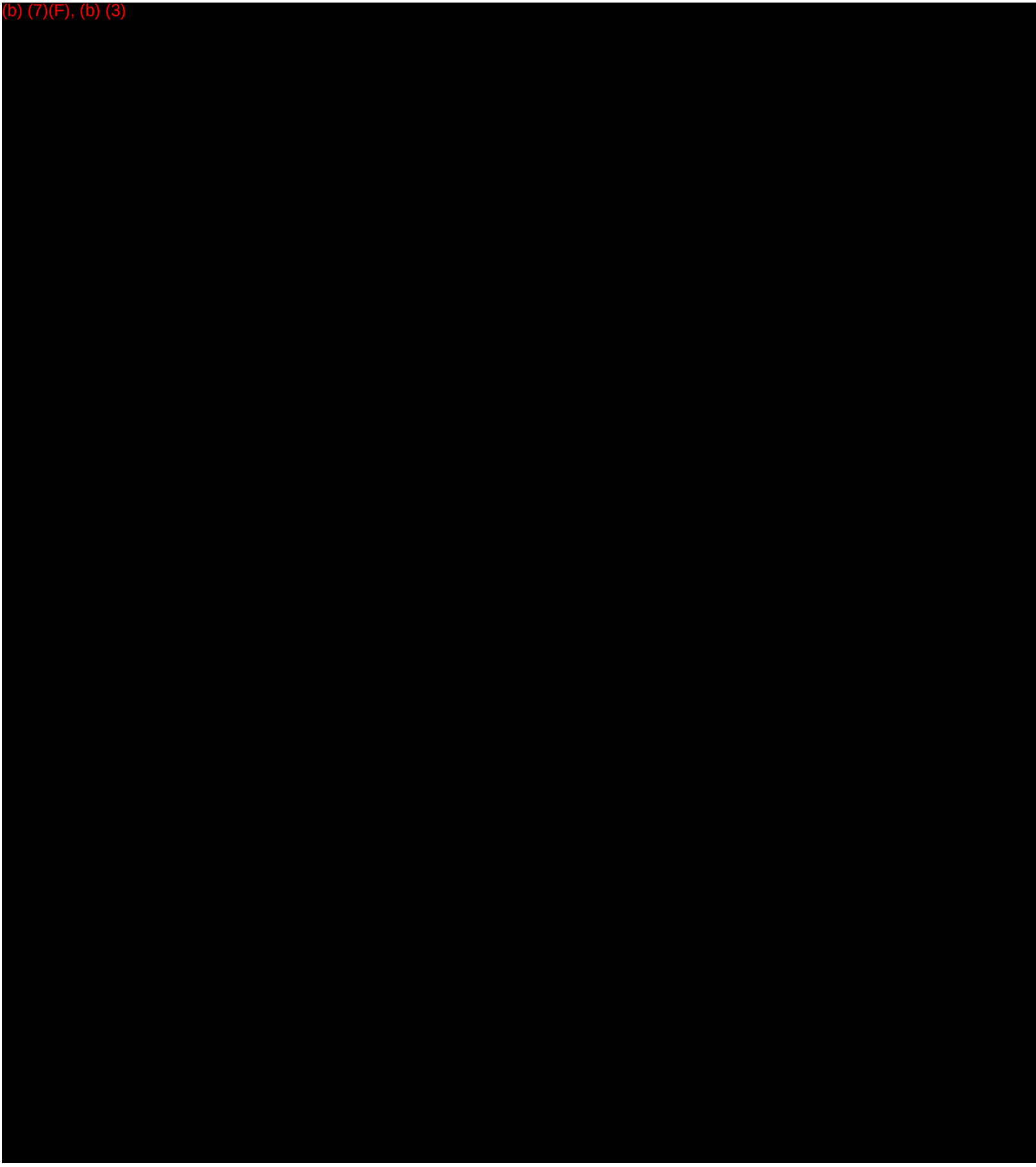
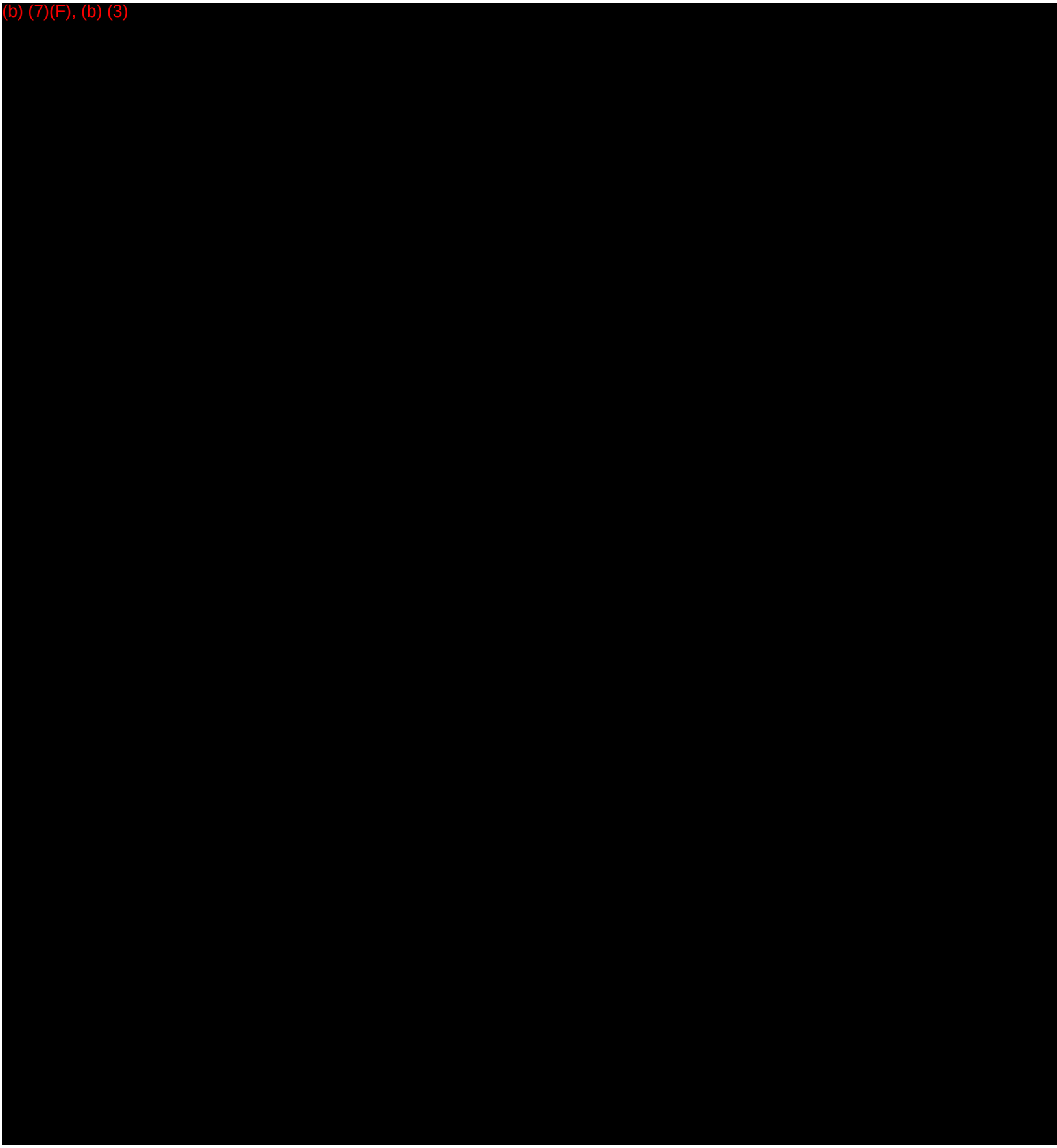


FIGURE 10-4: COMPANY ORCUTT TO SUMMIT PIPELINE ALIGNMENT & ELEVATION PROFILE

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

FIGURE 10-6 THOMAS GUIDE MAP INDEX (AREA OF INTEREST IN SANTA BARBARA COUNTY)

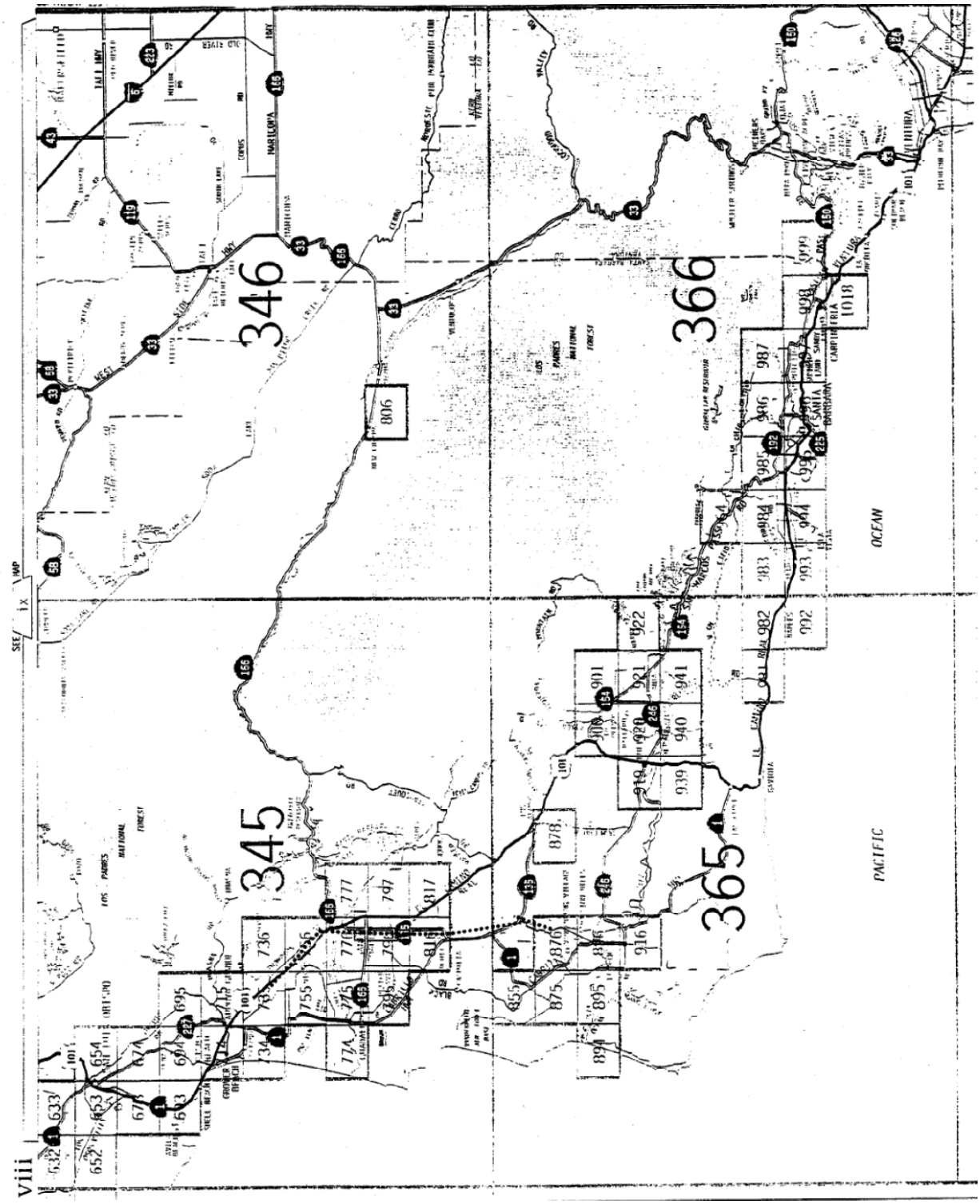


FIGURE 10-7: THOMAS GUIDE MAP 365 - LOMPOC HS&P

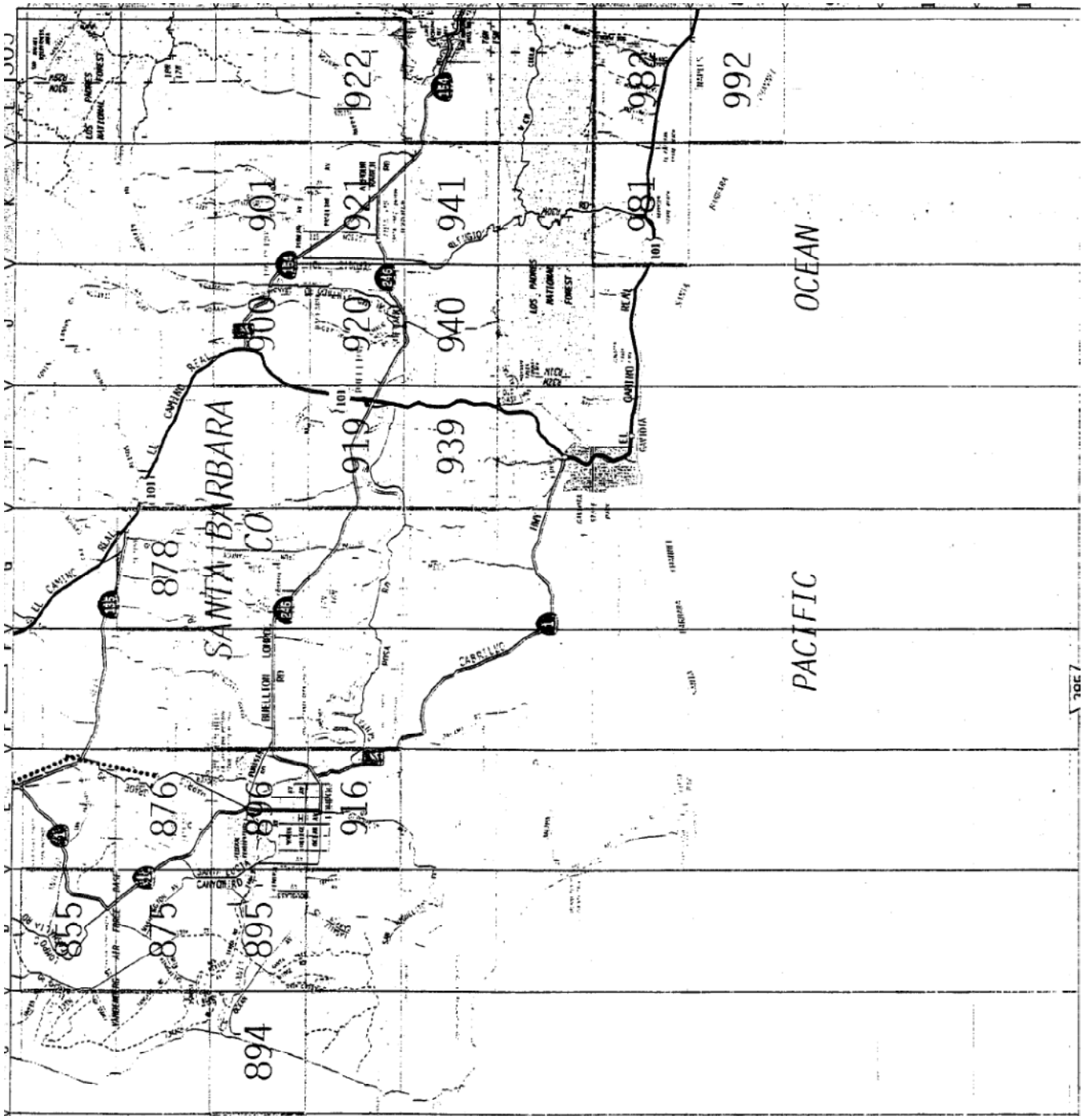


FIGURE 10-8: THOMAS GUIDE MAP 816 - ORCUTT PUMP STATION

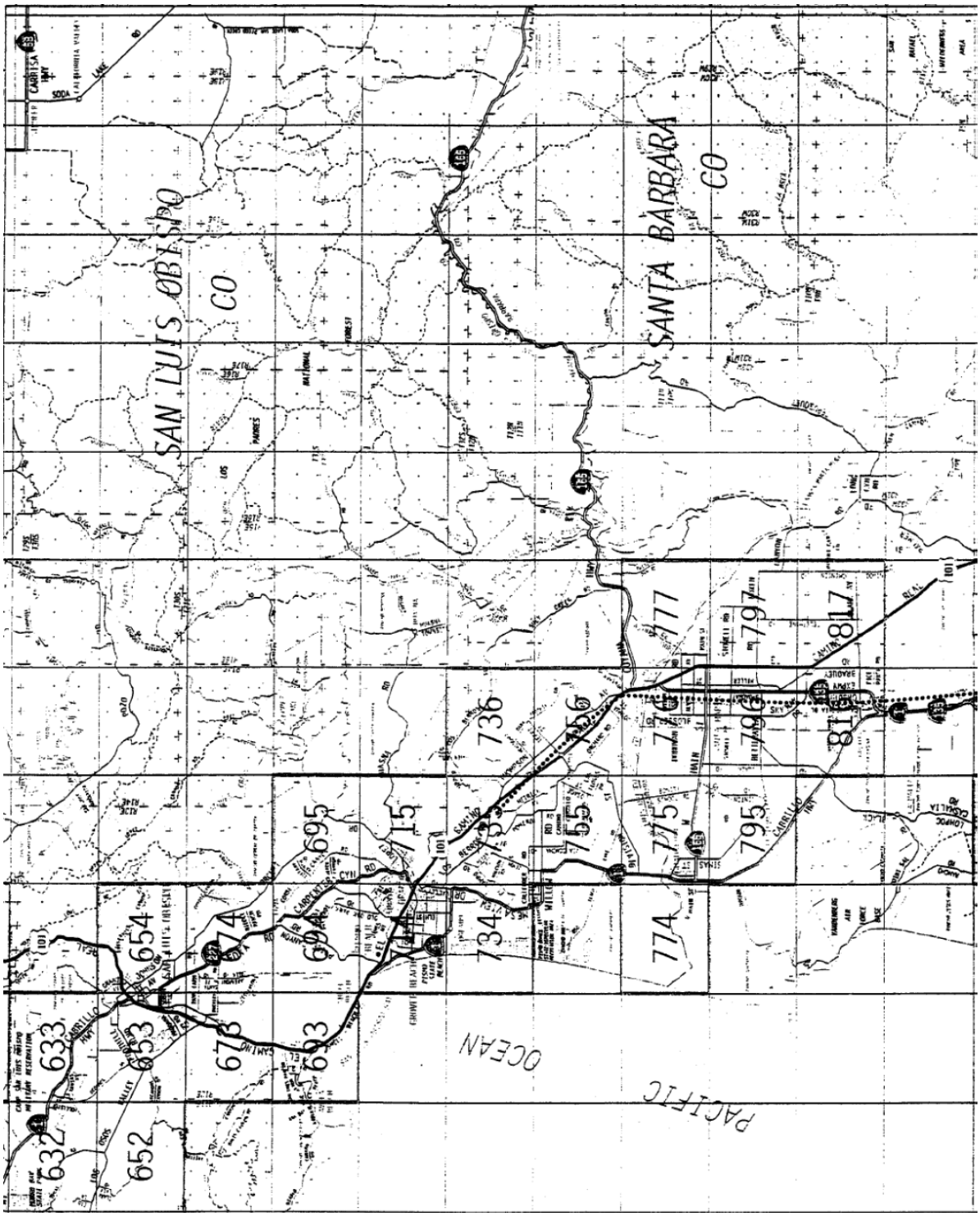


FIGURE 10-9: THOMAS GUIDE MAP 876 - LOMPOC HS&P

(b) (7)(F), (b) (3)

