U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety



Inventory of Upper Cook Inlet Pipeline Facilities and

Identification of Regulators

October 2018

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1. Introduction and Background

Between December 2016 and April 2017, several crude oil and natural gas releases occurred from pipelines owned by Hilcorp Alaska, LLC's offshore production and pipeline facilities in Alaska's Upper Cook Inlet.¹ A number of different federal and state agencies were involved in responding to those releases and questions arose regarding those various agencies' authority, responsibilities and practices. Following those releases, the U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration (PHMSA) initiated an intergovernmental effort with three specific goals: (1) to identify key stakeholders with an interest or responsibility for regulatory oversight of pipelines located within the waters of Upper Cook Inlet; (2) to inventory all current pipeline operators and assets within the waters of Upper Cook Inlet; and (3) to identify the federal and state agencies with regulatory authority over hazardous liquid and gas pipelines located within the waters of Upper Cook Inlet.

PHMSA used numerous data sources while compiling Tables 6-12 (see pages 44-46), including recent PHMSA site visits, PHMSA databases and records, meetings between relevant state and federal agencies, local knowledge, and operator input. This report is based on PHMSA's understanding of the current configuration of the facilities as of October 2018 (offshore platforms, pipelines, onshore facilities, etc.). The current configuration may be different from past configurations and could be different from future configurations. This report summarizes PHMSA's findings, based upon information available as of October 2018. PHMSA's findings are set forth in Section 4 of this report (see pages 39-46).

Numerous pipelines located within the waters of Upper Cook Inlet either originate at offshore production facilities or traverse various portions of Cook Inlet. The offshore oil and gas facilities in Alaska's Upper Cook Inlet consist primarily of platforms and associated pipelines, the majority of which were installed in the late 1960s. Currently, most of the crude oil and natural gas pipeline facilities in the region are operated by Hilcorp Alaska, LLC, and its midstream subsidiary, Harvest Alaska, LLC (collectively referred to as Hilcorp). Other transportation-related pipelines located within the waters of Upper Cook Inlet are operated by Alaska Pipeline Company, Tesoro Alaska Pipeline Co., or Aircraft Service International Group, Inc.

In late 2016 and early 2017, Hilcorp's offshore oil and gas facilities in Cook Inlet experienced three releases:

- On February 7, 2017, Hilcorp identified a leak from a Cook Inlet natural gas pipeline, using aerial surveillance. Subsequently, a flow analysis revealed that the pipeline had begun leaking in late December 2016.
- In late March 2017, Hilcorp suspected a natural gas leak from a different Cook Inlet natural gas pipeline. On April 3, 2017, the company conducted an unsuccessful pressure test of the pipeline, thereby confirming the leak; Hilcorp subsequently removed the

¹ For purposes of this report, Upper Cook Inlet refers to that portion of the Cook Inlet North of Kalgin Island.

pipeline from service.

• On April 1, 2017, Hilcorp personnel observed an oily sheen on the waters of Upper Cook Inlet adjacent to one of its offshore platforms; and reported that an 8-inch crude oil pipeline at that platform was leaking. However, the operator's subsequent investigation found that the source of the sheen was from equipment on the platform and not the pipeline.

Following these releases and after consultations with operators and various state and federal agencies, PHMSA determined that a comprehensive review of all pipeline facilities in Cook Inlet was needed. As part of its review, PHMSA conducted site visits to the Middle Ground Shoal and Trading Bay offshore platforms in August 2017.

Historically, most of the pipelines between the Cook Inlet offshore platforms and on-shore facilities that transport crude oil or natural gas have been subject to PHMSA regulation and inspection. Many of these same pipelines (i.e., those carrying produced crude oil and water) are also subject to the Alaska Department of Environmental Conservation's (ADEC) oil pollution prevention and inspection requirements. In addition, hazardous liquid pipelines that are exempt from PHMSA regulations remain subject to ADEC's regulatory oversight. Following PHMSA's records review and site visits to the Middle Ground Shoal and Trading Bay offshore platforms, PHMSA determined that certain hazardous liquid pipelines originating at these offshore platforms are exempt from PHMSA's regulations due to the current operational characteristics of these facilities, which, in some cases, is different from how they operated in the past.²

The United States Coast Guard (not PHMSA) regulates other over-water piping in the Upper Cook Inlet and serves as the Federal On-Scene Coordinator in response to a release.³

Furthermore, PHMSA has identified several pipelines within the waters of Upper Cook Inlet that are currently unregulated by either state or federal agencies, at least not from a pipeline-safety perspective, for various reasons.⁴

Below is a summary of PHMSA's three specific objectives for its review of all natural gas and hazardous liquids pipelines located within the waters of Upper Cook Inlet.

Objective 1: Identify key stakeholders.

Five Federal agencies, three Alaska state agencies, and one non-profit organization were

 $^{^2}$ See infra, at Section 4 (discussing the change in the operational characteristics of the platforms that resulted in certain hazardous liquid lines being exempt from PHMSA's regulations); see also infra, at Section 4, Tables 6-12 (identifying the regulator for each pipeline within the waters of the Cook Inlet).

³ *Infra*, at Tables 6 & 9.