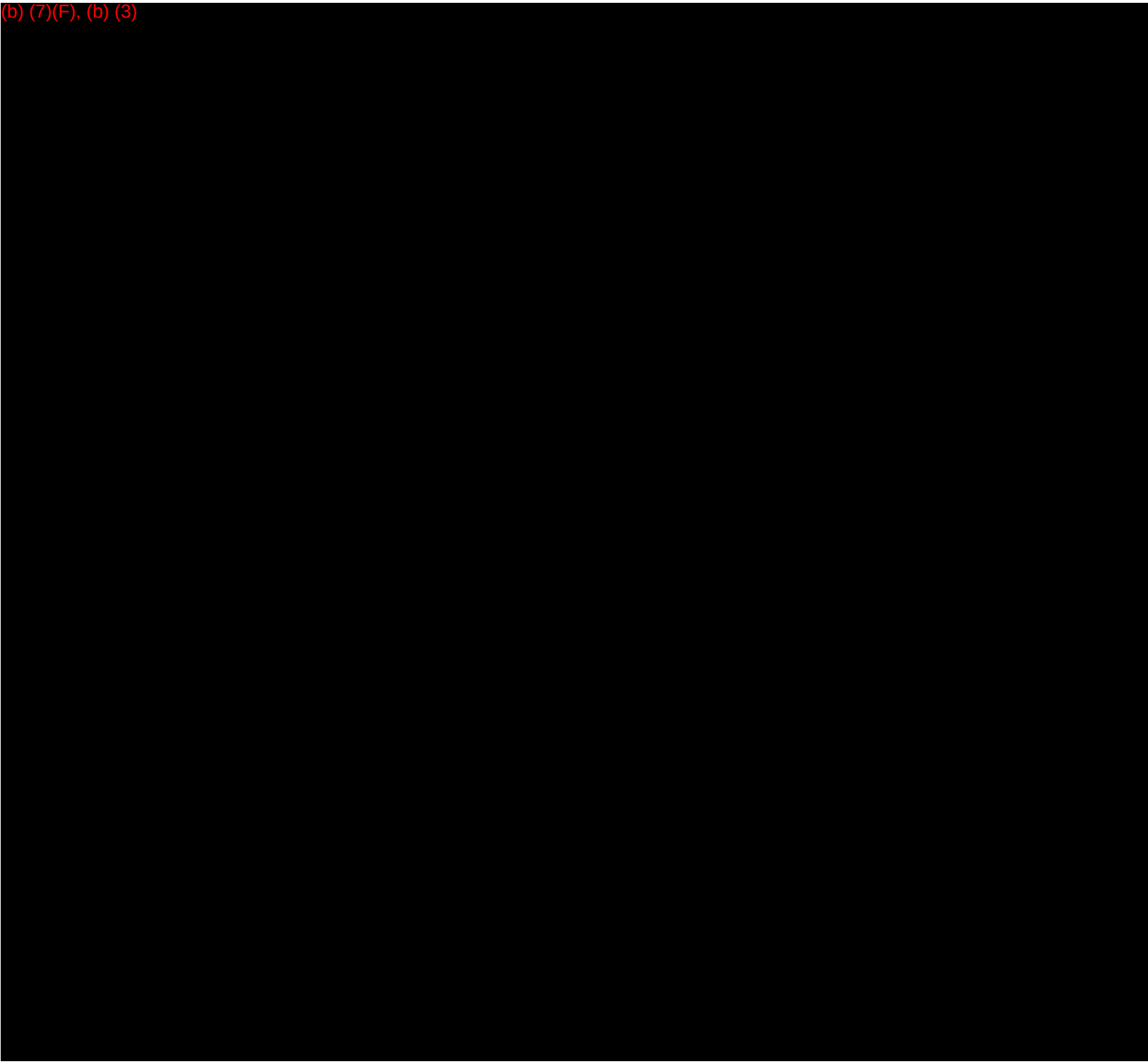


FIGURE 10-10: THOMAS GUIDE MAP 876 - ORCUTT PUMP STATION

(b) (7)(F), (b) (3)

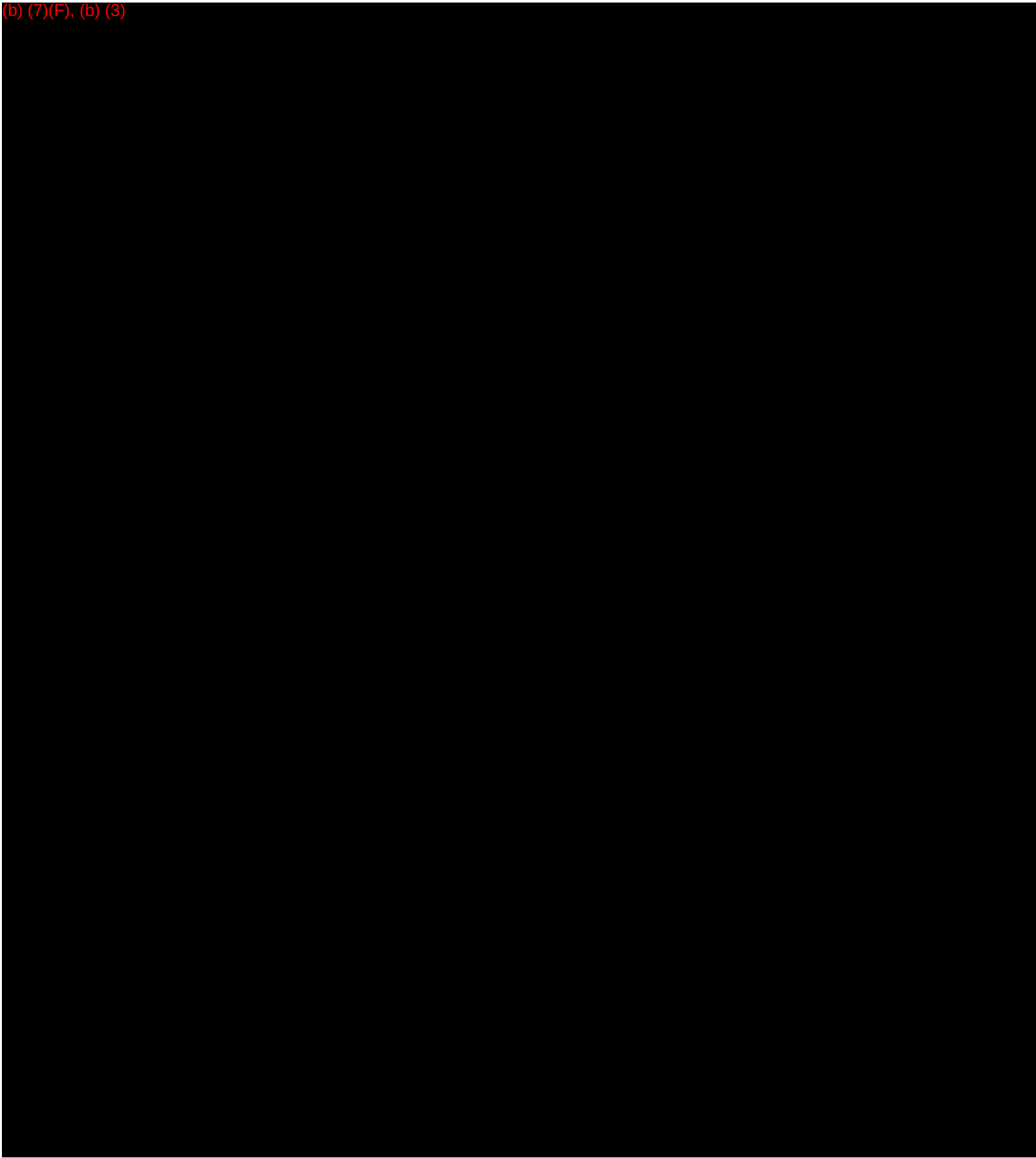


FIGURE 10-11: THOMAS GUIDE MAP 796

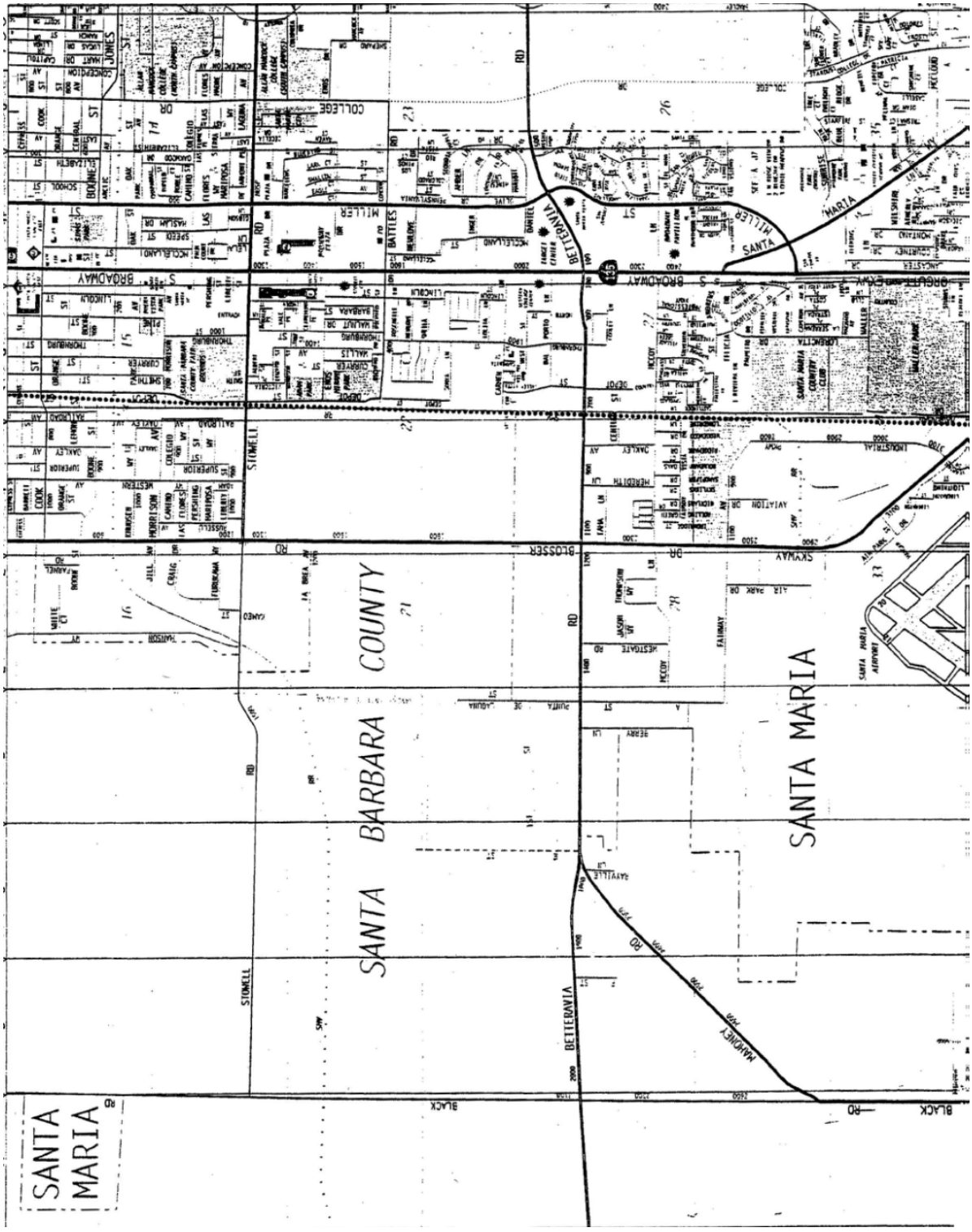


FIGURE 10-12: THOMAS GUIDE MAP 776

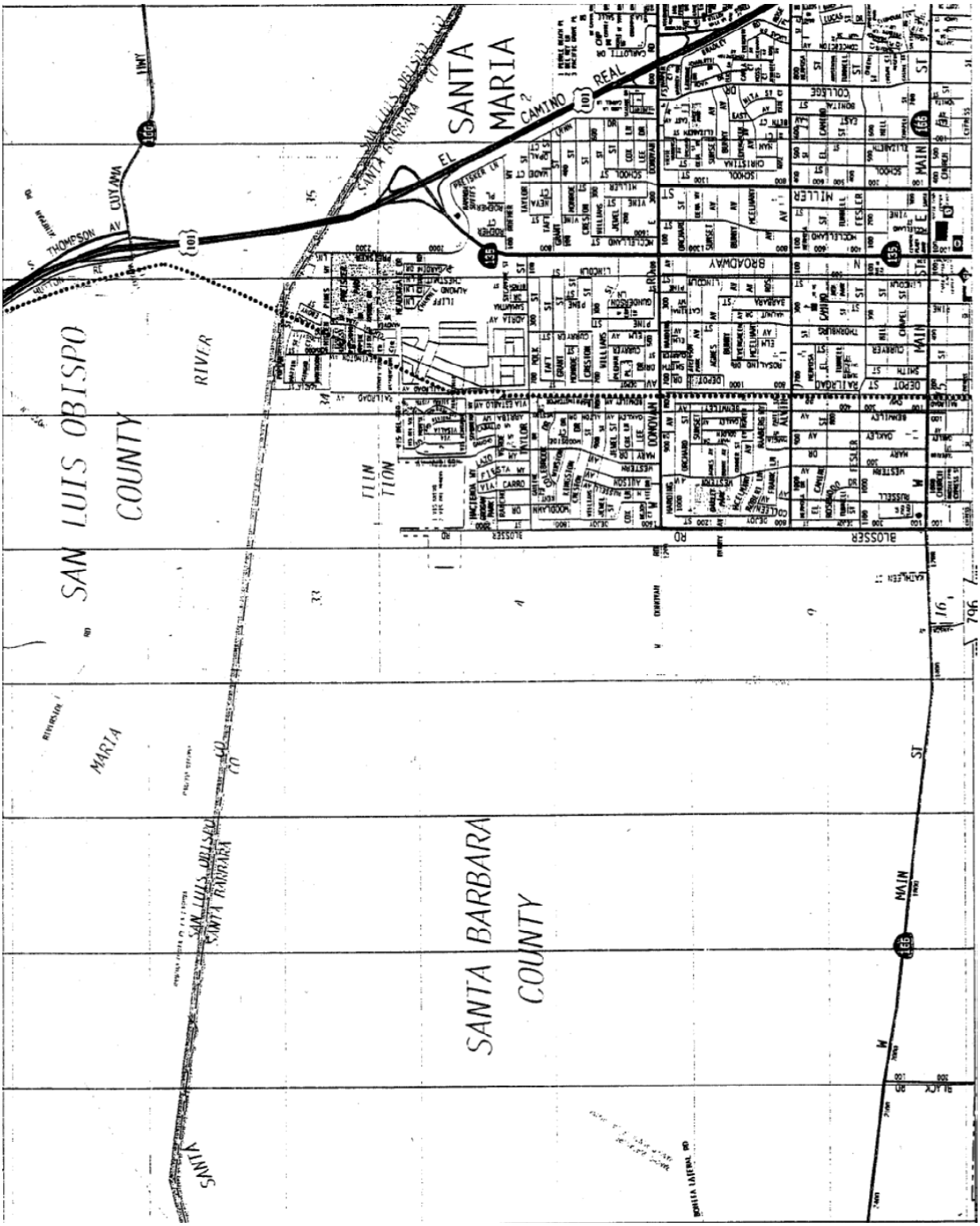


FIGURE 10-13: THOMAS GUIDE MAP 756

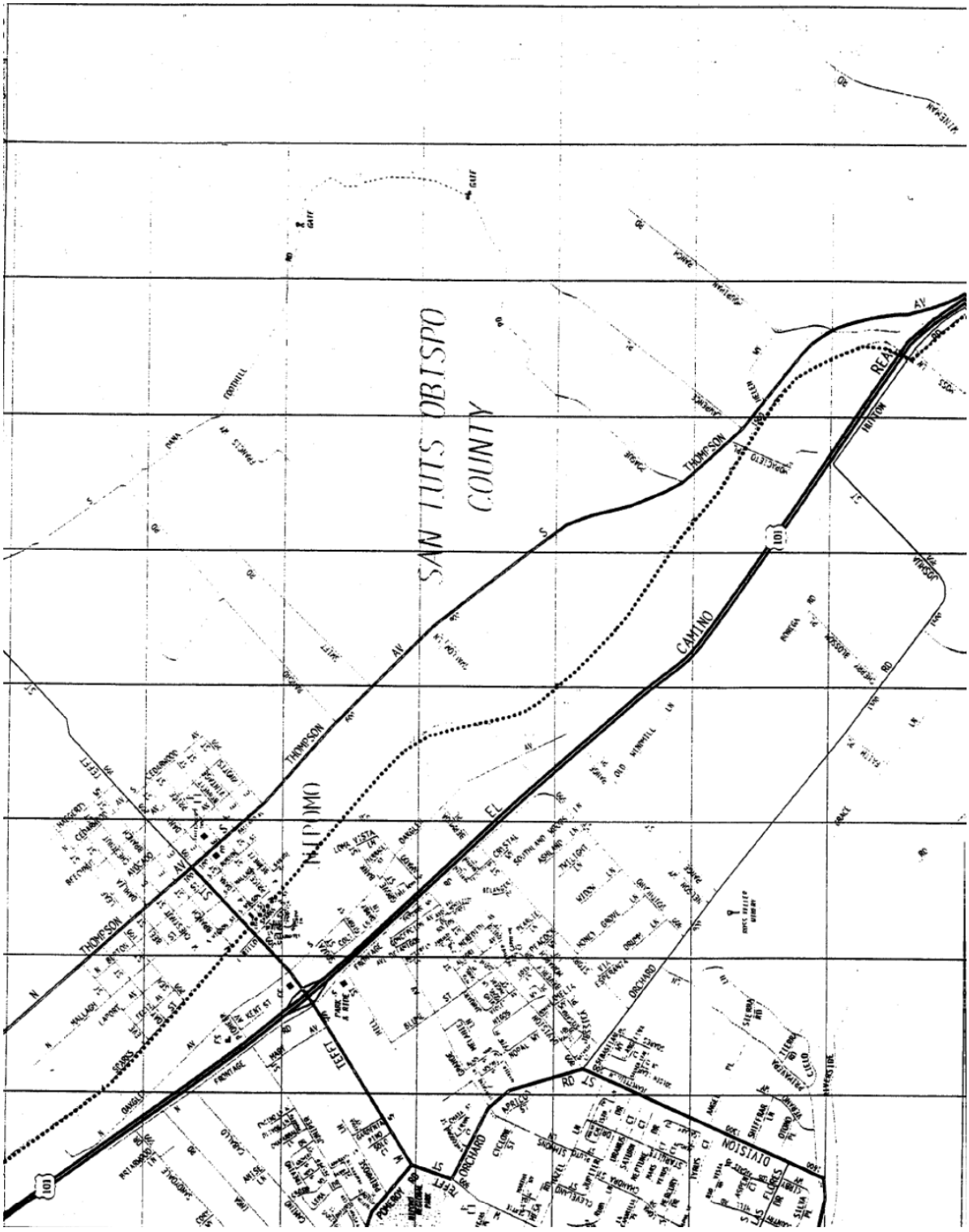


FIGURE 10-14: THOMAS GUIDE MAP 736

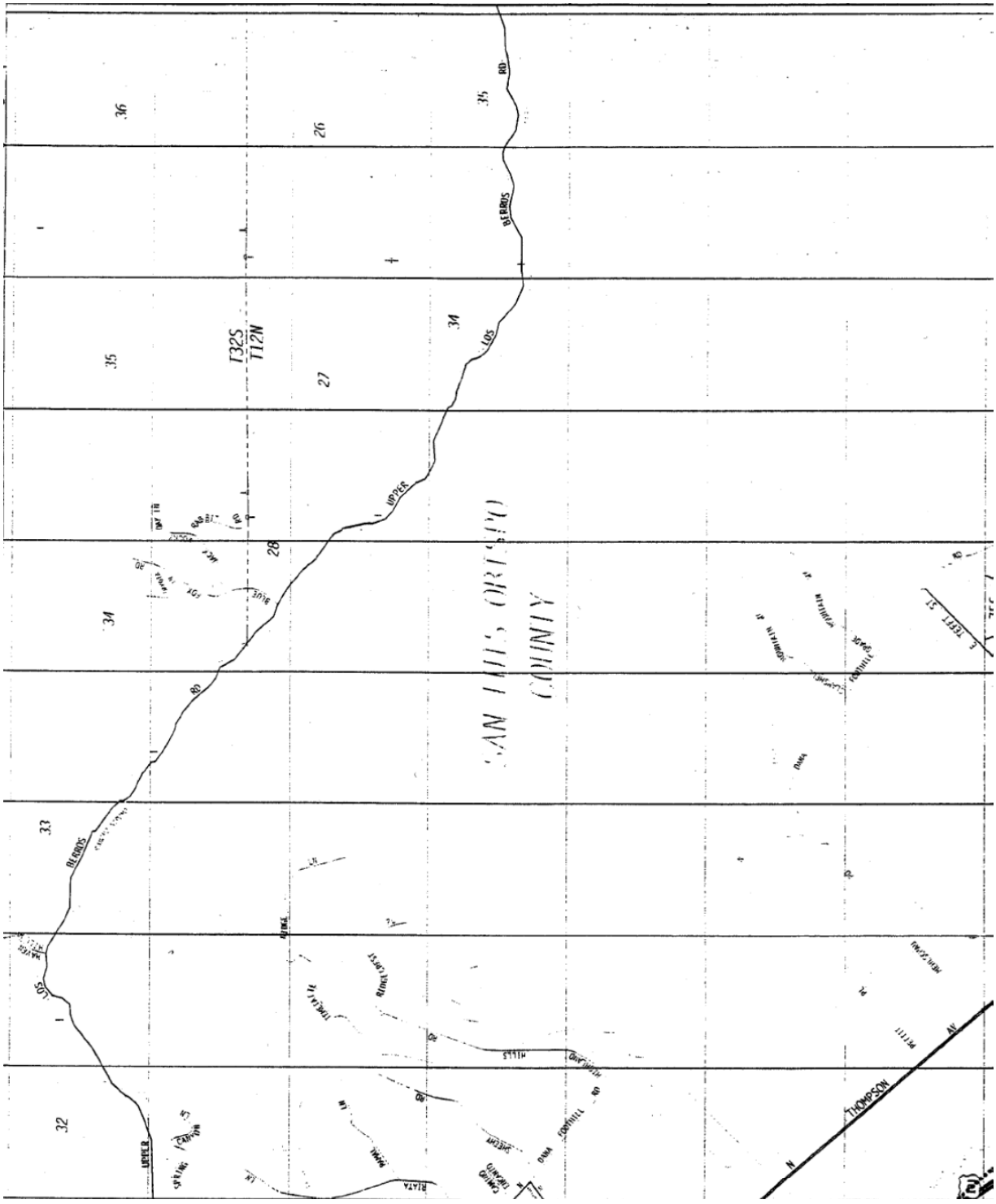


FIGURE 10-15: THOMAS GUIDE MAP 735 - SUMMIT PUMP STATION

(b) (7)(F), (b) (3)

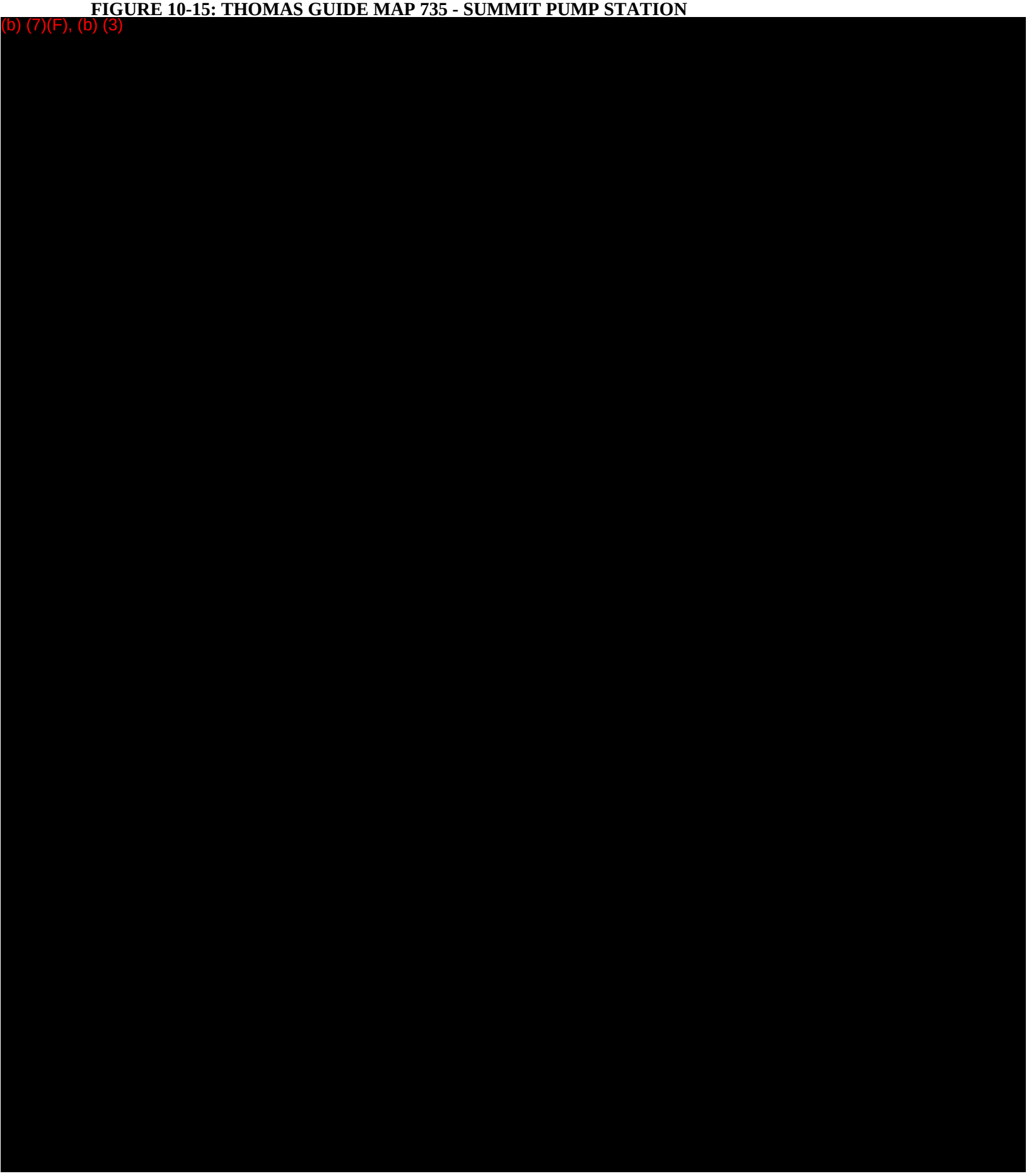


FIGURE 10-16: COMPANY SISQUOC TO SANTA MARIA PIPELINE STAGING AREA

(b) (7)(F), (b) (3)

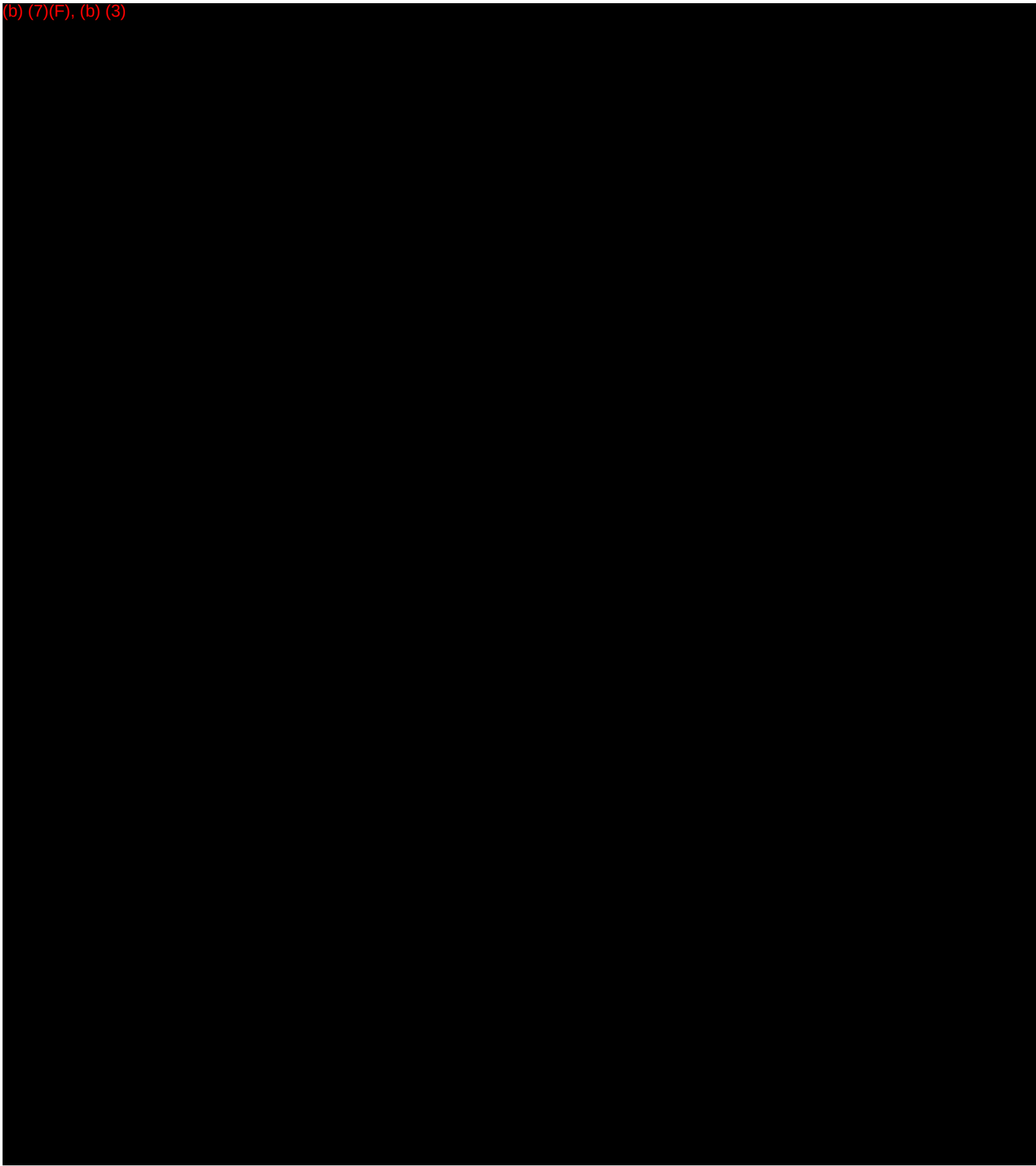
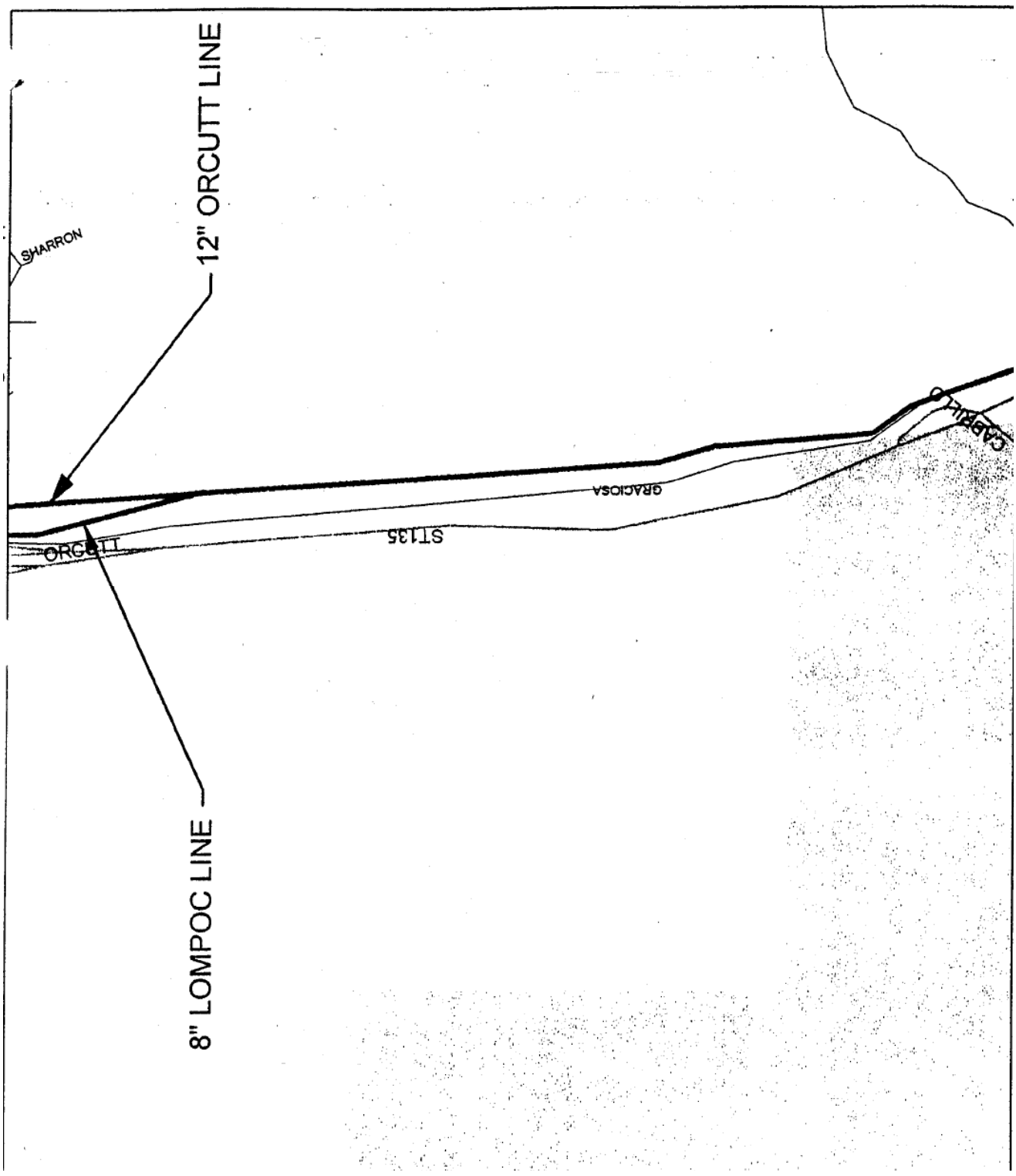


FIGURE 10-17: THOMAS GUIDE MAP 836 – LOMPOC O&G



(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

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(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

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APPENDIX A-1

SISQUOC RISK ANALYSIS

TABLE OF CONTENTS

A.1.0 SISQUOC PROJECT – RISK ANALYSIS

The Company has performed a risk analysis of the Sisquoc to Santa Maria Oil Pipeline and Santa Maria Pump Station for the purpose of identifying potential accidents for which the Emergency Response Plan should be prepared. This analysis included an examination of the design and operation of the pipeline, and considered both the results of that analysis and the types of accidents that have occurred in the past at similar pipelines.

The Sisquoc to Santa Maria Pipeline transports relatively dry crude oil. The flash point of the oil is about 74° F.

The oil contains three to four percent Sulfur, and a trace amount (up to 1 ppm) of H_2S. The amount of H_2S in the oil is not large enough to create a toxic gas cloud, which would drift with the wind, however, it is possible that someone surrounded by the oil or directly exposed to it could be affected. If the oil were ignited, it could create a radiant heat hazard.

A.1.1 ANALYSIS OF POTENTIAL ACCIDENTS

There are a number of factors that can cause a pipeline or pump station to fail:

- Internal corrosion- corrosion from the inside of the pipe, caused by the corrosiveness of the liquid flowing through it.
- External corrosion – corrosion from the outside, caused by external elements
- Structural failures or mechanical defects – includes defective materials, seams, welds, etc.
- External impacts- dropped equipment, fire exposure (from wildland fire, or fire in adjacent pipelines), excavation activity and related damage (usually referred to as “third-party activity”).
- Natural hazards – seismic events, subsidence, floods, etc.

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

A leak or break in the Company oil pipeline or pump station facilities would result in a volume of oil that depends on the following factors:

- Location of the leak or break
- Pumping rate through the pipeline
- Shutdown time for pumps
- Size (diameter) of the pipeline
- Topography, which determines the length of the pipeline which would drain by gravity through a leak or break after shutdown of the pumps
- Location of the block valves
- Time to respond and repair

Included in the pipeline design is a cathodic protection system to protect the line from external corrosion and for early detection of any corrosion problems.

(b) (7)(F), (b) (3)

[redacted]

A.2.2 CONSEQUENCES

A.2.2.1 PIPELINE

To predict the volume of oil escaping from the buried pipeline following a leak or break, two conservative assumptions are made to avoid underestimating the maximum potential spill:

- The Company Control Center detects a leak and shuts in the block valves within three minutes of its occurrence, instead of the minimum time of 50 seconds (pumping a maximum of about 80 barrels of oil during this time period if the pipeline severed).

- The leak occurs at the lowest portion of the pipeline segment between block valves, and the breach in the pipe and overlying earth is large enough to allow oil to escape in a virtually unrestricted manner.

The maximum volume of oil contained in each pipeline segment between block valves is estimated to be:

(b) (7)(F), (b) (3)

[redacted]

Since the Sisquoc River does not normally contain flowing water, any underground spill at this location would likely be confined to the immediate area. During the infrequent times when the river is flowing, some of the oil could conceivably be released to the surface of the riverbed and carried over twenty miles downstream to reach the ocean. If the coastline or oceans are threatened by a spill, Clean Seas would be notified, and spill containment/cleanup equipment and manpower would be mobilized as described in the Company Oil Spill Response Plan for the Sisquoc Pipeline.

Containment in the vicinity of a spill at the Sisquoc River pipeline crossing would be the likely responses to an oil spill the majority of the time. Earth-moving equipment could be used for spill containment in the river bottom, which is currently disturbed by other activities (recreational use and gravel mining operations) and lacks sensitive riparian plant and animal species. State Fish and Game will be notified, as discussed in Section Four of this Plan, prior to using earth-moving equipment in riparian areas.

The volumes reported above represent high-side cases. Spill volumes due to pipeline accidents are anticipated to be much smaller, on the order of 100 barrels of oil or less. This is due to the expectation that most pipeline leaks are due to a puncture or other failure of the pipeline below ground, which restricts the flow rate of oil out of the pipeline, and that the SCADA system would detect a leak and shut in the pipeline to minimize the amount of oil spilled.

An oil spill or leak from an oil pipeline could have consequences ranging from insignificant to serious. The oil contains three to four percent Sulfur, and a trace amount (up to 1ppm) of Hydrogen Sulfide (H2S). The amount of H2S in the oil is not large enough to create a toxic gas cloud which would drift with the wind; however, it is possible that people surrounded by the oil or directly exposed to it could be affected. If the oil were ignited, it could create a radiant heat hazard from the burning oil.

For the most part, impacts of pipeline oil spills would be limited to impacts on the environment, with little or no direct hazard to the public. Automatic monitoring and control of the pipeline operations will reduce the impacts of a potential oil spill to the environment.

A.2.2.2 PUMP STATION

Both the Santa Maria Pump Station and the AAPL Pump Station are designed with containment curbs and pits for containment of a spill or rupture of the large oil tanks or other equipment. In the event of a spill, the containment the areas and pits would contain the spill and prevent the flow of crude oil off-site into other facilities or property.

The Santa Maria Pump Station tanks and associated piping is encircled by full containment dikes, including a sump to collect any oil leakage from these facilities. Over-filling an oil storage tank at Santa Maria Pump Station is unlikely, due to a high level alarm on the tank.