⁴ Infra, at Sections 4.

identified as key stakeholders. Section 1.1 of this report discusses each stakeholder's role as it relates to Cook Inlet hazardous liquid and natural gas pipelines and other pipeline facilities.

Objective 2: Identify all pipelines operating within the waters of Upper Cook Inlet.

PHMSA, with input from the key stakeholders, tabulated the pipelines located within the waters of Upper Cook Inlet. Sections 2 and 3 of this report include summary tables of the pipelines and a discussion of each pipeline, including the operator for each. Figure 1 shows an overview of the Cook Inlet pipelines.

Objective 3: Identify the regulating agency(ies) for each pipeline.

Tables 6 through 12 in Section 4 identify the regulating agency(ies) for each pipeline.⁵

⁵ *See infra*, at n. 66.



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1.1. Identification of Key Stakeholders

The United States Department of Transportation, Pipeline and Hazardous Material Safety Administration (PHMSA) identified the following stakeholders with responsibility for oversight of pipeline facilities within the waters of Upper Cook Inlet: PHMSA; the Environmental Protection Agency (EPA); the State of Alaska Department of Environmental Conservation (ADEC); the United States Fish and Wildlife Service (USFWS); the State of Alaska Department of Natural Resources (DNR); the United States Coast Guard (USCG); the Alaska Oil and Gas Conservation Commission (AOGCC); and the National Oceanic and Atmospheric Administration (NOAA). PHMSA also identified one non-government organization as a key stakeholder for Cook Inlet pipelines: Cook Inlet Region Citizen's Advisory Council (CIRCAC). CIRCAC was identified in this effort because of their expertise in Cook Inlet hazardous liquid and natural gas pipelines and pipeline facilities.

1.1.1. United States Department of Transportation - Pipeline & Hazardous Materials Safety Administration

PHMSA's Office of Pipeline Safety (OPS) administers a comprehensive safety program contained in 49 C.F.R. Parts 190 through 199. The regulations establish minimum safety standards applicable to all owners or operators of transportation-related hazardous liquids or natural or other gas pipelines or pipeline facilities, including LNG and natural gas underground storage facilities. OPS has the authority to enforce its safety program through a variety of tools, ranging from warning letters to civil penalties.

PHMSA has primary authority over all interstate and intrastate transportation pipelines and pipeline facilities through U.S. Code, Title 49, Chapter 601 (§ 60101 et seq.). The Code allows states to assert primary authority for intrastate transportation pipelines and pipeline facilities if they have a PHMSA-certified program and the state has adopted the Federal Pipeline Safety Regulations. Since Alaska has chosen not to file a state certification for either its gas or hazardous liquid pipelines, PHMSA exercises primary authority, from a pipeline safety perspective, over all transportation pipelines and pipeline facilities in Alaska and regulates the majority of them, excluding those that are subject to specific regulatory exemptions. In addition, Federal law preempts state agencies from enforcing pipeline safety regulations on intrastate transportation pipelines and transportation-related pipeline facilities if they do not have a PHMSA-certified program. Federal law preempts all state agencies from enforcing pipeline-safety regulations on interstate transportation pipelines and transportation-related pipeline facilities. OPS may authorize a state agency to act as its agent to inspect interstate pipelines if they also have a state certification for intrastate pipelines, but OPS still retains sole responsibility for enforcement of the regulations against interstate operators. PHMSA's Facility Response Plan (FRP) regulations, also known as oil spill response plans, do not preempt state agency regulations for oil spill response.

PHMSA's safety regulations include minimum standards for the design, construction, inspection, testing, and operation and maintenance of transportation pipelines and pipeline facilities; parameters for administering the safety program; and requirements for operators' FRPs (discussed below). The applicability of these regulations depends on the type of pipeline (i.e., transmission, gathering, or distribution) and the location of the pipeline (i.e., class location

and "high consequence area" designation).

PHMSA regulations apply to all pipelines located within the waters Upper Cook Inlet, with limited regulatory exemptions. As for natural gas pipelines, 49 CFR Part 192 (Part 192) "prescribes the minimum safety requirements for pipeline facilities and the transportation of gas, including pipeline facilities and the transportation of gas within the outer continental shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331)." 49 CFR § 192.1(a). PHMSA has regulatory oversight over all natural gas transportation pipelines and pipeline facilities located within the waters of Upper Cook Inlet, including gathering lines except "offshore gathering of gas in State waters upstream from the outlet flange of each facility where hydrocarbons are produced or where hydrocarbons are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream."

As for hazardous liquid pipelines, 49 CFR Part 195 (Part 195) "prescribes the safety standards and reporting requirements for pipeline facilities used in the transportation of hazardous liquids or carbon dioxide."⁷ PHMSA has regulatory oversight over most pipeline facilities located within the waters of Upper Cook Inlet that are used in the transportation of hazardous liquids or carbon dioxide, including gathering lines except those used in the "transportation of hazardous liquid or carbon dioxide in an offshore pipeline in state waters where the pipeline is located upstream from the outlet flange of the following farthest downstream facility: The facility where hydrocarbons or carbon dioxide are produced or the facility where produced hydrocarbons or carbon dioxide are first separated, dehydrated, or otherwise processed." 49 CFR § 195.1(b)(5).⁸