The entire AAPL Sisquoc Pump Station area, including the location of all pumps, sumps, equipment and above ground piping, is curbed, guttered, and sloped so that any oil spilled will be drained into a large pit containing a 48 barrel capacity underground sump.

The worst case spill that could potentially occur from a leak at a pump station is approximately 330 barrels, given the pump station flow rate, oil volumes contained in station piping, control center recognition and response times, and valves closure times. Such a spill would require cleanup actions, but probably would not ignite or cause significant environmental damage.

A.2.3 MAXIMUM HAZARD EXTENT

The extent of area covered or affected by an oil spill depends on the local topography, the nature of the soil, and possibly other factors including depth of pipeline burial. Determination of the area covered requires examination of each specific case. However, a general approximation is available (Reference 1), assuming the spill is onto flat, unpaved, compacted earth. For the spill amounts described in the previous subsection, the estimated area of coverage is as follows:

BBL	Area (acres)
100	**0.2 – 0.3**
500	**0.5 – 1.5**
1,000	**0.7 – 3.1**
2,500	**1.2 - 7.7**
5,000	**1.7 – 15.5**

Reference 1: Chem-Plus, Arthur D. Little, 1988.

The low side of the spill area range represents the prediction of the model (Reference 1) based on experimental data, allowing a non-uniform spill thickness on the surface of the ground. The high side of the spill area range represents the model assumption that the spill spreads across the ground at a uniform thickness of one-half inch.

Since these values are for oil spilled onto the surface of the ground, they may overstate the area impacted by a spill from a buried pipeline.

The radiant heat hazard footprint from a fire is dependent on the area burning. A fire covering approximately one acre would produce a radiant heat hazard footprint which could cause second degree burns to exposed personnel within 30 seconds, out to a distance of approximately 400 feet from the edge of the fire.

A fire of oil containing Sulfur could produce Sulfur Dioxide (SO_2), which is one of the combustion products. The oil transported through this pipeline has between three and four percent Sulfur by weight. Gaseous combustion products from a fire tend to rise and dissipate in the air. The immediate danger to life and health (IDLH) level for SO_2 is 100 ppm.

The size of the SO_2 hazard footprint would depend on the size of the fire, amount of Sulfur in the oil, and the atmospheric conditions. Evaluation of the buoyant plume rise due to an oil fire under worst case spill conditions, using the Industrial Source Complex Short Term (ISCST) dispersion model, predicts that SO_2 concentrations on the ground never exceed 1 ppm.

While no significant hazard footprint is predicted, it would be a prudent practice for workers in the vicinity of an oil spill or fire to take conservative measures to ensure their safety. Personal protection equipment and breathing apparatus will be used by responders in the event of a spill or fire.

APPENDIX A-2

PT. PEDERNALES RISK ANALYSIS

TABLE OF CONTENTS

The Company has performed a risk analysis of the Lompoc Heating, Separation, and Pumping (O&GP) Facility to Orcutt Pipeline and Orcutt Pump Station for the purpose of identifying potential accidents for which the Emergency Response Plan should be prepared. This analysis included an examination of the design and operation of the pipeline, and considered both the results of that analysis and the types of accidents that have occurred in the past at similar pipelines.

The Lompoc O&GP to Orcutt Pipeline transports relatively dry crude oil. The flash point of the oil is about 74° F.

The oil contains three to four percent Sulfur, and trace amount (up to 1ppm) of H_2S. The amount of H_2S in the oil is not large enough to create a toxic gas cloud, which would drift with the wind; however, it is possible that someone surrounded by the oil or directly exposed to it could be affected. If the oil were ignited, it could create a radiant heat hazard.

A.2.1 ANALYSIS OF POTENTIAL ACCIDENTS

There are a number of factors that can cause a pipeline or pump station to fail:

- Internal corrosion – corrosion from the inside of the pipe, caused by the corrosiveness of the liquid flowing through it.
- External corrosion – corrosion from the outside, caused by external elements
- Structural failures or mechanical defects – includes defective materials, seams, welds, etc.
- External impacts – dropped equipment, fire exposure (from wildland fire, or fire in adjacent pipelines), excavation activity and related damage (usually referred to as “third-party activity”).
- Natural hazards – seismic events, subsidence, floods, etc.

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

A leak or break in the Company oil pipeline or pump station facilities would release a volume of oil that depends on the following factors:

- Location of the leak or break
- Pumping rate through the pipeline
- Shutdown time for pumps
- Size (diameter) of the pipeline
- Topography, which determines the length of pipeline which would drain by gravity through a leak or break after shutdown of the pumps
- Location of the block valves
- Time to respond and repair

(b) (7)(F), (b) (3)

[redacted]

A.2.2 CONSEQUENCES

Pipeline

To predict the volume of oil escaping from the buried pipeline following a leak or break, two conservative assumption are made to avoid underestimating the maximum potential spill:

- The Company Control Center detects a leak and shuts in the block valves within three minutes of its occurrence, instead of the minimum time of 50 seconds (pumping a maximum of about 80 barrels of oil during this time period if the pipeline is severed.)

- The leak occurs at the lowest portion of the pipeline segment between block valves, and the breach in the pipe and overlying earth is large enough to allow oil escape in a virtually unrestricted manner.

(b) (7)(F), (b) (3)

[redacted]

1. The loss of oil due to oil pumped out of the line for ten minutes, at the maximum rate of 28 barrels per minute, before the pumps can be shut down. This pumping loss results in a spill of about 280 barrels of oil.

2. The drainage of the oil from the highest point of the pipeline (at an elevation of 1,100 feet) at 7,500 feet along the pipeline route, down to the elevation of the high point (at an elevation of 525 feet) at 41,500 feet along the pipeline route (see Figure A-1). Oil in the pipeline above the top of the hill near the Orcutt Pump Station would be expected to drain out of the line. The volume of the oil that would drain out of the line is about 430 barrel.

Thus, the unlikely, but worst case spill scenario would result in a spill of approximately 2,500 barrels of oil near the Orcutt Pump Station. It would take an hour and a half for this volume of oil to flow out of a breach in the pipeline at the maximum pumping rate, thus the chance of such an occurrence is speculative.

The volume reported above represent high-side cases. Spill volumes due to pipeline accidents are anticipated to be much smaller, on the order of 100 barrels of oil or less. This is due to the expectation that most pipeline leaks are due to a puncture or other failure of the pipeline ground below, which restricts the flow rate of oil out of the pipeline, and that the SCADA system would detect a leak and shut in the pipeline to minimize the amount of oil spilled.

An oil spill or leak from an oil pipeline could have consequences ranging from insignificant to serious. The oil contains three to four percent Sulfur, and a trace amount (up to 1ppm) of Hydrogen Sulfide (H2S). The amount of H2S in the oil is not large enough to create a toxic gas cloud which would drift with the wind; however, it is possible that people surrounded by the oil or directly exposed to it could be affected. If the oil were ignited, it could create a radiant heat hazard from the burning oil.

For the most part, impacts of the pipeline oil spills would be limited to impacts on the environment, with little or no direct hazard to the public. Automatic monitoring and control of the pipeline operations will reduce the impacts of a potential oil spill to the environment.

(b) (7)(F), (b) (3)

Although the oil storage tank is not used often, it can be assumed for the purposes of a risk analysis that it would be 75 percent full under circumstances that might lead to its rupture. Thus, the estimated spill volume for the tank is taken to be 17,250 barrels. A spill from the rupture of the oil storage tank would be contained by the dike surrounding the tank.

From the above, it is seen that the impact of a spill would be limited to the facility or property owned by the Company. Since the area around the pit does not normally have any sources of ignition, it is unlikely that the crude oil will catch fire. There will be flammable vapor present in the event of an oil spill, particularly if it is hot, and personnel entering the area should exercise caution and eliminate all sources of ignition within 100 feet of the spill area to avoid igniting the spill. In the unlikely event that the crude caught fire, the facility itself could be damaged, but no surrounding structures, environmental resources, or members of the public would be endangered. Thus, impacts of accidents at the Orcutt Pump Station would be limited to the facility itself.

A.2.3 MAXIMUM HAZARD EXTENT

The extent of area covered or affected by an oil spill depends on the local topography, the nature of the soil, and possibly other factors including depth of pipeline burial. Determination of the area covered requires examination of each specific case. However, a general approximation is available (Reference 1), assuming the spill is onto flat, unpaved, compacted earth. For the spill amounts described in the previous subsection, the estimated are of coverage is as follows:

BBL	Area (acres)
100	0.2-0.3
500	0.5-1.5
1,000	0.7-3.1
2,500	1.2-7.7
5,000	1.7-15.5

RFERENCE 1 CHEMS-PLUS, ARTHUR D. LITTLE, 1988.

The low side of the spill area range represents the prediction of the model (Reference 1) based on experimental data, allowing a non-uniform spill thickness on the surface of the ground. The high side of the spill area range represents the model assumption that the spill spreads across the ground at uniform thickness of one-half inch.

Since these valves are for oil spilled onto the surface of the ground, they may overstate the are impacted by a spill from a buried pipeline.

The radiant heat hazard footprint from a fire is dependent on the area burning. A fire covering approximately on acre would produce a radiant heat hazard footprint which could cause second degree burns to exposed personnel within 30 seconds, out to a distance of approximately 400 feet from the edge of the fire.

A fire of oil containing Sulfur could produce Sulfur Dioxide (SO_2), which is one of the combustion products. The oil transported through this pipeline has between three and four percent Sulfur by weight. Gaseous combustion products from a fire tend to rise and dissipate in the air. The immediate danger to life and health (IDLH) level for SO_2 is 100 ppm.

The size of the SO_2 hazard footprint would depend on the size of the fire, the amount of Sulfur in the oil, and the atmospheric conditions, using the Industrial Source Complex Short Term (ISCST) dispersion model, predicts that SO_2 concentrations on the ground never exceed 1ppm.

While no significant hazard footprint is predicted, it would be prudent practice for workers in the vicinity of an oil spill or fire to take conservative measures to ensure their safety. Personal protection equipment and breathing apparatus will be used by responders in the event of a spill or fire.

(b) (7)(F), (b) (3)

APPENDIX B

CHARACTERISTICS OF HAZARDOUS MATERIALS

APPENDIX B

CHARACTERISTICS OF HAZARDOUS MATERIALS

TABLE OF CONTENTS

APPENDIX B

CHARACTERISTICS OF HAZARDOUS MATERIALS

Physical properties, flammability, toxicity and treatment guidelines are presented in this Appendix for the following hazardous materials:

- **CRUDE OIL**
- **SULFUR DIOXIDE**
- **HYDROGEN SULFIDE**
- **NATURAL GAS**

The Material Safety Data Sheets (MSDS) for all materials used in pipeline operations are maintained at the Santa Maria Office and appropriate pump stations.

Traces of Hydrogen Sulfide may be present in the crude oil, up to a concentration of 1 ppm, but would not be expected to pose a hazard to workers in the event of a crude oil spill along the pipeline or at the pump station. Nevertheless, workers surrounded by Crude Oil must use personal protection equipment (respirators) to avoid contact with Hydrogen Sulfide gases that may be present.

The only Natural Gas present at district pump stations is utility gas used to fuel boilers and gas engines.

Appropriate monitoring devices will be utilized as necessary.

APPENDIX B

CHARACTERISTICS OF HAZARDOUS MATERIALS

B.1 CRUDE OIL

Synonyms:	Petroleum, Crude
State at 15 C and 1 atm:	Liquid
Composition:	Produced oil contains 3-4% Sulfur and up to 1 ppm Hydrogen Sulfide.
Vapor irritant characteristics:	Hydrocarbon vapors are nonirritating to the eyes and throat. Hydrogen Sulfide vapors may be present, however not in high enough concentrations to be toxic.
Liquid irritant characteristics:	Minimum hazard. If spilled on clothing and allowed to remain, may cause irritation and reddening of the skin.
Odor threshold:	Data not available.
Flammability:	Combustible to flammable
Flash point:	May be as low as 74° F
Handling temperature:	May be as high as 200° F
Fire extinguishing agents:	Foam, dry chemical, or Carbon Dioxide (CO_2). Water may be ineffective.
Electrical hazard:	Not pertinent.
Boiling point at 1 atm:	90° F to 750° F
Solubility in water:	Floats on water.
Color:	Dark brown to black.
Odor:	Acrid.
Treatment for exposure:	**EYES** - Flush with water for at least 15 minutes.
	SKIN - Wipe off and wash with soap and water.

B.2 SULFUR DIOXIDE

Chemical composition:	SO_2
State at 15 C and 1 atm:	Gas
Vapor irritant characteristics:	Poisonous if inhaled. Causes irritation of eyes and lungs with severe choking.
Odor threshold:	3 ppm
Specific gravity of gas (air=1):	2.2
Flammability:	Not flammable
Flammable limits in air:	Not flammable
Color:	Colorless
Odor:	Sharp, irritating
Molecular weight:	64.06
Treatment for exposure:	Move to fresh air. If breathing has stopped, give artificial respiration. Give oxygen if breathing is difficult. **CALL A PHYSICIAN.**

NOTE: Sulfur Dioxide is present only as a combustion product of materials containing Sulfur, such as Hydrogen Sulfide or Crude Oil containing Sulfur.

APPENDIX B

CHARACTERISTICS OF HAZARDOUS MATERIALS

B.3 HYDROGEN SULFIDE

Chemical composition:	H_2S
State at 15° C and 1 atm:	Gas
Vapor irritant characteristics:	Serious eye and respiratory irritation at concentrations above 100 ppm. Produces coughing and loss of sense of smell. At higher concentrations, respiratory paralysis may occur.
Odor threshold:	0.1 ppm
Specific gravity of gas (air=1):	1.2
Flammability:	Flammable gas
Flammable limits in air:	4.3% - 45%
Color:	Colorless
Odor:	Rotten eggs odor, but odorless at poisonous concentrations.
Molecular weight:	34
Treatment for exposure:	Remove to fresh air, if breathing has stopped, give artificial respiration. Give oxygen if needed. **CALL A PHYSICIAN.**

NOTE: Hydrogen Sulfide is present in low concentrations, up to 1 ppm dissolved in Crude Oil. It is not expected to pose a hazard to workers in the event of a Crude Oil spill. Nevertheless, workers surrounded by Crude Oil must use personal protection equipment (respirators) to avoid contact with Hydrogen Sulfide gases that may be present.

APPENDIX B

CHARACTERISTICS OF HAZARDOUS MATERIALS

B.4 NATURAL GAS

Chemical composition:	Typically 90% methane mixed with small amounts of ethane, propane, butane, pentanes, carbon dioxide, hydrogen sulfide, and nitrogen.
State at 15°C and 1atm:	Gas
Vapor (gas) irritant characteristics:	Vapors are nonirritating to the eyes and throat.
Liquid/solid irritant characteristics:	No appreciable hazard. Practically harmless to the skin, be cause it evaporates quickly, but may cause some frostbite.
Odor threshold:	200 ppm
Specific gravity of gas (air=1):	0.6
Solubility in water:	negligible
Flammability:	Flammable gas
Flammable limits in air:	5.0% - 14.0%
Color:	none
Odor:	mild and sweet
Molecular weight:	16 to 17 (average)
Treatment for exposure:	Remove to fresh air. Support respiration.

NOTE: *Natural Gas is present only as utility gas used to fuel boilers and gas engines at Santa Maria and the Orcutt Pump Station Facility.*

APPENDIX C

EMERGENCY MEDICAL ASSISTANCE

APPENDIX C
EMERGENCY MEDICAL ASSISTANCE

TABLE OF CONTENTS

APPENDIX C
EMERGENCY MEDICAL ASSISTANCE

Emergency medical assistance is obtained by dialing **9-1-1** (or 805/683-2724 if outside Santa Barbara County).

Emergency personnel from the Fire Department that respond to a **9-1-1** emergency call will dispatch appropriate medical personnel to care for injured employees and the public. The following information is presented for reference in the event that local emergency or specialized care facilities need to be contacted.

C.1 MEDICAL FACILITIES

A list of medical facilities is provided below that can be contacted and/or utilized in the event of a medical emergency.

Lompoc		
Lompoc District Hospital	508 East Hickory Ave.	(805) 737-3300
Santa Maria		
Marian Medical Center	1400 East Church St.	(805) 739-3000
Arroyo Grande		
Arroyo Grande Community Hospital	345 S. Halcyon Rd.	(805) 489-4261
Burn Center		
Sherman Oaks Hospital	4929 Van Nuys Blvd.	(818) 981-7111
Santa Barbara		
Dr. Weis	2050 Cambridge Ln.	(805) 925-8332
Dr. E. G. Smith (Orthopedic)	2324 Bath St.	(805) 682-7801
Cottage Hospital	320 W. Pueblo St.	(805) 682-7111
	Emergency Room	(805) 569-7210
Goleta Valley Hospital	351 S. Patterson Rd.	(805) 967-3411
	Emergency Room	(805) 681-6473
Orthopedic		
Santa Barbara Orthopedics & Sports Medicine, Inc.	231 W. Pueblo St.	(805) 682-1394

APPENDIX C
EMERGENCY MEDICAL ASSISTANCE

C.2 POLICE AND FIRE DEPARTMENT SERVICES

Listed below are telephone numbers of fire and police departments for communities that could be affected by a facility emergency during production operations.

Santa Barbara County Fire Departments		
Protection Services Division		**9-1-1** or (805) 683-2724
Fire Administrative Center	4410 Cathedral Oaks Road Santa Barbara 93110	(805) 681-5500
Fire Prevention Division		(805) 686-8170
Santa Barbara County	Station 22 1596 Tiffany Park Court Santa Maria 93455	(805) 681-5500
Santa Barbara County	Station 51 749 Burton Mesa Road Lompoc 93436	(805) 681-5500
San Luis Obispo County	2315 Bayview Heights Los Osos 93402	(805) 528-1053
San Luis Obispo County Fire Departments		
County Emergency Center		(805) 543-4242
City Fire Departments		
Pismo Beach		(805) 773-2208
San Luis Obispo		(805) 549-7380
Orcutt (Volunteer)		(805) 937-7515
Lompoc City Station	115 South G Street Lompoc 93436	(805) 736-4513
Santa Maria Fire Station	222 East Cook Street Santa Maria 93454	(805) 925-0951 (805) 928-3781 24 hr

APPENDIX C
EMERGENCY MEDICAL ASSISTANCE

Sheriff Departments		
Emergency		**9-1-1**
From the Company Control Center		(805) 683-2724
Lompoc	751 Burton Mesa Road	(805) 737-7737
	Lompoc 93436	(805) 692-5744 24 hr
Santa Maria	812A West Foster Road	(805) 934-6150
	Santa Maria 93455	(805) 692-5744 24 hr
Santa Barbara	4436 Calle Real	(805) 681-4100
	Santa Barbara 93111	
Solvang	1745 Mission Drive	(805) 686-5000
	Solvang	
Police Departments		
Santa Barbara	215 East Figueroa	(805) 963-3616
	Santa Barbara	
San Luis Obispo		(805) 543-3131
Santa Maria		(805) 928-3781
Lompoc		(805) 736-2341
Pismo Beach		(805) 773-2208

APPENDIX D

TRAINING AND DRILLS

APPENDIX D
TRAINING AND DRILLS

TABLE OF CONTENTS

APPENDIX D
TRAINING AND DRILLS

D.0 TRAINING AND DRILLS

The emergency response training program is designed to assure that an adequate number of trained personnel are available to respond to emergencies along Unocap pipelines or at pumping stations on an around-the-clock basis. The program is designed to comply with all applicable laws and regulations.

The training program for emergency response is designed to prepare personnel to respond properly to non-routine activities or emergencies such as fires, spills, or leaks involving crude oil, pressure distillates, gasoline, or other petroleum products normally transported or stored in the pipeline system. This program is *not* currently designed to prepare personnel to respond to spills or fires involving other types of chemicals (e.g., boiler feedwater treatment chemicals), product transportation accidents other than spills (e.g., tank truck rollover or fire), fires beyond the incipient stage, or interior structural fire fighting. This program is also not intended to address routine activities that may involve potentially hazardous situations. For example, it is not intended to be applied to routine work such as normal maintenance or process interruptions, including, but not limited to, painting, machining, hot work (cutting/welding), refueling operations, and material transfer.

The specific objectives of the training program include:

(1) Define levels of training required for all personnel within pipeline operations, including awareness training for administrative staff through more advanced, specialized response training for those personnel with primary responsibility for the management and mitigation of emergencies;

(2) Establish the content of in-house classroom, computer-based training and hands-on training; and identifying specialized outside training courses to supplement the in-house program;

(3) Designate the duration and frequency of all training courses;

(4) Assure attendance and proficiency of personnel;

(5) Design and schedule drills to assess response capabilities to a variety of potential incidents; and

(6) Maintain compliance status of all Pipeline Division personnel with designated training level requirements using the Training Tracking System.

Each of the objectives listed above is addressed in the following sections.

Refer also to Section 9 of this California State Appendix DOT Plan for additional business specific training programs.

APPENDIX D
TRAINING AND DRILLS

D.1 TRAINING LEVELS

The variety of jobs on the pipeline requires a range of awareness and expertise to cope with potential emergencies. Training levels have therefore been designed to provide a tailored curriculum for defined levels of response capabilities, which are designated for each individual depending on his or her specific job description and stated emergency role.

Each training level is comprised of a series of training modules or courses, as summarized in Table D-1. As the training levels increase numerically, information presented in previous level(s) will be included in the upper level programs. A brief description of each training level and its applicability to a defined emergency response role is provided below.

Level 1 - Awareness. A fundamental level of training addressing site-specific evacuation procedures, general safety considerations, and other basic information for personnel who would not be likely to encounter or be actively involved in an emergency situation.

- Level 1A - Visitors.
- Level 1B - Contractors who will have limited, specific involvement in emergency response operations, e.g., backhoe operators.
- Level 1C - Administrative and technical support staff with minimal potential for exposure to emergency situations.

Level 2 - Emergency Support. Designed for personnel working along the pipeline who are likely to discover or be exposed to an emergency situation; personnel at this level would *not* be actively engaged in offensive mitigation activities. Personnel will be trained to take certain mitigation activities only if trained to the HAZWOPER level, and only if it is safe to do so. These activities may include activation of a tank seal foam system, coating a spill with foam, or using monitors or hose reels to cool exposed equipment or tanks in the event of a small fire. Personnel could be called for support during an emergency, under the supervision of emergency responders. This would include individuals assisting in emergency oil cleanup for large spills.

Level 3 - Emergency Responders. Responsible for handling all types of emergencies along the pipeline or at the pump stations. Pipeline personnel, except for administrative support staff, are trained to the HazMat technician level and will be expected to function as emergency responders. Emergency responders will be trained to take offensive measures during a hazardous materials incident, and will take defensive actions in the event of a fire beyond the incipient stage. Designated roles are in accordance with the Incident Command System (ICS). Key ICS roles are: Incident Commander, Safety Officer, Liaison Officer, Operations Section Chief, and Logistics Section Chief.

Level 4 - Incident Commander/Scene Managers. Level 4 includes the Pipeline Division Manager, District Superintendents, Supervisor of Health, Safety, and Environment, and selected supervisory personnel who could serve as the Incident Commander during an emergency. Training focuses on managing an emergency using the ICS, documentation and notification procedures, and communicating effectively with outside and corporate resources, the media, and the public. The training of every employee is categorized by one of the four training levels described above, and records of training compliance are maintained in accordance with The Company's computerized Training Tracking System.

APPENDIX D

TRAINING AND DRILLS

TABLE D-1: COMPANY NORTHERN CALIFORNIA PIPELINE DIVISION - EMERGENCY RESPONSE TRAINING

TRAINING LEVEL AND APPLICABILITY		MINIMUM REQUIRED TRAINING COURSES									TOTAL MINIMUM REQUIRED HOURS OF TRAINING PER LEVEL	
		Fire Exting	Respir Fit Test	HazComm/FRA[1]	PEC[2]	HMT	First Aid & CPR	ICS	SPECIAL MODULES		INITIAL COURSES	ANNUAL REFRESHER COURSES
	Initial Hrs	1	2	3	4	24	8	16	DESCRIPTION	HRS		
	Annual Ref Hrs	1	2	3[3]	4	4[3]	4	NA				
LEVEL 1 - AWARENESS Level 1A: Visitors Level 1B: Contractors Level 1C: Administrative Staff		X		X X					Emergency Instruction[4] Orientation	N/A 1	0 4 4	0 3 4
LEVEL 2 - EMERGENCY SUPPORT (Petroleum post-emergency spill cleanup only)					X						4	4
LEVEL 3 - EMERGENCY RESPONDERS (Hazardous Materials Technician)		X	X			X	X				35	11
LEVEL 4 - INCIDENT/SCENE MANAGERS (Incident Commander)		X				X	X	X			49	9

Notes: There are no minimum required hours for the HazComm and FRA course The hours listed are estimated

FRA = First Responder, Awareness
PEC = Post-Emergency Cleanup Level 1B: Contractors working in areas where hazardous materials may be present ICS = Incident Command System

Notes: (1) There are no minimum required hours for the HazComm and FRA course The hours listed are estimated
(2) Per the OSHA directive dated October 5, 1990, 4 hours of training is needed for (otherwise untrained) personnel who will be actively involved in cleanup and mopping up of major petroleum spills
(3) Refresher training consists of completion of a minimum of 4 computer-based training modules for FRA, and 11 modules for HMT, which require an average of 1 to 1-1/2 hours each to complete
(4) Emergency instructions given to visitors, contractors, or vendors who will have short term unescorted access to Pipeline property
HMT = Hazardous Materials Technician FRA or equivalent (provided by contracted company) is required

SUMMARY

APPENDIX D
TRAINING AND DRILLS

D.2 TRAINING MODULES

Training modules have been developed to provide a consistent and repeatable training program that can be conducted by in-house instructors. Training for hazardous material emergencies involves both classroom sessions and field exercises, as appropriate.

A brief description of the training that specifically satisfies the requirements of 29 CFR 1910.120 and 29 CFR 1910.38 is provided below:

- **Hazard Communication/First Responder Awareness**. Incorporates Hazard Communication requirements (29 CFR 1910.1200), First Responder Awareness (29 CFR 1910.120), with Employee Emergency Plans and Fire Prevention (29 CFR 1910.38) to provide the basic awareness level course. The course covers site-safety emergency procedures, such as discovery, notification, evacuation, and general safety considerations.

- **HazMat Technician**. Incorporates first responder awareness and first responder operations (as defined in 29 CFR Part 1910.120), to provide basic hazard and risk assessment techniques; selection and use of PPE; basic procedures for defensive emergency measures; decontamination; and the role of the HazMat technician in an emergency. The HazMat technician level also includes more advanced training in personal protective equipment; incident management; material classification; control and containment measures to stop releases; and basic chemical and toxicological terminology. The course content for this training is discussed below.

D.3 COMPUTER BASED TRAINING

The Pipeline Division uses the PC-based Williams Computer Based Training Program, which provides 27 computerized modules of training information for employees. The Williams Program includes the following modules which are incorporated in the annual refresher training:

D.3.1 HAZARD COMMUNICATION/FIRST RESPONDER AWARENESS

- **Introduction to Safety**. Covers safety aspects of working in a pipeline facility.

- **Worker Right to Know** (2 parts). Discusses "Right to Know" laws, potential hazards to pipeline personnel, and the way in which the Pipeline Division communicates such information to employees.

- **Hazard Recognition and Evaluation**. Provides employees information on hazards they may be exposed to and how to handle them.

- **Emergency Response Pre-Planning and Site Control**. Reviews policy and procedures to ensure preparations for Pipeline Division emergencies.

D.3.2 HAZMAT TECHNICIAN

- **Safety Equipment**. This module covers the different types of monitoring equipment used by the Pipeline Division.

- **DOT Safety Reporting Requirements**. Discusses DOT reporting requirements for accidents specific to the Pipeline Division.

- **Respirators** (2 parts). The first module is a general introduction to the types of respiratory equipment used by the Pipeline Division. The second module details fit testing, use, and maintenance of respirators.

- **Confined Space Entry Procedures**. This module, specific to pipelines, discusses how to work safely in a confined space.

- **Emergency Response Equipment**. Equipment that may be used during an emergency is covered in this module.

- **Hazardous Spill Response Procedures**. This module reviews plans for Pipeline Division response during an emergency.

- **Medical Surveillance and Treatment**. This explains the Pipeline Division's program to monitor employee health, human exposures, and medical treatment.

Additional computer-based training modules include the following topics but are not required for annual refresher training.

- Nature of Petroleum Products
- Liquid Petroleum Measurement
- Petroleum Tank Operations
- DOT Part 195 Codes and Regulations
- Pipeline Maintenance, Line Pipe
- Pipeline Maintenance, Practices
- Fundamentals of Corrosion Control
- Cathodic Protection Maintenance

APPENDIX D
TRAINING AND DRILLS

D.4 HANDS-ON AND SPECIALIZED TRAINING COURSES

A brief description of other emergency response training modules is discussed below:

- **Emergency Instructions**. Information provided to visitors that describes fundamental emergency procedures. Not a formal course.
- **Contractor Orientation**. Emergency procedure information provided to contractors and vendors, delivered verbally, by videotape and/or written materials.
- **Fire Extinguisher**. Provides hands-on instruction in the use of fire extinguishers.
- **Respirator Fit Test**. Annual test to determine the appropriate size of air purifying respirator required for each participant.
- **First Aid and Cardiopulmonary Resuscitation (CPR)**. Equivalent to Red Cross courses in standard first aid and adult CPR.
- **Refresher Training**. Annual training which reviews previous material and new information to the extent that employees are able and competent in their duties. The previously discussed computer program is incorporated in this training.
- **Incident Command System (ICS)**. Instruction in the structure and use of the ICS, which is employed by the Company in its emergency organizational structure. Course is intended for supervisors who would assume the role of Incident Commander, particularly during a major incident.
- **Incident Commander Training (at Texas A&M)**. Course which instructs supervisory personnel how to function as Incident Commanders during an emergency response.

D.5 HAZMAT SCHOOL

The Company HazMat School HazMat technician training course is a 24-hour in-house course which provides initial training to the HazMat technician level. A sample list of topics to be addressed during the course is presented below. While the order of presentation of each of these modules and the scenario for tabletop exercises may be varied at the instructor's discretion, this agenda represents the minimum information to be covered during the course. Additional information may be added, particularly if the results of drills or other exercises identify areas where more emphasis is needed. A course book is also provided to all participants which addresses the course topics. The list of topics includes:

A course book is provided to all participants, which addresses the following topics:

- HazMat Emergency Response Regulations and Standards
- Hazardous Materials Technician Duties and Responsibilities
- General Hazardous Materials Terms, Definitions, and Assistance Resources
- Chemical and Toxicological Terms and Definitions
- Basic Hazardous Material Toxicological Behavior

- Personal Protective Equipment (PPE)
- PPE Selection and Inspection
- Risk Assessment
- Hazardous Substance Identification Systems
- Air Monitoring Instruments
- Incident Management
- Standard Operating Procedures for HazMat Operations
- Incident Mitigation
- Containment of Hazardous Materials
- Plug, Patch, Transfer, and Overpack
- Vapor Suppressant Foams
- Decontamination
- Incident Termination Procedures
- Glossary: Hazardous Materials Definitions and Terms

D.6 DURATION AND FREQUENCY OF TRAINING

Table D-1 specifies the minimum duration of initial training as well as annual refresher courses required. Refresher training for staff trained to the FRA level consists of a combination of computer-based training and classroom fire extinguisher training. Annual refresher training for personnel trained to the HMT level will consist of computer-based training, respirator fit testing and SCBA checkout procedures, and participation in at least one emergency response drill. Also, training for the emergency response plan will be reviewed initially upon employment, if the plan is revised, or if changes in an employee's job duties alter their responsibilities under the emergency response plan.

D.7 ATTENDANCE AND PROFICIENCY

For required classroom training, the attendance of all trainees is compulsory and will be documented through a sign-in list maintained by the course instructor. A proficiency test is given at the conclusion of the HMT course to document comprehension of subjects taught. A score of at least 80% is required on the written exam. There is no written exam for FRA training. Hands-on proficiency testing is graded on a pass/fail basis, and training records of attendance and proficiency are maintained on the Training Tracking System. Copies of attendance sheets and course agendas are kept for additional documentation.

Proficiency for subjects covered in PC-based modules is measured by achieving a score of at least 80% on the computer exam for each module. The Williams Program stores detailed data including the number of attempts at each exam by an employee, and the employee's score on each of those attempts. The date that an employee successfully completes these modules is manually input into the Training Tracking System.

The Pipeline Division Manager of Health, Safety and Environment and Division Superintendents will

ensure that the Company emergency personnel attend training courses and are proficient in the material presented.

D.5 DRILLS AND EXERCISES

Regular drills and exercises, such as evacuation drills, shall be conducted by the Coast Area Department to assure adequate preparedness. There will be one drill conducted annually for each system Sisquoc and Pt. Pedernales. Drills and exercises will be scheduled and conducted under the direction of the Pipeline Division Manager of Health, Safety, and Environment to assure that preparedness objectives are fulfilled while considering operational constraints, such as personnel availability and other operational factors. Local emergency response agencies will be invited to participate in at least one annual drill for each Area.

Periodic spill exercises are normally conducted twice a year. Supervisors and relief supervisors from Santa Margarita and Santa Maria Districts participate in the periodic exercises, as well as Gang personnel from San Luis Obispo District.

Company employees receive training in Hazardous Materials Technician and appropriate spill response training from qualified trainers.

In addition to the regular drills and exercises conducted by the Company, County of Santa Barbara Condition P-3 indicates that the effectiveness of the ERP shall be demonstrated by responding to no more that two surprise drills each year which may be called by the County.

APPENDIX E

SANTA BARBARA COUNTY AREA OIL AND GAS INDUSTRY EMERGENCY RESPONSE PLAN

APPENDIX E
SANTA BARBARA COUNTY AREA OIL & GAS INDUSTRY EMERGENCY RESPONSE PLAN

APPENDIX E – SBC AREA OIL & GAS INDUSTRY ERP

SANTA BARBARA COUNTY

AREA OIL & GAS INDUSTRY EMERGENCY RESPONSE PLAN (Industry Mutual Aid Plan)

MARCH 2007

Revised: October 2013

Prepared by: **Santa Barbara County Office of Emergency Management; and Industry**

AREA OIL & GAS INDUSTRY EMERGENCY RESPONSE PLAN

RECORD OF REVISIONS: March 2008; June 2009; September 2009 #1 & #2; October 2009; November 2009, June 2011, April 2012, June/July 2013,

Revision Number	Revision Date	Revision Page and Description
1	3/2008	Pg 35 - Add PIMA Task Force Chairman Rotation. Pg 36-42 - Update Facility Communications Plan Information. Pg 9 - Change that Hazardous Materials Emergency Response Area Plan was developed by OEM and is being revised by SBC Fire-HMU.
2	6/2009	Updated Title Page, Record of Revisions, and Distribution of Plan. Page 12 – Deleted date of FOG and added Current FOG. Added new web location for IMH. Page 23 – Clarified portion pertaining to Industry EOC. Added "protective measures for the protection of life, property and the environment. Page 35 – Changed AAPL from Dave Woodruff to Kathy Thomas. Page 36, 39, 40 – Updated contact information. Page 43 – Added line for date completing forms. Page 38 – Change Control Center Telephone Number.
3	10/29/09	Page 18 – Change Level III to Level 3 in the Criteria column. Page 36, 37, 38, 40, and 41 – Changed Satellite Phone information.
4	11/9/09	Page 42 – Added Satellite information to SMAR.
5	7/2011	Distribution of Plan – Name Changes: Kathy Randall, Ed Fetterman, Tim Plaisance & EPI Representative. Deleted all references that this Plan is an annex to County HazMat Plan. Communications Plan – Name Change for Kathy Randall & EPI Rep. Added Satellite Information. Updated information for: SBC, Kathy Randall, E&B, ExxonMobil & EPI Information. Added Year to Self Inspection Forms.
6	9/2011	Added EPI representative and information. New satellite phone numbers for PXP, E&B information.
7	4/2012	Change ConocoPhillips to Phillips 66. EOP changed to EMP. County OSCP is a stand-alone Plan and no longer an Annex to Hazardous Materials Emergency Response Plan. Added that Title 29 CFR 1910.120. (q) (3) (ii) is the regulation that requires the implementation of an ICS for hazardous material response. Updated Communications Plan. Changed date & OES to OEM on Self Inspection Forms.
8	6/2013	Change Task Force Chairman for EPI. Update information for this Section, e.g., PAAPL, ExxonMobil, Bill Alston, Butch Lemos, Phillips 66.
9	7/2013	Change PXP to Freeport-McMoRan Oil & Gas LLC (FM O&G). Updated GENERAL, Task Force Chairman Information, SBC EOC, Phillips 66, Plains All American Pipeline, L.P., Hazardous Materials Emergency Response Area Plans and XXXXX Information.
10	10/2013	Updated Operator information for: FM O&G, PAAPL and Greka.

Rev. 7/2013

DISTRIBUTION OF PLAN

Name	Agency	Revision Date
Byron Everist	Freeport-McMoRan Oil & Gas LLC (FM O&G) – Arguello (GOHF) and LOGP	7/2013
Kathy Randall	PAAPL	7/2013
Butch Lemos	Phillips 66	7/2013
Ed Fetterman	E&B	6/2013
Bill Alston	ExxonMobil	7/2013
Steve DeMott	Greka – SMRC	10/2013
Kevin Drude	P&D – Energy Division	6/2013
Jeff MacDonald	EPI	7/2013

Rev. 7/2013

GENERAL

The Santa Barbara County Emergency Response Plans are designed to be consistent with the National Contingency Plan, Area Contingency Plan and State Emergency Response Plans. The National Incident Management System (NIMS) Incident Command System (ICS) model and the Standardized Emergency Management System (SEMS) model will be utilized for emergency response issues that occur within Santa Barbara County promoting clear communications and stakeholder involvement in all aspects of emergency response within the County.

This plan is designed to work in concert with and be a part of the Emergency Response Plans (ERPs) for those facilities that operate within Santa Barbara County and are required to have an ERP.

Introduction

Santa Barbara County has long been known for the oil and gas development, which occurs off its shores. There are numerous oil and gas platforms, pipelines, processing facilities, and marine terminals. Although both government and oil industry have gone to great lengths to reduce the risks posed by oil and gas development and the marine transportation of oil and other hazardous materials, the possibility exists that an incident could occur.

This document is directed toward the joint government and oil industry response to a petroleum related incident, which involves one or more of the onshore petroleum facilities. Examples of the types of incidents, which would require activation of this plan, are: toxic gas releases, hazardous substance spill, major fire, explosion, earthquake, or other emergency situations that exceed the operator's initial response capabilities.

The Area Oil and Gas Industry ERP has been developed pursuant to County Permit Conditions enacted upon oil and gas development projects, which have undergone or are currently undergoing the County's land use permitting process. In addition, California Government Code Section 8670-35 requires local governments with jurisdiction over or located directly adjacent to marine waters, to develop an offshore Oil Spill Contingency Plan (OSCP). The Area Oil and Gas Industry ERP was also developed to satisfy this requirement.

Purpose and Objective

The purpose of the Area Oil and Gas Industry ERP is to provide a structure for government and industries' response to an onshore oil or hazardous materials related emergency. It outlines the responsibilities of federal, state, and local responding agencies and the oil industry, and describes how these entities should coordinate their response efforts.