As for oil-spill response jurisdiction, PHMSA's oil spill response regulatory scheme is codified by 49 CFR Part 194, which "contains the requirements for oil spill response plans to reduce the environmental impact of oil discharged from onshore oil pipelines." 49 CFR § 194.1. These regulations apply to operators of oil pipelines that "could reasonably be expected to cause substantial and/or significant harm to the environment by discharging oil into or on any navigable waters of the United States or adjoining shorelines." 49 CFR § 194.3. In contrast to Parts 192 and 195, which are authorized by the Pipeline Safety Act, Part 194 regulations are issued pursuant to section 1321(j)(5) of the Federal Water Pollution Control Act (FWPCA), as amended by the Oil Pollution Act of 1990 (OPA 90). Unlike the Pipeline Safety Laws,

⁶ 49 CFR Part 192 also exempts certain offshore pipelines located on the Outer Continental Shelf (OCS), pursuant to 49 CFR §§ 192.1(b)(2), (3). There are currently no pipelines or pipeline facilities within the waters of the Cook Inlet that are located on the OCS.

⁷ 49 CFR § 195.0.

⁸ See infra, at Section 4, pp. 38-39 (discussing the application of 49 CFR § 195.1(b)(5) to specific pipelines);
49 CFR Part 195 also contains other regulatory exemptions for offshore pipeline facilities.
49 CFR §§ 195.1(b)(1), (2), (3)(i), (6), (7), (9), and (10).

Congress explicitly provided that the provisions of OPA 90 do not preempt states from regulating certain matters associated with the protection of waters within their jurisdiction from oil pollution.⁹ OPS shares oil spill response plan regulatory authority with EPA and the United States Department of the Interior (DOI) pursuant to operation of a 1994 Memorandum of Understanding (MOU). The MOU specifically refers to the "coast line" of Cook Inlet, as that term is defined and interpreted under the Submerged Lands Act of 1953 (SLA),¹⁰ to divide oil spill response regulatory responsibility for Cook Inlet among the relevant agencies. The "coast line," as defined in the SLA, is located generally in the vicinity of Kalgin Island. Under the MOU, OPS has oil spill response regulatory responsibility for all transportation-related pipelines and pipeline facilities located landward of the "coast line," as that term is interpreted under the SLA.

1.1.2. United States Department of Homeland Security - United States Coast Guard

The United States Coast Guard (USCG) coordinates incident and disaster preparedness and response efforts in the maritime domain under its Captain of the Port (COTP) and Federal On-Scene Coordinator (FOSC) authorities and responsibilities. In addition to responding to maritime accidents and emergencies, the USCG investigates their causes. Additionally, the USCG determines whether applicable laws have been violated or whether changes should be made to improve safety through prevention programs. This work is often done in coordination with other government entities.

As the pre-designated FOSC for oil and hazardous substance pollution incidents that threaten the coastal zone of the United States,¹¹ the USCG directs responses to—and ensures effective and immediate removal action for—any oil or hazardous substance release in the coastal zone. The USCG leads oil spill planning efforts for the coastal zone to identify, assess, and verify: threats (i.e., spill potential); (2) risk of harm to waters, shoreline, and natural resources; and strategies necessary to mitigate the threats, minimize the risk, and respond to an incident or event should it occur.

As a COTP and, within its respective areas, the USCG: enforces port safety and security; enforces marine environmental protection regulations; and exercises control and supervision over vessel traffic, including the establishment of safety zones.¹² In addition, the USCG's jurisdiction extends from the piping connected to a vessel to the first valve inside the secondary containment area around the facility. Facilities transferring oil to vessels must submit a facility oil spill response plan to the USCG.

⁹ See infra, at Section 4, p. 40 (summarizing instances in which both PHMSA and ADEC exercise independent regulatory oversight on certain hazardous liquid pipelines).

¹⁰ 43. U.S.C. §§ 1301 et seq.

¹¹ Defined in 40 CFR § 300.5.

¹² As defined by 33 CFR 165.20, in accordance with 33 CFR 1.01-30 and the Ports and Waterways Safety Act, 33 U.S.C. §§ 1221-1236 (2002).

1.1.3. United States Environmental Protection Agency

The Environmental Protection Agency (EPA) regulates owners or operators of offshore oil drilling, production, or workover facilities. In addition to general requirements,¹³ owners and operators must also meet the specific requirements for discharge prevention and containment procedures.¹⁴ These requirements include safety measures such as oil drainage collection equipment, sump and drain requirements, oil discharge prevention measures, pressure and high-liquid-level sensing devices, and corrosion protection. Owners and operators must also maintain written procedures for inspecting and testing pollution-prevention equipment and systems and conduct inspection and testing on a periodic basis.

1.1.4. State of Alaska Department of Environmental Conservation (ADEC)¹⁵

The State of Alaska Department of Environmental Conservation (ADEC) has direct regulatory oversight, operation, maintenance, and inspection authority over liquid crude-oil and refined-hydrocarbon pipelines, as defined in Alaska Statutes (AS).¹⁶

By regulation, natural gas pipeline operations, maintenance, and inspections are exempt from ADEC oversight. However, this exemption is from a planning, inspection, and corrosion monitoring perspective. If a gas line leaks, ADEC has authority to over the leak if it determines that the leak contains a hazardous substance that poses a threat to public health or the environment. ADEC has inspection, monitoring, and oversight regulations, which apply to production flow lines and production facility oil piping, in addition to hazardous liquid gathering pipelines that are exempt from PHMSA's regulatory oversight.