The objective of this plan is to provide timely, effective and coordinated response and mitigation of petroleum or hazardous materials related emergency involving one or more petroleum facilities, and oil or gas pipelines.

Scope

This plan is to be used by the oil industry and local agencies in responding to onshore petroleum related emergency occurring at one or more of the oil and gas facilities located within Santa Barbara County.

This Plan may be activated at any time that the facility or governmental Incident Commander (IC) deems it necessary to do so. Upon activation of this Plan, a Level 3 Industry emergency shall be declared. Nothing in this Plan shall override the right of a jurisdictional agency to assume full command of a Level 3 incident at any time.

Each individual facility shall utilize its own ERP for all incidents. This plan is intended to provide an overarching process for Level 3 emergency response actions.

Refer to the Emergency Levels Matrix located in this plan for definition of Emergency Levels.

Authorities

This plan is promulgated under the authorities:

- State Emergency Services Act (Govt. Code Chapter 7 of Division 1 of Title 2, Sections 8559 et seq) especially Articles 3.5 and 3.7)
- California Health & Safety Code
  - Hazardous Materials (Division 20, Chapter 6.95, Sections 25500 through 25521)
  - County Health Emergencies (Division 1, Part 2, Chapter 1158, Sections 470-474)
- California Emergency Plan
- State Hazardous Materials Incident Contingency Plan
- State OSCP
- DOT Pipeline Safety Regulations
- County of Santa Barbara Emergency Management Plan (EMP)
- County of Santa Barbara Emergency Services Ordinance #3014
- County Board of Supervisors Emergency Plan Requirements for New Petroleum Facilities (P-3 Condition)
- County Board of Supervisors Area Emergency Planning requirements for existing and new petroleum facilities (P-4 Condition)

Hierarchy/Relationship to Other Plans

The federal, state and local governments have numerous plans dealing with emergency response. In addition, there are different industry OSCPs for platforms, marine terminals and onshore facilities. The purpose of this section is to describe the different government and industry OSCPs and explain how these plans interrelate. The plans included in this discussion are those that focus on oil spill response or have an Annex that deals with that issue.

This plan shall be updated as changes are made to the Communications Plan or at least every three years to assure accuracy, adequacy and consistency with other related plans.

This plan will be activated when an incident involves one or more facilities or has the potential for an impact upon the community. It does not supersede the facility plans but coordinates implementation of those plans when more than one facility is impacted or assistance is required from neighboring facilities.

FEDERAL PLANS

National Contingency Plan

The National Contingency Plan serves as the umbrella document guiding the Federal Government's response to an oil spill or other hazardous materials discharge, occurring anywhere in the United States, both offshore and inland. Offshore includes: the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management of the United States. Specifically, the plan discusses and describes federal response policies, the national response organization; the responsibilities of the Federal On-Scene Coordinator; the agencies included on the National Response Team and their responsibilities; and the National Response Center.

The Oil Pollution Act of 1990 (OPA '90) requires that the oil spill response component of the National Contingency Plan be amended to address a worst-case discharge, which is a complete loss of cargo from an oil tanker. Specifically, the plan is required to include the following:

- Identification, maintenance, storage and procurement of equipment and supplies;
- Establishment of a National Response Unit and Coast Guard District Response Groups;
- A surveillance and notification system to ensure the earliest possible notification of an oil spill or other hazardous materials discharge;
- Establishment of a national center to provide coordination and direction for operations in carrying out the plan;
- Procedures and techniques to be used in identifying, containing, dispersing and removing oil or other hazardous materials discharge;

- A section identifying dispersants or other chemical used to mitigate the effects of an oil spill, which must include identification of the water where dispersants may be used and the quantity of dispersants which may be used in these waters;
- Procedures for reimbursing a State for its response to an oil spill;
- Procedures to coordinate the activities of Coast Guard Strike Teams, the Federal On-Scene Coordinator, Coast Guard District Response Groups, and Area Committees; and
- A fish and wildlife response plan for immediate and effective protection, rescue and rehabilitation of fish and wildlife resources.

Region IX – Mainland Regional Contingency Plan

The Region IX – Mainland Regional Contingency Plan describes the response actions of Region IX – Mainland Regional Response Team. The plan is to be used in the event of an oil spill and other hazardous substance discharges both onshore and offshore of Region IX – Mainland. Region IX – Mainland includes Arizona, California and Nevada.

The Region IX – Mainland Regional Contingency Plan is to be used in conjunction with the National Contingency Plan. The Regional Contingency Plan describes the responsibilities of the Regional Response Team; procedures for establishing Federal Local Contingency Plans (see below); and procedures for conduction response actions pursuant to the Clean Water Act and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by SARA.

Specifically, the Region IX – Mainland Plan does the following:

- Pre-designates specifically who the Federal On-Scene Coordinator is for the different geographical areas within Region IX – Mainland;
- Describes the formation of the Region IX – Mainland Regional Response Team, its specific membership and their responsibilities in both of response planning and in the event of an oil spill;
- Discusses funding, public information, and community relations in the event of an oil spill or other hazardous materials discharge.

The main difference between the National Contingency Plan and the Region IX – Mainland Regional Contingency Plan is the National Contingency Plan focuses on the federal response to an oil spill, including the responsibilities of the Federal On-Scene Coordinator, the National Response Team, the Coast Guard Strike Teams, and the National Response Center. The Region IX – Mainland Regional Contingency Plan describes the responsibilities of the Region IX – Mainland Regional Response Team and how it assists the Federal On-Scene Coordinator in the event of an oil spill.

U.S. Coast Guard Marine Safety Office/Group Los Angeles – Long Beach Oil and Hazardous Substance Pollution Contingency Plan

The National Contingency Plan requires the Coast Guard to develop federal local plans to provide for the integrated and coordinated response to an offshore oil spill or other hazardous substance discharge, between federal, state and local government agencies, and non-government entities. Federal Local Plans are much more specific than the National and Regional Contingency Plans since the Federal Local Plans describe the response procedures for a particular geographic area. The federal local plan in which Santa Barbara County is included is the U.S. Coast Guard Marine Safety Office/Group Los Angeles – Long Beach Oil and Hazardous Substance Pollution Contingency Plan. The plan also includes Orange, Los Angeles and Ventura Counties. The intent of this plan is to provide an integrated and coordinated response to an offshore oil spill or other hazardous substance discharge, between federal, state and local government agencies, and non-government entities.

The Oil Pollution Act of 1990 requires some modification to the Federal Local Plans. For example, OPA '90 requires that Area Committees, consisting of qualified federal, state, and local officials, be established to work with the Federal On-Scene Coordinator in developing what they are now calling Area Contingency Plans. As with the federal local plans the Area Contingency Plans will be more site specific than the National and Regional Contingency Plans and must describe the response procedures for worst-case spill occurring within the jurisdiction of each Area Committee.

The Area Contingency plans to be used in conjunction with the National Contingency Plan and the Regional Contingency Plan in the event of an oil spill or other hazardous substance discharge. The plans are required to describe the Coast Guard and other federal response agencies' exact responsibilities in the event of an oil spill or other discharge, and the joint response between federal, state and local response agencies. The plans must also include:

- A description of areas within the jurisdiction of the Area Committee that are of special environmental or economic importance;
- A list of available equipment and personnel; and
- The responsibilities of governmental agencies and the vessel or facility owner or operator responding to a discharge.

The Area Committee in which Santa Barbara County is included in the same geographic region covered by the Marine Safety Office/Group Los Angeles – Long Beach which includes the counties of Orange, Los Angeles, Ventura and Santa Barbara.

California Hazardous Materials Incident Contingency Plan (HMICP)

The California State Office of Emergency Services pursuant to Government Code Section 8574.16 requires a state toxic disaster plan to be prepared. The plan addresses the release or threatened release of hazardous materials, including an oil spill and radiological release. The HMICP serves primarily as an umbrella and reference document, not an operational tool. Specifically, the plan:

- Describes the ICS and provides examples for how the system works;
- Delineates the respective responsibilities for the local, state, and federal agencies, interagency organizations, and non-governmental organizations;
- Describes the different federal and state funding sources available to federal, state, and local agencies for financing or reimbursing their response to an oil spill other hazardous materials release, and
- Facilitates mutual aid to supplement local needs.

The HMICP provides a good description of the overall hazardous materials emergency response organization in California.

State Oil Spill Contingency Plan

The State's OSCP is a stand-alone Annex to the HMICP and specifically addresses the state's response to an oil spill. In 1990 however, the State Legislature passed the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act, which requires that the State OSCP be amended to include a marine OSCP section. The State Office of Oil Spill Prevention and Response within the Department of Fish and Game, is charged with developing the new planning section that must provide for the best achievable protection of California's coast and marine waters and must include the following elements:

- A Marine Response Element that will specify the hierarchy for state and local agencies responding to an oil spill;
- A Regional and Local Planning Element which will provide the framework for the involvement of regional and local agencies in the State's response to an oil spill;
- A Coastal Protection Element which will establish the State standard for coastal protection; and
- An Environmentally and Ecologically Sensitive Areas Element, which will consist of maps depicting environmentally and ecologically sensitive areas in marine waters or along the coast.

Emergency Management Plan (EMP)

The EMP is the county emergency plan required by the State of California. This plan addresses the jurisdiction's planned response to extraordinary emergency situations associated with natural disasters, technological incidents and nuclear defense operations.

The EMP is activated as the umbrella response plan for all major emergencies. However, the County Hazardous Materials Emergency Response Area Plan would also be activated in the event of an oil spill. The Offshore OSCP and this plan would be activated as a component of the Hazardous Materials Emergency Response Area Plan.

Hazardous Materials Emergency Response Area Plan

California Health and Safety Code Section 2550 et seq. requires local governments to develop Hazardous Materials Emergency Response Area Plans. The purpose of these plans is to detail how city and county emergency response agencies will respond in the event of an actual or threatened hazardous materials release. In Santa Barbara County the original plan was developed by OEM and was revised by the Santa Barbara County Fire Department Hazardous Materials Unit who was the Administering Agency for the Certified Unified Program Agency (CUPA). CUPA moved to Santa Barbara County Public Health-Environmental Health Services in July 2013 and Public Health will be responsible for updating the Plan in the future for the County and the Cities within the County.

The Area Plan for the Santa Barbara County area is intended to be used as a resource and guidance document for emergency response agencies and organizations during a hazardous materials release or threatened release. This plan does not specifically address the County or Cities' response to an oil spill but there are general guidelines, which are applicable to both a hazardous materials emergency occurring onshore and offshore.

Area Oil and Gas Industry Emergency Response Plan (This Plan)

The Area Oil and Gas Industry ERP outlines how Industrial Mutual Aid will occur and augments operator facility ERPs and OSCPs.

County Oil Spill Contingency Plan (OSCP)

The County OSCP, approved by the State, is a stand-alone Plan. The purpose of this plan is to provide a structure for government and industries' response to an offshore oil or hazardous materials related emergency.

Industry Plans

All oil facilities in federal or state waters, onshore facilities, and all tank vessels utilizing these facilities must have an approved OSCP to be used in conjunction with their Facility ERPs. In addition, oil spill cooperatives shall have OSCP for their response areas. Rev. 7/2013

OIL POLLUTION ACT OF 1990

OPA'90 requires that by February 1993, all offshore tankers and facilities and all onshore facilities that could cause a release of oil into the environment, must prepare oil spill response plans. These plans must do the following:

- Be consistent with the National Contingency Plan and the appropriate Area Contingency Plan;
- Identify the qualified individual having full authority to implement the removal actions and require immediate communications between that individual and the appropriate federal responder;
- Identify and ensure by contract, the availability of personnel and equipment necessary to remove a worst case discharge; and
- Describe the training, equipment, periodic unannounced drills and response actions of personnel on the tanker or at the facility.

In order for a tanker, offshore facility or onshore facility to continue operating, the Coast Guard and Oil Spill Prevention and Response (OSPR) must approve its oil spill response plan.

THE LEMPERT-KEENE-SEASTRAND OIL SPILL PREVENTION AND RESPONSE ACT

Under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act, all operators of tank vessels, pipelines, terminals and facilities within the marine waters of the State of California are required to prepare OSCPs. These plans are required to address the following:

- The response to a worst case oil spill;
- Measures to be taken to protect environmental and recreational resource areas:
- The hazard associated with the operation such as operating error, equipment failure and external events;
- A list of contacts to call in the event of an oil spill;
- Financial and contractual arrangements for equipment and personnel in the event of an oil spill. The amount of equipment and number of personnel must be sufficient to respond to a worst case oil spill;
- Identification of the type of equipment that would be used in the event of an oil spill, including its location and the time it would take to deliver the equipment to the site; and
- Demonstration that all protective measures have been taken to reduce the possibility of an oil spill.

COOPERATIVE CLEAN-UP MANUALS

These manuals may be used as reference materials within the Facility ERPs as deemed appropriate. They can provide valuable information concerning clean up resources.

- Clean Seas Clean-up Manual
- Marine Spill Response Corporation (MSRC) Response Plan

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)/INCIDENT COMMAND SYSTEM (ICS)

The NIMS is a nationwide standardized approach to incident management and response. Title 29 CFR 1910.120. (q) (3) (ii) is the regulation that requires the implementation of an ICS for hazardous material response. NIMS utilizes the ICS.

The ICS is used to manage incident response activities. ICS is readily expandable to help manage small incidents as well as larger more complex incidents. ICS is an effective safety and incident management tool and should be implemented for all emergency incidents that may cause potential harm to responders, the public, the environment or property. Staffing and resources needed to meet specific incident needs will be based on the size, complexity and severity of the incident. At minimum, Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations require the ICS positions of IC and Safety Officer to be implemented during a response to a hazardous or potentially hazardous substance.

This Section contains an example of the basic NIMS ICS Organization (five functional areas) and the Operational Period Planning Cycle.

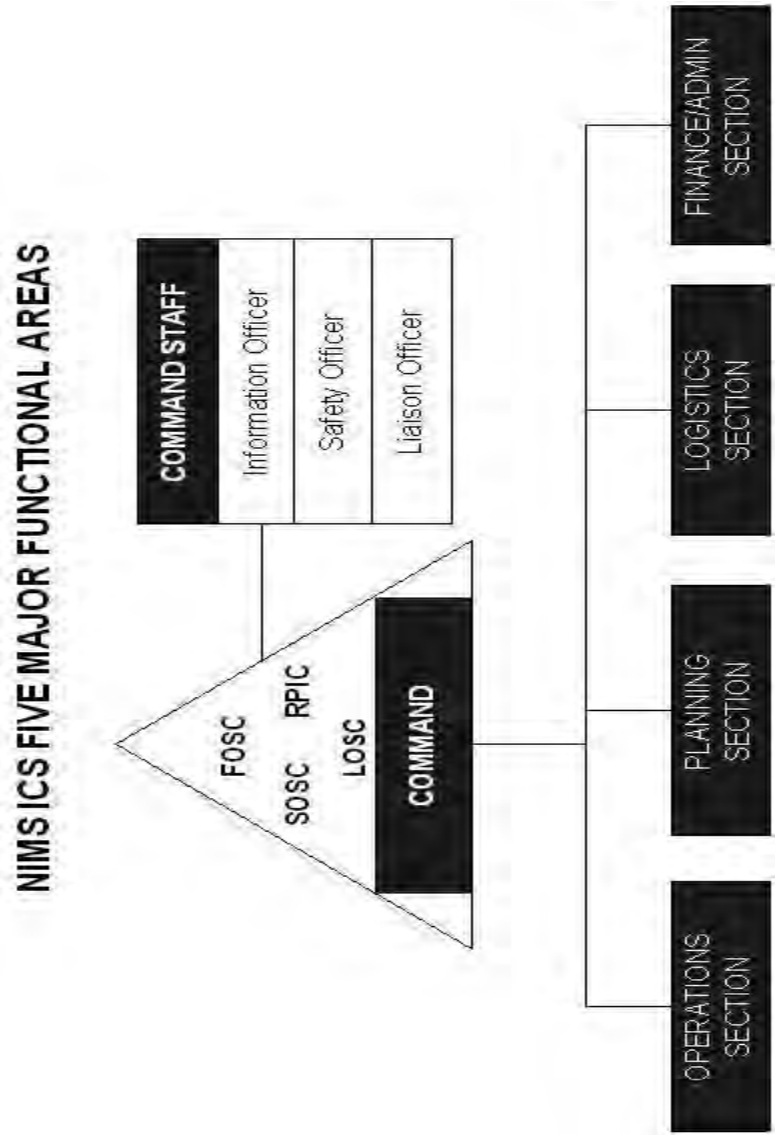
Incident Management Handbook (IMH)

Company Stakeholders will utilize the IMH, dated August 2006, as the primary guide for incident response.

Responders may continue to utilize the current U.S. Coast Guard Oil Spill Field Operations Guide (FOG), ICS-OS-420-1 or current Incident Management Handbook (IMH) in their possession. Either of these documents is consistent with the five functional areas of NIMS ICS.

Access to complete versions of the latest U.S. Coast Guard Incident Management Handbook can be located on the U.S. Coast Guard web site at http://www.uscg.mil/hq/nsfweb/docs/FinalIMH18AUG2006.pdf.

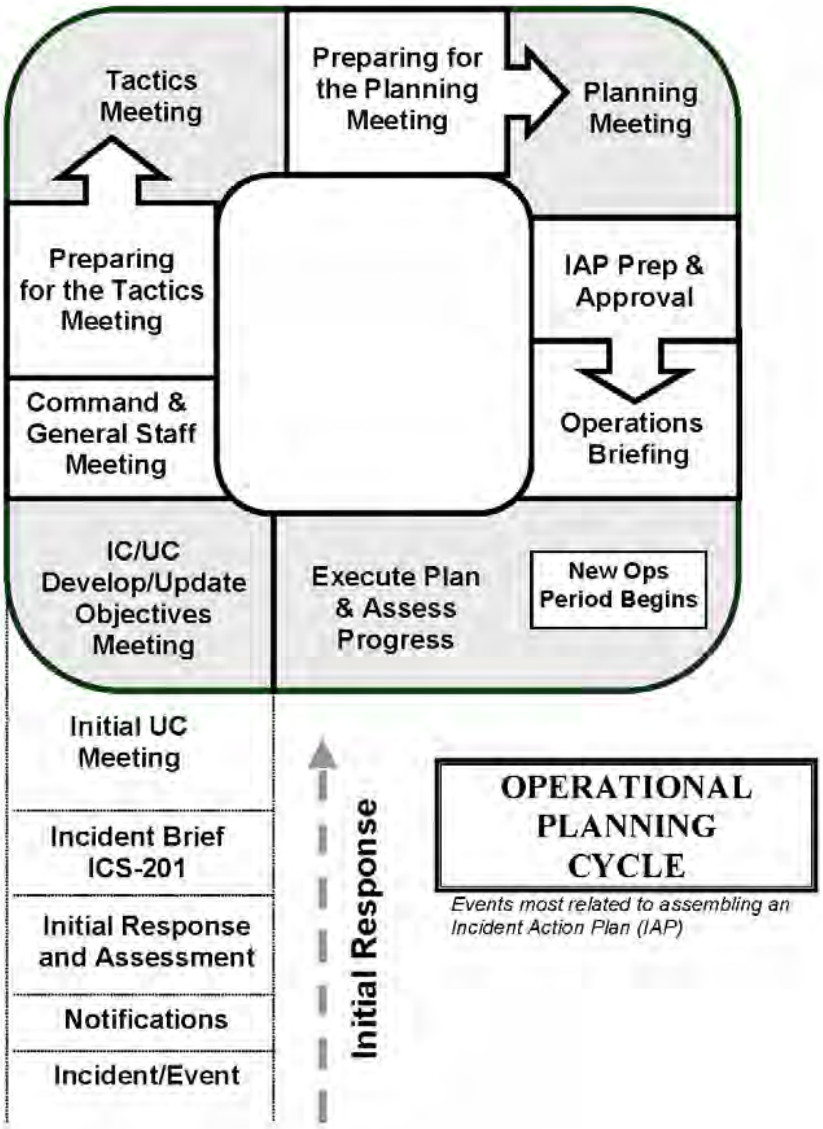
NIMS ICS FIVE MAJOR FUNCTIONAL AREAS



JUNE 2005

CHAPTER 3

OPERATIONAL PLANNING CYCLE, MEETINGS, BRIEFINGS, AND THE ACTION PLANNING PROCESS



This plan has two categories:

1. Emergency Operating Procedures

2. Appendices
   - County Plan Exercise Program
   - Petroleum Industry Mutual Aid (PIMA) Agreement
   - SBC/OSPR Memorandum of Understanding (MOU)
   - Communications Plan
     - List of Petroleum Facilities and Phone Numbers
   - Self-Inspection Form

General Information

Introduction

The most likely incidents, which could occur at fixed onshore facilities and have major impacts on the community or involve more than one facility, are:

- Major flammable or toxic gas release
- H_2S in sales gas lines
- Major tank or vessel fires
- Large explosions at facilities
- Major liquid spills
- Explosions/overpressure
- Civil disorder
- Major earthquake
- Floods

Planning Assumptions

It may be assumed that one or more of the following incidents could occur within the life of this plan. These emergencies may require activation of this plan and thus will serve as the planning assumptions for this plan.