1.1.5. State of Alaska, Oil and Gas Conservation Commission (AOGCC)

The Alaska Oil and Gas Conservation Commission (AOGCC) regulates oil and gas activities for conservation purposes and—to the extent not in conflict with regulation by the Department of Labor and Workforce Development or the Department of Environmental Conservation—for public health and safety purposes.

The AOGCC has jurisdiction and authority to regulate the drilling, producing, and plugging of

¹³ Listed under 40 CFR § 112.7.

¹⁴ Listed under 40 CFR § 112.11.

¹⁵ One of the first studies performed in Cook Inlet was the Belmar Study in 1993 (Belmar Study). The Alaska Department of Environmental Conservation contracted Belmar Management Services to prepare a pipeline reliability and risk assessment study of the crude oil pipeline systems in the Cook Inlet area. In 2000, an additional study was performed, updating the Belmar Study.

¹⁶ Codified in AS 46.03.020 (Powers of the Department), AS 46.04.030 (Oil Discharge Prevention and Contingency Plans), 46.04.060 (Inspections), and 46.04.070 (Scope of Regulations). These statutes are further implemented through state regulations, predominantly at 18 AAC 75, Article 1, Oil Pollution Prevention Requirements, and 18 AAC 75.480, Inspections.

wells; the perforating, fracture simulation, and chemical treatment of wells; the spacing of wells; the disposal of salt water, non-potable water, and oil field wastes; the contamination or waste of underground water; the quantity and rate of the production of oil and gas from a well or property; wells or properties in a voluntary cooperative or unit plan of development or operation entered into in accordance with AS 38.05.180(p); and the underground injection of gas for purposes of storage.¹⁷

The AOGCC's regulatory role in Cook Inlet is best expressed in AS 31.05.030, *Powers and Duties of Commission*, including the "jurisdiction and authority over all persons and property, public and private, necessary to carry out the purposes and intent of this chapter, [and to] investigate to determine whether or not waste exists or is imminent, or whether or not other facts exist which justify or require action by it." AS 31.05.030(a), (b). Significantly, AOGCC does not regulate natural gas pipelines or pipeline facilities for operational safety and maintenance.

1.1.6. State of Alaska, Department of Natural Resources (DNR)

Pipelines constructed and operated on State-owned land, tideland or submerged land must be authorized by the Alaska Department of Natural Resources (DNR) through a permit, lease, or easement managed by either the Division of Oil and Gas (DOG) or the Division of Mining, Land, and Water (DMLW).

Authorizations issued by DNR include conditions and stipulations relating to land management, health, safety, and the environment. DNR may also include technical stipulations related to engineering, design, operations, and maintenance and may require annual or quarterly reporting. DNR also issues authorizations for planned and emergency activities but is not the primary emergency response agency.

DOG ensures compliance of transportation pipelines authorized under Alaska Statute (AS) 38.35, Right-of-Way Leasing Act, as well as regulatory requirements for those pipelines that are exempt from AS 38.35, such as field gathering lines or those pipelines that can be authorized under an oil or gas lease or unit agreement, or easement. DMLW ensures that other pipelines that are exempted from AS 38.35 or are not authorized by DOG are in compliance with permits and easements.

The scope of the jurisdiction of the State Pipeline Coordinator Section (SPC) of the DOG is to ensure compliance with the Right-of-Way (ROW) leases for common carrier pipelines. These leases include stipulations relating to land management, health, safety, and the environment.

SPC Lease Compliance Specialists conduct field inspections of the physical pipeline ROWs at least twice per year, and an engineering team reviews: the required quality assurance, surveillance, and monitoring programs; the design basis for proposed pipelines; and any proposed modifications.

¹⁷ Regulations that flesh out these topics are at 20 AAC chapter 25.

Lessees are required to submit annual reports to DNR detailing activities as they relate to lease requirements, and the SPC holds quarterly meetings with lessees to discuss field work, repairs, construction, inline inspection results, and other topics. The SPC is not a response agency.

1.1.7. United States Department of Commerce - National Oceanic and Atmospheric Administration (NOAA)

The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) Protected Resources Division (PRD) is responsible for implementing marine mammal conservation and recovery programs under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA), in close coordination with the State of Alaska and other partners. The NMFS provides Federal agencies with information regarding threatened or endangered species in action areas and provides expedited consultation in the event of emergencies.

The ESA requires Federal agencies to consult with NMFS on activities that may affect a listed species if those activities have a federal nexus (i.e., the project/action is funded, authorized, or carried out by a Federal agency).¹⁸ Upon request, NMFS provides a species list that documents the presence of a threatened/endangered species or a critical habitat in an action area. If a listed species or a critical habitat is present, the Federal action agency must assess the effects of the action on those listed species or critical habitat.¹⁹ NMFS may recommend changes or mitigation measures to remove any adverse effects. It may also recommend or require formal consultation. If NMFS determines that a proposed action will not jeopardize the species or adversely modify a critical habitat, the action may proceed with approved types and levels of take.²⁰ If the action has adverse effects, then it cannot proceed as designed. NMFS may recommend a reasonable and prudent alternative that allows the action to proceed, but which avoids jeopardy or adverse modification.

NMFS can also provide expedited consultation in case of an emergency, including response activities that must be taken to prevent imminent loss of human life or property. Predictable events usually do not qualify unless there is a significant unexpected human health risk. Emergency consultations allow action agencies to incorporate endangered species concerns into their activities during the response to an emergency, but do not obstruct an emergency response decision made by the action agency in which human life is at stake.

¹⁸ 15 U.S.C. § 1536 (1973).

¹⁹ "No Effect" indicates the proposed action will have zero effect on the listed species or critical habitat; "May Affect but Not Likely to Adversely Affect" indicates the proposed action may affect the listed species or critical habitat but the effects will be insignificant, discountable, or beneficial; and "May Affect and Likely to Adversely Affect" indicates the proposed action may negatively and significantly affect the listed species or critical habitat. This process is often conducted through a Biological Assessment.

²⁰ "Take" in this case means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.

1.1.8. United States Department of the Interior - Fish and Wildlife Service (FWS)

The Fish and Wildlife Service (FWS) has jurisdiction over pipeline projects' activities related to prevention, preparedness, and response. In general, FWS reviews proposed projects for elements relating to the design, construction, and maintenance of facilities and suggests potential mitigation options to avoid or reduce adverse effects on trust resources. Authorities are project-specific, depending on the location, scope, and potential impacts to trust resources. FWS participates in the National Environmental Policy Act (NEPA) process and provides consultation under the Endangered Species Act (ESA) as requested by the Federal action agency.²¹

FWS also has authority over preparedness, as required in the Oil Pollution Act of 1990.²² FWS develops and updates species-specific response plans for FWS trust species, participates in committees to update the Sensitive Areas section of Subarea Contingency Plans, reviews Contingency Plans submitted by regulated entities, and comments on wildlife-protection aspects of those plans.

FWS's authorities also cover response requirements, although authorities are incident-specific and based on spill characteristics.²³ FWS and NMFS share responsibilities under ESA and the Marine Mammal Protection Act, pertaining to specific species.²⁴ Common roles include: oversight of, or participation in, field operations (e.g., wildlife reconnaissance, carcass collection, oiled wildlife rescue, and Shoreline Cleanup Assessment Technique, or SCAT activities); oversight of rehabilitation facilities; and wildlife morgue operations. FWS also provides assistance with Natural Resource Damage Assessments and provides Public Information Officer support to the Joint Information Center.

Specific to Cook Inlet, FWS participates in the Wildlife Protection Committee of the Alaska Regional Response Team, assisting in updates of Alaska's Unified Plan.²⁵ FWS serves in the Wildlife Branch, Operations Section within Unified Command, for which it provides expertise to Unified Command on potential wildlife impacts of proposed response strategies, and suggests mitigation measures to minimize harm, and facilitates the acquisition of wildlife permits, if applicable.

²¹ Additional authorities include the Migratory Bird Treaty Act; Marine Mammal Protection Act; Fish and Wildlife Coordination Act; Clean Water Act; Bald and Golden Eagle Protection Act; Refuge Improvement Act.

²² Title IV, Section 4201 of the Oil Pollution Act of 1990, the National Contingency Plan set forth requirements in 300.210(C)(4)(i) for Area Contingency Plans to include "...coordinated, immediate and effective protection, rescue, and rehabilitation of, and minimization of risk of injury to, fish and wildlife resources and habitat."

²³ Oil Pollution Act of 1990; Marine Mammal Protection Act; Migratory Bird Treaty Act; Bald and Golden Eagle Protection Act; Refuge Improvement Act; Endangered Species Act.

²⁴ The following ESA-listed species are managed by the U.S. Fish and Wildlife Service and are found in some parts of Cook Inlet at times during the year: Northern Sea Otter, Northwest Distinct Population Segment and portions of their critical habitat, Steller's Eider, and Short-tailed Albatross.

²⁵ Per the Endangered Species Act of 1973.

1.1.9. Cook Inlet Regional Citizens Advisory Council (CIRCAC)

The Cook Inlet Regional Citizens Advisory Council (CIRCAC) is a nonprofit corporation created by Congress under the Oil Pollution Act of 1990 to give citizens a greater voice in oil transportation and production. CIRCAC's area of concern is both geographic and programmatic. Geographically, CIRCAC's area of concern is Cook Inlet and the areas potentially impacted by oil industry activities within CIRCAC's defined area of responsibility. Programmatically, CIRCAC's area of concern entails pursuing any project that is relevant or applicable to CIRCAC's region and meets CIRCAC's program goals. OPA 90 directs the Council in its efforts to improve marine transportation and oil facility operations and mandates action to that end. Among other duties, CIRCAC provides advice and recommendations on policies, permits, and site-specific regulations for terminal and tanker operations and maintenance; monitors environmental impacts of the operation of terminals and tankers; monitors terminals and tanker operations and maintenance that may affect the environment near terminals; reviews the adequacy of oil-spill prevention and contingency plans for terminals and tankers; provides advice and recommendations on port operations, policies, and practices; and reviews standards for tankers bound for, loading at, or exiting from oil terminals. CIRCAC receives base annual funding per OPA 90 from the operators in Cook Inlet. The following companies, which are required to file an oil spill contingency plan for the Cook Inlet region under OPA 90, represent what are known as the Charter Funding Companies: Andeavor (formerly Tesoro Alaska Petroleum), Glacier Oil and Gas (formerly Cook Inlet Energy), Furie Operating Alaska, Hilcorp Alaska LLC, and BlueCrest Energy.