Type of Emergency	Magnitude
1. Major Earthquake	Of a magnitude causing significant damage, spills, releases, fire, etc. at more than one facility.
2. Major Hazardous Materials Release	Major casualties on site, or spreading off site or having potential for causing injury, (Gas or Liquid).
3. Hydrogen Sulfide Gas Release	Major casualties on site, or spreading outside of the boundary of a facility, or leaking from a pipeline, at a concentration approaching or exceeding 300 ppm.
4. Petroleum Liquid Release without Fire	Onshore, having the potential to spread off site, (liquid tank, pipeline failure, Oil, NGL or Gasoline, etc.).
5. Flammable Gas Release	Spreading off site and near residence or populated area.
6. Civil Disobedience/Terrorism/Labor Strife	With potential or actual impact upon more than one facility. (Widespread threats, roving vandalism, mass picketing, etc.).
7. Tank Truck Accident	Spill fire or explosion involving vehicles entering or leaving facilities.
Note: Tanker accidents on highway not associated with a local facility are treated as a hazardous materials incident and are not in the scope of this plan. However, the basic procedures in the appropriate checklist can also be applied to a transportation accident.	
8. Major Facility, tank or Pressurized Vessel	• Tank over 100' in diameter, or Fire involving storage, loading, process, or • Multiple Tanks, or Buildings • Lengthy fire with threat of boil over, or • Threat of causing off site fire, injury, or • Major spill fire, or • Process unit fire, or • Threat of/or actual BLEVE of a major vessel, or • Potential for causing injury, death or damage off site. • Destruction of control center.
9. Predicted or Actual Flood/Tidal Wave/Tsunami	Of a magnitude, which could or does major damage to more than one facility
10. State of War	Period of heightened tensions, or actual enemy attack.

Type of Emergency	Magnitude
11. "Off Site' Incident Impacting Facilities	Wildland fire, high winds, funnel clouds, hazardous materials release, Diablo Canyon release, transportation accident.
12. Explosion	Major casualties and/or fire on site, or damage, death, injury off site.
13. Toxic Gas in Sales Gas Line	Of a quantity large enough to be a danger to gas company consumers.
14. Major Evacuations	Due to an industry related petroleum incident.

Based upon the incidents listed above, action checklists will be provided in this plan.

EMERGENCY LEVEL MATRIX

Level Emergency	Criteria	Incident Commander	Command Post Status	Staging Area
LEVEL 1 Facility Plan Initial Response Minor On-Site Incident	1. Oil spill or produced water spill > 1 bbl outside secondary containment designated for that vessel, system or pipeline, or ≥ 5 bbl inside secondary containment designated for that vessel, system or pipeline, unless it impacts or potentially impacts state or marine waters, in which case go to Level 3. 2. Two combustible gas or fire eyes alarms. 3. Verified high-level combustible gas (≥ 50% LEL) alarm. 4. Single hand held detector with a LEL reading = 50%. 5. Smoke Investigation. 6. Fire reported out. 7. Hazardous material release outside secondary containment designed for that vessel, system or pipeline. 8. Bomb or extortion threat.	Highest ranking on-duty operations person until arrival of Fire Dept.	Not Activated	Not Activated
LEVEL 2 Facility Plan Sustained Response Major On-Site Incident	1. Oil spills or produced water spill ≥5 bbl unless it impacts or potentially impacts state or marine waters, in which case go to Level 3. 2. Any toxic gas release > 10 ppm by fixed or handheld monitor. 3. More than 2 combustible gas or fire eye alarms. 4. Fire. 5. Hazardous materials release requiring HazMat emergency response from emergency rescue personnel or contractors. 6. Sour gas in sales line. 7. Earthquake or Flooding damage. 8. Activation of Emergency Shut Down for plant and / or pipeline.	Highest ranking on-duty operations person until arrival of Fire Dept. (May Implement Unified Command)	Activated. Facility CP and County EOCs may be activated	Activated

Level Emergency	Criteria	Incident Commander	Command Post Status	Staging Area
LEVEL 3 Area Plan Major Incident with Public Exposure Potential (off-site impacts)	1. Oil or produced water spill impacting or potentially impacting state or marine waters, or threatened release of oil or produced water impacting or potentially impacting state or marine waters. 2. Fire with potential for spreading. 3. Explosion. 4. Hazardous materials release or gas leak with off-site potential. 5. Civil disturbance. 6. State of War. 7. Highway 101 closure or impact on other significant access routes or roads.	Highest-ranking on-duty Oper. until arrival Fire Dept. - May Implement Unified Command with Potentially: • Responsible Party • Sheriff's Dept. • CHP • Federal/State/Local On-Scene Coordinators/IC's	Activated. Facility CP Activated. County EOC Activated.	Activated

Note: Level 1 and 2 conditions are not justified to activate this Plan, unless requested by Unified Command.

Command and Control

The Emergency Response Organization to be activated when using this plan is described in this section.

In order to be in compliance with county, state and federal requirements regarding utilization of the ICS during emergencies, the Emergency Response Organization for this plan will be in an ICS format.

This section discusses and describes how command and control of an incident will occur within the purview of this plan.

The plan utilizes concepts set forth in the ICS, which has been adopted by the Federal Government, the State and the County as the management system to be utilized during emergencies. By state law, ICS is considered incorporated into the SEMS. SEMS is intended to standardize response to emergencies involving multiple jurisdictions or agencies. SEMS is intended to be flexible and adaptable to the needs of all emergency responders in California. SEMS requires emergency response agencies use basic principles and components of emergency management including ICS, multi-agency or inter-agency coordination, the operational area concept, and established mutual aid systems. State agencies must use SEMS. Local government must use SEMS in order to be eligible for state funding of response-related personnel costs pursuant to activities identified in California Code of Regulations, Title 19; 2920; 2925; and 2930. Industrial facilities responding to hazardous materials emergencies are required, by Title 29 CFR 1910.120. (q) (3) (ii), to use the ICS. Owners and operators of Marine facilities are required per Title 14 CCR to utilize ICS. All entities responding to a hazardous materials incident and/or participating within an ICS with a governmental agency must be trained in, and utilize the ICS.

As previously referenced, this Plan utilizes the NIMS ICS for its emergency organization.

There are five **functional areas** in the ICS: **Command, Operations, Planning, Logistics and Finance/Administration**.

- **Command** has the responsibility for the overall management of the response. The IC has the authority to approve the Incident Action Plan (IAP) and make decisions without having to clear them with a superior. The IC may have a Deputy IC (who has the same qualifications as the IC) and a command staff of an Information Officer, Liaison Officer and a Safety Officer. The IC may operate within a "Unified Command" with others having jurisdictional for functional authority. Unified Command may include Federal, State, County, Local and the IC from the responsible party (RPIC). Accordingly, the agencies have jurisdictional authority over the responsible party in matters pertaining to the response. The Unified Command Structure may be implemented within all functional areas of the ICS.

- **Operations** has the responsibility of directing all incident tactical activities, or physical response operations. The Operations Chief is responsible for the implementing of the response strategy and the action plan at an incident. Any deputies must have the same qualifications and level of authority as the Operations Chief.
- **Planning** has the responsibility for the collection, evaluation, documentation and dissemination of information. This includes development of the incident and surveillance/situational information, status of resources, environmental information, technical specialists, documentation and demobilization.
- **Logistics** has the responsibility for the supply of all support needs. Logistics would also organize and maintain any facilities, transportation, equipment, food services, communications, medical services and volunteer services.
- **Finance/Administration** has the responsibility for time recording for personnel and equipment, administering all financial matters, compensation and claims, cost analysis, and legal issues.

The philosophy of the ICS is to allow decisions to be made and action to be taken at the lowest level.

The ICS enables the person in charge (the IC) to activate and expand an emergency organization, which allow him/her to delegate tasks and oversee the implementation of the objectives he/she has set.

The ICS selected for this plan utilizes a concept referred to as a "Unified Command." Unified Command is defined as a method for all agencies or individuals who have jurisdictional responsibility, and in some cases those who have functional responsibility at the incident, to contribute to determining overall objectives and selecting strategies to achieve the objectives.

During emergency operations, which may be multi-agency or multi-jurisdictional, a "Unified Command" is established at the IC level. This is simply a group of industry, agency and/or jurisdictional representatives serving together and sharing the Incident Management Role, with one spokesperson.

The IC may be a facility management person acting or he/she may be part of a Unified Command team working with the government responders.

Working jointly within the Unified Command structure will provide the following:

- It provides for the sharing of personnel, equipment, supplies, and technical, managerial, financial and legal expertise, to assist a facility in need of help.
- It serves as a coordination point to disburse resources on a priority basis to numerous incidents.

- It provides for a Unified Command Post or Emergency Operations Center (EOC) that would provide a point "remote" from the response operations; where area management people can decide if objectives are being met, if the incidents are being mitigated, and if the best interests of the stakeholders are being considered during the response.
- It provides an opportunity to develop a Joint Information Center (JIC) for media releases and to liaison with the many agencies that may respond to a major emergency.

County Command and Control

In the event that the Government IC is on the scene, they may take command of the incident. A Unified Command may be established at their discretion. The RPIC would send a representative to the County EOC if requested to do so.

Discovery and Notification of Industry Responders

The Area Plan is activated at a Level 3 emergency at the discretion of the Unified Command (UC) when a Level 3 incident has occurred. Examples of Level 3 incidents are listed in this Plan. Unified Command may then respond and activate the Plan. If necessary, the Unified Command may decide to activate the EOC to support the activities of the various ICs in the field. The EOC will coordinate and facilitate the distribution of government resources to assist the field response activities. The EOC will support the incident by coordinating additional mutual aid requests should the scale of the incident expand.

Any local facility may activate communications by utilizing the Communications Plan Section of this plan.

Facility Telephone Contact information

Facility telephone contact information is located in the Communications Plan Section and will be updated during exercises.

Mandatory Notifications

A list of all governmental and industrial entities that require notification during an emergency will be located in the Facility ERP. Timeframes and reportable quantities for notifications will also be included in the Facility ERP. Notification requirements vary, based upon the type of incident.

Facility ERP notifications information will be updated during exercises.

Worker, Emergency Responder and Public Safety

Worker, emergency responder and public safety must be a top priority at hydrocarbon incidents. A Safety Officer from the involved company and who is knowledgeable regarding the risks presented by the type of incident that is occurring should serve as the Safety Officer at the incident. This person shall have the authority to stop hazardous operations, require appropriate safety clothing and breathing apparatus, and to order evacuation or retreat of emergency workers. A safety position is provided in the emergency organization, and shall be activated by the IC. The Safety Officer shall be alert to the operations underway at all times. The Safety Officer may need assistants at a widespread incident. The Safety Officer shall not engage in the rudiments of mitigation, but be ever alert to hazards.

If toxic or otherwise hazardous materials have been released, sufficient to activate this plan, the County Hazardous Materials Team shall handle the actual field activities related to mitigation of the spill or release. They will be under the direction of the Unified Command.

Industry shall coordinate with and assist the Public Agency Responders in notification and evacuation of bystanders and the otherwise exposed or potentially exposed public. The Unified Command shall ensure that ambulances are standing by on site that hospitals have been notified, and that ample first aid supplies, safety clothes, air bottles, etc., are on site as necessary.

County Emergency Operations Center (EOC)

The County shall activate its EOC for large-scale incidents. Industry shall establish an alternate EOC. The purpose of the Industry EOC is to provide a location where the Unified Command, comprised of designated representatives from governmental agencies and industry, can gather to assist the Unified Command structure responding to an incident. The EOC is the focal point for coordination of petroleum industry response to a widespread incident. If the County EOC is activated, the mutual aid organization may be organized at the Industry EOC.

The Industry EOC should work to support the response effort of the field based Unified Command by gathering, displaying, and evaluating information about what is occurring and where. Informed decisions regarding response prioritization and resource allocation (personnel, equipment and supplies) will be determined at the Industry EOC. The County EOC will assist in implementing protective measures for the protection of life, property and the environment and requesting additional resources to support the field response if needed. The inter-facility communications and alerting system may be operated from the EOC.

The EOC may also establish a Joint Information Center (JIC). The JIC provides a location for interface with the media and governmental agencies. The industry may use the EOC to formulate policy decisions regarding incident mitigation, public relations, economic matters, care of the displaced and injured, and their return to normalcy after the incident is over.

The County EOC location and contact information is located in the Communications Plan Section.

Levels of Response

Levels of response must be determined so that the emergency organization can transition in an orderly manner.

Three Levels of response have been identified based on certain incident criteria and are described in the "Emergency Response Plan for Petroleum Facilities in Santa Barbara County," used by industry to develop their facility ERPs, and are included in this plan by reference. A Level 3 incident is a disaster impacting more than one facility or with major off-site impacts. Level 3 incidents may result in multiple injuries, deaths, and major pollution and be a result of civil disorder, earthquakes, or weather related disasters.

This Plan will be activated at Level 3.

Activation of Communications

A Communications Plan is hereby established as an Appendix to this Plan. The RPIC may activate the Communication Plan and place the area industry on a "standby alert". The County will be contacted directly by cellular or landline phone. The RPIC will notify other Facility Managers to alert them of the situation, using the Communications Plan.

Runners

- It is possible that during an emergency of the magnitude which would require activation of this plan, electrical power, telephones, microwave units, radio repeaters, etc., may be rendered inoperable. Communications may then consist of "runners" for exchange of information.

COUNTY PLAN EXERCISE PROGRAM

This plan will be exercised on an annual basis as determined by the County. This plan shall be an appendix to the facility ERP. Exercises will consist of the following elements:

- Activation of the Unified Command System with at least one County representative and the RPIC
- Activation of the County Emergency Management Plan
- Activation of the County EOC
- Activation of the Communications Plan

The annual exercise will review the Communications Plan and the plan will be updated as needed. SB County OEM will distribute an updated Communications Plan to all plan holders if revised.

SANTA BARBARA COUNTY AREA PETROLEUM INDUSTRY MUTUAL AID AGREEMENT

I. INTRODUCTION

The purpose of this agreement is to establish a vehicle for member companies to provide mutual aid assistance. The Santa Barbara County Petroleum Industry Mutual Aid Agreement (PIMA) is an emergency response cooperative of oil and gas related companies. The purpose of the cooperative is to provide assistance (material and equipment) to any member company requiring aid during an emergency situation.

The County of Santa Barbara Area Oil and Gas Industry Emergency Response Plan (herein referred to as "PLAN"), developed pursuant County Permit Conditions enacted upon oil and gas development projects, established the need for the PIMA.

II. LIMITATIONS

Member Companies participating in the Plan ("Responding Company") must reserve manpower, material and equipment for their own protection before they allocate resources to another member requiring aid ("Requesting Company"). Any allocation of resources by a Responding Company to a Requesting Company, not withstanding any other provision of this agreement, shall be made at the sole discretion of the management of the Responding Company, and no company is obligated to release equipment or material for use by a Requesting Company if it elects not to do so.

Further, although a Requesting Company may request workforce assistance, no Responding Company is obligated by this Agreement to provide any personnel to aid in the response.

III. CONDITIONS OF MEMBERSHIP

The cooperative can fulfill its purpose of providing mutual aid only if each member company meets the following minimum and basic conditions of membership.

As a member of the Cooperative, each member company shall:

1. Provide an Emergency Response Plan for activating personnel and equipment within their own facility, and to interface with County emergency response units. Response plans will address Level 1, 2, and 3 emergencies.

   The Facility Emergency Response Plan will include the following:

   A. Instructions for properly requesting and receiving aid from PIMA members.
   B. Instructions for properly responding to calls for assistance from PIMA members.

1 of 6

2. Appoint a representative and one alternate representative to serve on the PLAN Task Force. At least one (1) representative from each company will make reasonable efforts to attend all meetings of the Task Force. Representatives will elect a Task Force Chairman on an annual basis. The Task Force Chairman must be elected from the ranks of member company representatives serving on the Task Force.

3. Maintain a current list of equipment and materials as defined in each member Emergency Response Plan that under most circumstances could be furnished to a Requesting Company in case of a Level 3 Emergency.

4. Make reasonable efforts to participate in at least one annual Level 3 drill. It is understood that the County Office of Emergency Services (OES) will conduct one Level 3 drill in the North County, and one Level 3 drill in the South County each year. Drills may be conducted as part of regular facility drills conducted by the County OES.

5. Perform an annual inspection of Emergency Response Equipment and file the annual inspection form with the Task Force Chairman.

6. Provided the equipment and/or material was furnished by Member Companies response pursuant to a properly placed request, the Requesting Company will:

   A. Replace material or equipment expended or lost due to the emergency, in cash at current prices or in kind.

   B. Repair material or equipment damaged due to the emergency. Damaged equipment will be replaced to its condition at the time of delivery or replaced with like equipment, to the satisfaction of the Responding Company.

   C. Costs incurred due to normal wear and tear are not reimbursable. Requesting Companies shall comply with this paragraph notwithstanding the amount of reimbursement its insurance carrier agrees to.

7. If and only if, to the extent requested and provided, the Requesting Company shall reimburse Responding Companies for out of pocket costs, normal wages and overtime for employees responding to properly placed requests for assistance.

8. Any Member Company that requests mutual aid and assistance using the process described in this document agrees to indemnify, defend and hold any Responding Company harmless from and against any and all damages, losses, costs, expenses, fees, fines, penalties, liabilities or claims on the account of any personal injury, death or property damage including, but not limited to environmental damage and cleanup, arising out of, or in any way connected with, the performance of services or functions, or failure to perform hereunder proximately caused by the sole or

concurrent negligence of the Responding Company, its officers, agents and employees. It being the intention of this provision to indemnify responding parties for all but willful misconduct or gross negligence.

9. The Requesting Company shall supervise and ensure that all materials and equipment are utilized in accordance with all applicable laws and regulations.

10. The Responding Company makes no warranty as to serviceability, material defects, or fitness for use.

IV. PROBATIONARY STATUS

Failure to comply with the Minimum Conditions of Membership will be cause for a Member Company to be placed on probationary status. The following is the procedure for placing a member company on probationary status:

1. A recommendation of probationary status by a majority vote of member companies.
2. A written notice of the consideration of probationary status, from the PIMA Task Force Chairman to the senior management of the offending company, outlining the reasons, and providing a reasonable amount of time to either; (1) correct the problem(s) and avoid further consideration of probation, or (2) present additional facts for reconsideration of the matter.
3. After reconsideration of the reasons and any further information provided in step 2 above, a vote shall be taken by the member company representatives on whether to place the member on probation. A quorum of greater than fifty percent majority vote is required for a valid decision.
4. If it is voted to place a member company on probation then the member company is notified and provided with actions needed to correct the matter and for probationary status to be removed.
5. A continuing probationary status for more than one year is grounds for dismissal from PIMA.