2. Cook Inlet Pipeline and Facility Descriptions: Hilcorp

Currently, most of the crude oil and natural gas pipeline facilities in the region are operated by Hilcorp Alaska, LLC, and its midstream subsidiary, Harvest Alaska, LLC. There are other transportation-related pipelines located in Cook Inlet and that are operated by Alaska Pipeline Company, Tesoro Alaska Pipeline Co., or Aircraft Service International Group, Inc. This report identifies and describes these pipeline facilities, starting with the Hilcorp facilities.

Hilcorp has been operating pipeline facilities in Alaska since its early 2012 purchase of Union Oil Company of California's production and pipeline facilities in the Cook Inlet Region. Since that time, Hilcorp has grown, acquiring the majority of production and pipeline facilities within the Cook Inlet Region.

2.1. Middle Ground Shoal Production Facilities

As shown on Figure 2 (see page 20), there are four offshore platforms and one onshore facility associated with the Middle Ground Shoal (MGS) production facilities. Table 1 (see page 19) provides details about each pipeline associated with the MGS facility.

Hilcorp acquired the Baker and Dillon offshore platforms (and certain associated pipelines) from Union Oil Company of California in early 2012. Hilcorp acquired the A and C offshore platforms, the MGS onshore facility, and associated pipelines from XTO Energy, Inc. on September 1, 2015. With its September 2015 acquisition, Hilcorp has acquired all the MGS production facilities.

The MGS onshore facility is located on the east side of the Upper Cook Inlet in Nikiski, Alaska. The four offshore platforms associated with the MGS production facilities are the A Platform, Baker Platform, C Platform, and Dillon Platform. The A and C Platforms are active production platforms. The Baker and Dillon Platforms are inactive production platforms, are unmanned, and are in "lighthouse" mode. "Lighthouse" mode refers to platforms that are no longer active production platforms and have primary operating objectives of continual operation of impressed current cathodic protection systems and navigational-aid lighting.

The offshore hazardous liquid pipelines associated with the MGS production facilities are ADEC-regulated pipelines subject to the requirements of 18 AAC 75, *et seq.*²⁶, except for one out-of-service pipeline, which remains PHMSA-regulated.²⁷ The C pipeline associated with the Dillon Platform is abandoned pursuant to PHMSA's regulations, and is unregulated.²⁸ The B pipeline, associated with the Dillon Platform, is an out-of-service pipeline but has not been abandoned pursuant to PHMSA's regulations, and therefore remains a PHMSA-regulated pipeline.²⁹ The offshore natural gas pipelines associated with the MGS production facilities are PHMSA-regulated pipelines subject to the requirements of 49 CFR Part 192.³⁰

- (1) A Platform
 - There are two pipelines between the A Platform and the MGS onshore facility, two pipelines between the A Platform and the Baker Platform, and two pipelines between the A Platform and the C Platform.³¹
 - The liquids pipeline between the A Platform and the MGS onshore facility (i.e., the B Pipeline) transports commingled produced fluids from the A and C Platforms to the MGS onshore facility for final processing.

³⁰ See infra, at Table 6.

²⁶ See supra, at Section 1.1.4 (summarizing ADEC's role in regulating hazardous liquids pipelines); see also infra, at Section 4 (providing additional detail regarding ADEC's role in regulating hazardous liquid pipelines in Alaska).

²⁷ See infra, at p. 18 (describing the hazardous liquid pipeline associated with the Dillon Platform as out of service); see also Table 6 (identifying the regulator for each pipeline associated with the MGS production facilities, among other pipelines).

²⁸ See 49 C.F.R. § 195.402(c)(10) (detailing the process to abandon a hazardous liquid pipeline).

²⁹ PHMSA does not recognize "out of service" status for pipelines. PHMSA regulated pipelines remain subject to part 192 or part 195 until abandoned in accordance with the applicable regulation. *See* 49 CFR § 192.3, and 49 CFR § 195.2 ("Abandoned means permanently removed from service"); *see also* 49 CFR § 192.727, and 49 CFR § 195.405(c)(10) (detailing the requirements that operators must take to abandon a natural gas and hazardous liquid pipeline); *see also* PHMSA Advisory Bulletin (ADB-2016-05), 81 FR 54512 (Aug. 16, 2016) (clarifying that out-of-service pipelines not abandoned remain regulated pipelines).

³¹ See infra, at Table 1 (summarizing pipeline characteristics).

- The gas pipeline between the A Platform and the MGS onshore facility (the A Pipeline) transports fuel gas from the MGS onshore facility to a subsea manifold located at the base of the A Platform. From the subsea manifold, the fuel gas is distributed to the four platforms.
- The gas pipeline between the A Platform and Baker Platform (the B Pipeline) transports fuel gas from the subsea manifold located at the base of the A Platform to the Baker Platform.
- The second gas pipeline between the A Platform and Baker Platform (the A Pipeline) was converted from a liquids pipeline to a gas pipeline and is now out of service.
- The liquids pipeline between the A Platform and the C Platform (the B Pipeline) transports produced fluids from the C Platform to the subsea manifold located at the base of the A Platform. Produced fluids from the A Platform and the C Platform are commingled at the subsea manifold.
- The gas pipeline between the A Platform and the C Platform (the A Pipeline) transports fuel gas from the A Platform to the C Platform.
- (2) C Platform
 - There are two pipelines between the C Platform and the A Platform and two pipelines between the C Platform and the Dillion Platform.³²
 - As described above for the A Platform, the liquids pipeline between the C Platform and the A Platform (the B Pipeline) transports produced fluids from the C Platform to the subsea manifold located at the base of the A Platform. The produced fluids from the A Platform and the C Platform are commingled at the subsea manifold.
 - As described above for the A Platform, the gas pipeline between the C Platform and the A Platform (the A Pipeline) transports fuel gas from the A Platform to the C Platform.
 - The gas pipeline between the C Platform and Dillon Platform (the A Pipeline) transports fuel gas from the C Platform to the Dillon Platform.
 - The liquids pipeline between the C Platform and the Dillon Platform (the B Pipeline) is now out of service.

³² See infra, at Table 1 (summarizing pipeline characteristics).

(3) Baker Platform

- There is no active production on the Baker Platform, and it is in "lighthouse" mode.
- There are two pipelines between the Baker Platform and the A Platform.³³
- The Baker Platform no longer has a liquids pipeline associated with it, as the original liquids pipeline was converted to a gas pipeline. As a result, the platform has two gas pipelines.
- As described above for the A Platform, the gas pipeline between the Baker Platform and the A Platform (the B Pipeline) transports fuel gas from a subsea manifold located at the base of the A Platform to the Baker Platform.
- As described above for the A Platform, the second gas pipeline between the Baker Platform and the A Platform (the A Pipeline) was converted from a liquids pipeline to a gas pipeline and is now out of service.
- (4) Dillon Platform
 - There is no active production on the Dillon Platform, and it is in "lighthouse" mode.
 - There are two pipelines between the Dillon Platform and the C Platform, and there are two pipelines between the Dillon Platform and the MGS onshore facility.³⁴
 - As described above for the C Platform, the gas pipeline between the Dillon Platform and the C Platform (the A Pipeline) transports fuel gas from the C Platform to the Dillon Platform.
 - As described above for the C Platform, the liquids pipeline between the Dillon Platform and the C Platform (the B Pipeline) is now out of service.
 - The liquids pipeline (the C Pipeline) between the Dillon Platform and the MGS onshore facility is an abandoned pipeline.
 - The gas pipeline (the D Pipeline) between the Dillon Platform and the MGS onshore facility is now out of service.

³⁴ *Id*.

³³ *Infra*, at Table 1.

Table 1 Middle Ground Shoal Production Facility Pipelines

	Construction of	Oning	Descent			Discolutor	1 and 1		
	construction	original	Present			Piggable	Length	0.0.	
Functional Name	Year	Commodity	Commodity	Origination Facility	Termination Facility	(Y/N)	(Miles)	(inches)	Notes
Baker Platform			Out of service	A Platform subsea					
A Pipeline	1965	Crude Oil	(Natural Gas)	manifold	Baker Platform	N	2.33	8.625	(1)
Baker Platform				A Platform subsea					
B Pipeline	1965	Natural Gas	Natural Gas	manifold	Baker Platform	N	2.33	8.625	
A Platform				Middle Ground Shoal					
A Pipeline	1965	Crude Oil	Natural Gas	Onshore Facility	"A" Platform	Y	7.00	8.625	
A Platform			Crude Oil (Oil and		Middle Ground Shoal				
B Pipeline	1965	Crude Oil	Produced Water)	"A" Platform	Onshore Facility	Y	7.00	8.625	
C Platform			Crude Oil (Oil and		A Platform subsea				
B Pipeline	1967	Crude Oil	Produced Water)	"C" Platform	manifold	Y	2.30	8.625	
C Platform									
A Pipeline	1967	Natural Gas	Natural Gas	"A" Platform	"C" Platform	N	2.30	8.625	
Dillon Platform			Out of service	Middle Ground Shoal					
D Pipeline	1966	Natural Gas	(Natural Gas)	Onshore Facility	Dillon Platform	N	5.63	8.625	(2)
Dillon Platform					Middle Ground Shoal				
C Pipeline	1967	Crude Oil	Abandoned	Dillon Platform	Onshore Facility	N	5.63	8.625	(3)
Dillon Platform			Out of service						
B Pipeline	1966	Crude Oil	(Crude Oil)	Dillon Platform	"C" Platform	N	2.30	8.625	(4)
Dillon Platform									
A Pipeline	1966	Natural Gas	Natural Gas	"C" Platform	Dillon Platform	N	2.30	8.625	

NOTES:

(1) Filled with seawater.

(2) Valves removed and blinded.

(3) Abandoned per DOT NPMS. Last service was crude oil.

(4) Cleaned but not formally abandoned.