V. RESPONSE TO EMERGENCIES AT NONMEMBER FACILITIES

Historically, the petroleum industry has responded on their own to assist neighboring facilities during emergency situations. While this practice may continue, it is understood that PIMA member companies responding in this manner are acting solely on their own and PIMA is in no way responsible or liable for any consequences of such independent action.

VI. CONDITIONS UNDER WHICH ASSISTANCE WILL BE RENDERED

The Facility Incident Commander makes requests to any Member Company listed in the Communications Plan. A Level 3 incident will be declared if a request for PIMA assistance is made.

All aid reporting to the Requesting Company's Facility or Location will act under the supervision of the Incident Commander or Unified Command. When delivering equipment or material to a Facility or Staging Area, an itemized list will be signed by the Requesting Company's Facility Supervisor or designate. Accurate records shall be maintained for accounting and disbursement.

Any Requesting Company must designate a representative to meet such aid as it is dispatched, provide a parking (staging) location, and/or directions to the emergency scene.

VII. CLASSIFICATION OF EMERGENCIES

1. Standby Alert

   A Standby alert may be requested when an emergency has the potential of developing so that PIMA assistance is required. The Standby Alert call may be made by the affected facility to any Responding Company listed in the Communications Plan.

2. Assistance Call

   An assistance call is made when an emergency is beyond the control of in-plant personnel or equipment and materials, and specific PIMA assistance is needed. Request for assistance will be made by the affected Facility Incident Commander or the highest-ranking Facility Representative to Companies listed in the Communications Plan as deemed necessary by the Requesting Company. The Requesting Company may request assistance from the Task Force Chairman or his/her designee to assist with an All Out Call notification.

3. Military Alert (Given only by the OES)

   indicates that an enemy attack is imminent, or that a disaster may require voluntary assistance from PIMA members. Facility Emergency and Security Plans should be implemented.

4. All Clear

   To be given by the Requesting Company Incident Commander when the particular emergency condition which prompted the original response request no longer exists

This Agreement does not create an obligation of any other industrial aid organization to furnish aid to a PIMA member, and by the same token, any aid furnished by a PIMA member in response to a request from a member of another mutual aid organization would not be covered by this Agreement.

In executing this agreement, none of the parties hereto intend to create in favor of any other party the status of a third party beneficiary.

The undersigned agree to the conditions of the Santa Barbara County Petroleum Industry Mutual Aid Agreement (PIMA), and agree to participate in the program. The undersigned warrant that they are official representatives of their company.

PLAINS PIPELINE, L.P.
By Plains Marketing GP Inc.
its General Partner

By: _____ Date: 1-30-07
Name: MARK F. SHIELDS
Title: SR. V.P. - OPERATIONS

PLAINS EXPLORATION & PRODUCTION COMPANY
(Lompoc Oil & Gas Plant & Gaviota Oil Heating Facility)

By: _____ Date: 12/12/06
Name: David Rose
Title: Manager, Environmental, Health & Safety

CONOCOPHILLIPS COMPANY

By: _____ Date: 3/26/07
Name: Bill Orr
Title: Area Supervisor

E& B NATURAL RESOURCES

By: _____ Date: 11/20/06
Name: Stephen D. Layton
Title: President

EXXONMOBIL PRODUCTION COMPANY and POPCO GAS PLANT

By: _____ Date: 2/28/07
Name: James D. Sifferkid
Title: Operations Manager

5 of 6

SANTA MARIA REFINING COMPANY - GREKA

By: ______________________ Date: 11-2-06
Name: Susan M. Whalen
Title: VP Asset Management + General Counsel

6 of 6

Name:
Title:

LOMPOC OIL & GAS PLANT - PLAINS EXPLORATION & PRODUCTION COMPANY (PXP)

By: _____ Date: _____
Name:
Title:

SANTA MARIA REFINING COMPANY - GREKA

By: _____ Date: _____
Name:
Title:

ELLWOOD PIPELINE INC.

By: Ed O'Donnell Date: 8/9/11
Name: Ed O'Donnell.
Title: Sr. V. President

Memorandum of Understanding
Relating to Oil Spill Response and Management
Between the State of California, Office of Spill Prevention and Response
And the Santa Barbara County Operational Area

WHEREAS, the Administrator of the Office of Spill Prevention and Response (hereinafter referred to as "OSPR") and the Santa Barbara County Operational Area (hereinafter referred to as "County") are interested in ensuring a unified and coordinated effort between OSPR and all local governments within the County through appropriate mutual aid in the event of an oil spill incident and the coordinated and informed representation within the Incident Command System ("ICS") as prescribed by the Standardized Emergency Management System (SEMS); and

WHEREAS, pursuant to SEMS, the Santa Barbara Lead Operational Area Organization was formed by resolution on September 19, 1995 ("Operational Area Resolution"), and is comprised of the local governments within the County of Santa Barbara including the COUNTY, the CITIES OF BUELLTON, CARPINTERIA, GUADALUPE, LOMPOC, GOLETA, SOLVANG, SANTA BARBARA, and SANTA MARIA and ALL SPECIAL DISTRICTS, and ALL SCHOOL DISTRICTS; and

WHEREAS, the COUNTY, pursuant to its Operational Area Resolution, is designated as Lead Agency of the Santa Barbara Operational Area Organization and shall develop the Santa Barbara Operational Area and its Disaster Response Standard Operating Procedures in accordance with the major components of the SEMS identified in California Code of Regulation, Title 19, Division 2, which includes:

- THE NATIONAL INCIDENT COMMAND SYSTEM (ICS)
- INTER-AGENCY SYSTEM COORDINATION
- THE STATE'S MASTER MUTUAL AID PROGRAM .

and

WHEREAS, the Federal On-Scene Coordinator has the primary authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill affecting the exclusive economic zone, Federal lands or waters; and

WHEREAS, OSPR has the primary State of California authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill or threatened oil spill in the marine waters of the State and to designate a State Incident Commander (State IC); and

WHEREAS, the State and Federal parties will act in a cooperative and coordinated manner as stipulated in the June 2, 1993 Memorandum of Understanding (MOU) between said parties; and

WHEREAS, OSPR recognizes that the COUNTY has the expertise and resources which OSPR will depend on during an oil spill incident; and

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Office of Spill Prevention and Response
Memorandum of Understanding
Page 2

WHEREAS, both the Administrator of OSPR and the COUNTY share the same goals of protecting California's marine waters and environment and of minimizing any deleterious impacts to public health and safety or the environment; and

WHEREAS, Section 852.60.4 (d) of Title 14 of the California Code of Regulations requires the Administrator to enter into a MOU with local governments; and

WHEREAS, California Code of Regulation, Title 14 Section 852.60.4 indicates that the Unified Incident Command Team shall consist of the State's Incident Commander, the Federal On Scene Coordinator, the representative (s) from the local jurisdiction (s) directly impacted by the spill, and the senior representative of the party responsible for the spill, if the party is identified and assumes responsibility; and

WHEREAS, pursuant to California Code of Regulations, Title 14, Section 852.60.4, local jurisdictions have the right and authority to have a representative serve as a Unified Incident Commander when an oil spill affects, or threatens to affect the health, safety and environment of its local jurisdictions; and

WHEREAS, the Administrator of OSPR deems it necessary to limit the numbers of participants within the Unified Incident Command Team due to span of control issues; and

THEREFORE, let it be resolved that OSPR and the COUNTY agree to the following provisions with respect to participation in the Unified Command during an oil spill emergency; and

The Unified Incident Command Team shall consist of four parties; (1) the Federal On-Scene Coordinator, (FOSC) (2) the State Incident Commander, (SIC) (3) the Local On-Scene Coordinator, (LOSC) and (4) the Responsible Party (RP).

The COUNTY agrees to designate within the County's Oil Spill Contingency Plan, a Response Coordinator as lead for the Santa Barbara Operational Area Organization who will serve as the LOSC.

The decision making by the Unified Command should be by consensus during and oil spill response. In absence of consensus, the LOSC will recognize the paramount authority of the FOSC and the SIC to issue orders to direct the oil spill response.

Such orders of the FOSC and SIC do not preempt the COUNTY or impacted city from enforcing applicable ordinances, permit conditions, or other provisions of law such that they do not conflict with orders issued by the FOSC or SIC during the response.

The COUNTY is the lead agency for the Santa Barbara Operational Area. During an oil spill response, the COUNTY'S designated representative will either function as or identify the appropriate local government representative who will assume the responsibilities of the LOSC and coordinate among all local governments in the Operational Area. As a member of the Unified Command, the county representative shall coordinate input from and speak for all divisions and departments of the COUNTY.

OSPR may request local government participation to support the response as appropriate. Other local government agency representatives will coordinate in accordance with the standards of practice outlined in SEMS and ICS.

The LOSC will be familiar with the local Oil Spill Contingency Plan element and the Los Angeles/Long Beach Northern Sector Area Contingency Plan, will be authorized to represent other local governments in the Santa Barbara Operational Area Organization, and will assist in the administration of local permits, as required, for oil spill response and recovery efforts.

Future changes or modifications to this Memorandum of Understanding will consist of written mutual consent on behalf of the State of California and Santa Barbara County.

24 FEB 03
Harlan Henderson, Administrator — Date
State of California, Department of Fish and Game
Office of Spill Prevention and Response

14 JAN 03
Santa Barbara County Operational Area — Date
Michael F. Brown
Director of Emergency Services

1/14/03
Approved as to Form — Date
Stephen Shane Stark
County Counsel

1-14-03
Approved as to Form — Date
Risk Manager

AREA OIL & GAS INDUSTRY COMMUNICATIONS PLAN

Under this Communications Plan (Plan) the Industry will provide communications equipment, which may be utilized during a Level 1, 2 and 3 Emergency.

Upon activation of this Plan, the Requesting Company may activate necessary communications and place the area facilities listed on page 2 of this Plan on a "standby alert".

The "standby alert" will be made to each facility by the Requesting Company IC or the highest ranking facility representative. The Requesting Company may also request the PIMA Task Force Chairman or their designee to assist with "standby alert" notification. This activation will take place primarily by landline or mobile telecommunications. Each facility contacted will be informed regarding the incident and the current or potential need for assistance.

PIMA Task Force Chairman Rotation is as follows:

- 2013/14 Jeff MacDonald (EPI)
- 2014/15 Byron Everist (FM O&G – GOHF & LOGP)
- 2015/16 Kathy Randall (PAAPL)
- 2016/17 Butch Lemos (Phillips 66)
- 2017/18 Ed Fetterman (E&B)
- 2018/19 Bill Alston (ExxonMobil)
- 2019/20 Steve DeMott (SMRC-Greka)

****Time frame is July through June.****

Each facility will have the ability to communicate with resources within the area of operation of the facility. Facility communications equipment will, at minimum, consist of the following:

Land Line Telephones

1. The County EOC will provide a landline phone to participating supervisors.
2. Industry offices and facilities will have a landline phone.
3. Critical personnel will have home phones.

Mobile Phones

1. Facility Managers will have cellular phones as part of this Plan.

Satellite Phones

1. Facility Managers will maintain one Satellite phone per Company listed in this Plan.

SANTA BARBARA COUNTY EMERGENCY OPERATIONS CENTER

Company	Santa Barbara County			
Facility Name	County Emergency Operations Center (EOC)			
Facility Address	4408 Cathedral Oaks Road Santa Barbara, CA 93110			
Phone	(805) 681-5526 – 24 hour #			
Fax	(805) 681-5592			
GPS Coordinates	**Longitude**	(b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**		
Duty Officer		(805) 681-5526 – 24 hour #		
Secondary Contact		**Office**		
SBC Dispatch		(805) 683-2724 – 24 hr #		
Satellite Number(s)		8816-414-85771		8816-414-85772

FREEPORT-MCMORAN OIL & GAS LLC

Company	Freeport-McMoRan Oil & Gas LLC (FM O&G)		
Facility Name	Gaviota Oil Heating Facility (GOHF)		
Facility Address	17100 Calle Mariposa Reina Goleta, CA 93117		
Phone	Primary telephone – (805) 567-1654 Secondary telephone – (805) 567-1655		
Fax	(805) 567-1676		
GPS Coordinates	**Longitude**	(b) (7)(F), (b) (3)	**Latitude** (b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Ira Razon (Foreman)		(805) 567-1664	(805) 621-4187
Secondary Contact		**Office**	**Cell**
Byron Everist (Emergency Preparedness Coordinator)		(805) 934-8219	(805) 720-6629
Satellite Number(s)		8816-3142-9415	Orcutt Office 8816-3145-0423

Company	Freeport-McMoRan Oil & Gas LLC (FM O&G)		
Facility Name	Lompoc Oil & Gas Plant (LOGP)		
Facility Address	3602 Harris Grade Rd. Lompoc, CA 93436		
Phone	Primary telephone – (805) 733-5174 Secondary telephone – (805) 733-2095		
Fax	(805) 733-3254		
GPS Coordinates	**Longitude**	(b) (7)(F), (b) (3)	**Latitude** (b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Gary Olivera (Foreman) John Irving (Foreman)		(805) 733-5174	(805) 896-8845 (805) 896-8846
Secondary Contact		**Office**	**Cell**
Byron Everist (Emergency Preparedness Coordinator)		(805) 934-8219	(805) 720-6629
Satellite Number(s)		8816-3142-9532	Orcutt Office 8816-3145-0423

Revised 10/2013

PHILLIPS 66 PIPELINE LLC

Company	Phillips 66 Pipeline LLC		
Facility Name	Santa Maria Pipeline Facility		
Facility Address	1580 E. Battles Road Santa Maria, CA 93454		
Phone	(805) 925-5795 Phillips 66 Control Center: 877-267-2290		
Fax	(805) 925-8753		
GPS Coordinates	**Longitude** (b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Butch Lemos, Area Supervisor		(805) 925-5795	(805) 331-6965
Secondary Contact		**Office**	**Cell**
Rob Yarbrough Director, Emergency Response & Security		(832) 765-1693	(281) 627-3177
Satellite Number(s)		8816-5142-9394	

PLAINS ALL AMERICAN PIPELINE, L.P.

Company	Plains All American Pipeline, L.P.		
Facility Name	Las Flores Pump Station		
Facility Address	12050 Calle Real, Goleta, CA 93117		
Phone	(805) 562-1288		
Fax	N/A		
GPS Coordinates	**Longitude** (b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Kathy Randall		805-922-9897	805-657-6764
Secondary Contact		**Office**	**Cell**
Darren Palmer		661-336-7908	661-978-4915
Satellite Number(s)		254-543-0806	

Company	Plains All American Pipeline, L.P.		
Facility Name	Gaviota Station		
Facility Address	17100 Calle Mariposa Reina, Goleta, CA 93117		
Phone	(805) 567-1085		
Fax	N/A		
GPS Coordinates	**Longitude** (b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Kathy Randall		(805) 922-9897	(805) 657-6764
Secondary Contact		**Office**	**Cell**
Darren Palmer		(661) 336-7908	(661) 978-4915
Satellite Number(s)		254-543-0806	

Company	Plains All American Pipeline, L.P.		
Facility Name	Sisquoc Station		
Facility Address	5781 Santa Maria Mesa Rd, Santa Maria, CA 93454		
Phone	(805) 937-8372		
Fax	N/A		
GPS Coordinates	**Longitude** (b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Kathy Randall		(805) 922-9897	(805) 657-6764
Secondary Contact		**Office**	**Cell**
Darren Palmer		(661) 336-7908	(661) 978-4915
Satellite Number(s)		254-543-0806	

E & B NATURAL RESOURCES

Company	E & B Natural Resources		
Facility Name	South Cuyama Field		
Facility Address	1848 Perkins Road-3 miles South of Highway 166		
Phone	(661) 766-2501 / Bakersfield Office 661-679-1700		
Fax	(661) 766-2348		
GPS Coordinates	**Latitude** (b) (7)(F), (b) (3)	**Longitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Ed Fetterman		(661) 766-2501	(661) 619-2633
Secondary Contact		**Office**	**Cell**
Ryan Plaugher		(661) 766-2501	(661) 619-4672
Satellite Number(s)		8816-224-26819	

EXXONMOBIL

Company	ExxonMobil		
Facility Name	Las Flores Canyon		
Facility Address	12000 Calle Real, Goleta, CA.		
Phone	(805) 961-4011		
Fax	(805) 961-4069		
GPS Coordinates	**Longitude** (b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Bill Alston		(805) 961-4080	(805) 588-6589
Secondary Contact		**Office**	**Cell**
Production Supervisor		(805) 961-4055	N/A
Satellite Number(s)		866-463-8397	

Company	ExxonMobil		
Facility Name	POPCO Gas Plant		
Facility Address	12100 Calle Real, Goleta, CA.		
Phone	(805) 961-4011		
Fax	(805) 961-4069		
GPS Coordinates	**Longitude** (b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Bill Alston		(805) 961-4080	(805) 588-6589
Secondary Contact		**Office**	**Cell**
Production Supervisor		(805) 961-4055	N/A
Satellite Number(s)		866-463-8397	

SANTA MARIA REFINING COMPANY - GREKA

Company	Santa Maria Refining Company		
Facility Name	Santa Maria Refining Company		
Facility Address	1660 Sinton Rd., Santa Maria, CA 93458		
Phone	(805) 347-8700		
Fax	(805) 347-1072		
GPS Coordinates	**Longitude**	(b) (7)(F), (b) (3)	**Latitude** (b) (7)(F), (b) (3)
Primary Contact		**Office**	**Cell**
Steve DeMott		(805) 347-8700	(805) 310-7629
Secondary Contact		**Office**	**Cell**
Perry Fraze		(805) 347-8700	(805) 310-9964
Satellite Number(s)		254-871-1253	

Rev. 10/2013

ELLWOOD PIPELINE INC.

Company	Ellwood Pipeline Inc.			
Facility Name	Line 96 Pipeline			
Facility Address	7979 Hollister Ave., Goleta, CA 93117			
Phone	(805) 961-2338			
Fax	(805) 961-2349			
GPS Coordinates	**Longitude**	(b) (7)(F), (b) (3)	**Latitude**	(b) (7)(F), (b) (3)
Primary Contact		**Office**		
Jeff MacDonald		(805) 961-2301		(805) 455-9666
Secondary Contact		**Office**		**Cell**
Walt McCarty		(805) 961-2312		(805) 455-9643
Satellite Number(s)		8816-3257-5245		

Rev. 4/2012

AREA OIL & GAS INDUSTRY SELF-INSPECTION FORM Fiscal Year: 2013-14

This form is to be completed by JULY 1st of each year for each facility listed in the Communications Plan and kept on file by the Facility Manager for review by the County Office of Emergency Management. It will serve as an inventory of the Emergency Response equipment and material that may be available for a Level 3 Response. Availability of the equipment or material is at the discretion of the person in charge of this facility at the time of the request.

IF ADDITONAL SPACE IS REQUIRED, PLEASE ATTACH A SEPARATE SHEET.

Company: _____

Facility Location: _____ Date: _____

Contact: Name _____

Title _____

Phone Number _____

List the available equipment type and number/quantity of pieces of each type of equipment whether an operator is needed with the equipment; whether transportation is available or needed (You may attach a copy of your ERP equipment list to this form in lieu of listing your equipment separately on this form)

COMMUNICATIONS EQUIPMENT:

_____

_____

_____

_____

_____

Safety Equipment: _____

_____

_____

_____

_____

_____

Rev. 7/2013

Spill Containment/Recovery Equipment:

Air Monitoring Equipment:

Decontamination Equipment:

Other (include trained personnel to assist in Facility EOC or in the Field):