Inventory and Identification of Pipeline Facilities October 2018



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2.2. Trading Bay Production Facilities

As shown on Figure 3 (see page 25), there are five offshore platforms and one onshore facility associated with the Trading Bay production facilities. Table 2 (see page 24) provides details about each pipeline associated with the Trading Bay facility.

Hilcorp acquired the Trading Bay production facilities (onshore facility, platforms, pipelines, etc.) from Union Oil Company of California in early 2012.

The Trading Bay Production Facility (TBPF) is the onshore facility and is located on the west side of the Upper Cook Inlet. The five platforms are the Dolly Varden Platform, Grayling Platform, King Salmon Platform, Monopod Platform, and Steelhead Platform. Each platform, at a minimum, has one hazardous liquids pipeline and one natural gas pipeline between the platform and the onshore TBPF.

There are six offshore hazardous liquid pipelines associated with the TBPF. Of these, one is regulated solely by PHMSA pursuant to 49 CFR Part 195, three are regulated solely by ADEC pursuant to 18 AAC 75, *et seq*,³⁵ and two are regulated by both PHMSA and ADEC.³⁶ The offshore natural gas pipelines associated with the TBPF are PHMSA-regulated pipelines subject to the requirements of 49 CFR 192.

(1) Dolly Varden Platform

- There are three pipelines between the Dolly Varden Platform and the onshore TBPF.³⁷
- The two liquids pipelines between the Dolly Varden Platform and the onshore TBPF are the A Pipeline and the C Pipeline. The A pipeline transports produced fluids from the Dolly Varden Platform to the onshore TBPF for final processing. The C Pipeline is an out-of-service pipeline but is not abandoned.
- The gas pipeline between the Dolly Varden Platform and the onshore TBPF (the B Pipeline) transports fuel gas from the onshore TBPF to the Dolly Varden Platform.

³⁵ See supra, at Section 1.1.4 (summarizing ADEC's role in regulating hazardous liquids pipelines); see also infra, at Section 4 (providing additional detail regarding ADEC's role in regulating hazardous liquid pipelines in Alaska).

³⁶ *Infra*, at Table 6; *see also infra*, at Section 4 (discussing the authority of PHMSA and ADEC to share regulatory oversight on certain hazardous liquid pipelines).

³⁷ See infra, at Table 2 (summarizing pipeline characteristics).

- (2) Grayling Platform
 - There are two pipelines between the Grayling Platform and the onshore TBPF.³⁸
 - The liquids pipeline between the Grayling Platform and the onshore TBPF (the A Pipeline) transports produced fluids from the Grayling Platform to the onshore TBPF for final processing.
 - The gas pipeline between the Grayling Platform and the onshore TBPF (the B Pipeline) transports fuel gas from the onshore TBPF to the Grayling Platform.
- (3) King Salmon Platform
 - There are two pipelines between the King Salmon Platform and the onshore TBPF.³⁹
 - The liquids pipeline between the King Salmon Platform and the onshore TBPF (the A Pipeline) transports produced fluids from the King Salmon Platform to the onshore TBPF for final processing.
 - The gas pipeline between the King Salmon Platform and the onshore TBPF (the B Pipeline) transports fuel gas from the onshore TBPF to the King Salmon Platform.
- (4) Monopod Platform
 - There are two pipelines between the Monopod Platform and the onshore TBPF.⁴⁰
 - The liquids pipeline between the Monopod Platform and the onshore TBPF (the A Pipeline) transports produced fluids from the Monopod Platform to the onshore TBPF for final processing.
 - The gas pipeline between the Monopod Platform and the onshore TBPF (the B Pipeline) either sends gas to, or receives gas from, the onshore TBPF depending on Monopod Platform's gas production and gas demand. When the Monopod Platform produces gas exceeding its fuel gas demand, the B Pipeline transports excess gas to the onshore TBPF. When the Monopod Platform's fuel gas demand exceeds its production, the B Pipeline transports "make-up gas" from the onshore TBPF to the Monopod Platform.

³⁹ Id.

⁴⁰ *Id*.

³⁸ Id.

(5) Steelhead Platform

- There are three pipelines between the Steelhead Platform and the onshore TBPF.⁴¹
- The liquids pipeline between the Steelhead Platform and the onshore TBPF (the C Pipeline) transports produced fluids from the Steelhead Platform to the onshore TBPF for final processing.
- The two gas pipelines between the Steelhead Platform and the onshore TBPF are the A Pipeline and the B Pipeline. The A Pipeline and the B Pipeline transport gas to the onshore TBPF gas header and to pipeline connections with the Cook Inlet Gas Gathering System (CIGGS) and Glacier Oil and Gas production facilities. The A Pipeline is an out-of-service pipeline but is not abandoned.

⁴¹ *Id*.

Table 2 Trading Bay Production Facility Pipelines

	Construction	Original	Present	Origination	Termination	Piggable	Length	0.D.	
Functional Name	Year	Commodity	Commodity	Facility	Facility	(Y/N)	(Miles)	(inches)	Notes
Monopod Platform			Crude Oil (Oil and		Trading Bay				
A Pipeline	1966	Natural Gas	Produced Water)	Monopod	Production Facility	Y	8.98	8.625	
Monopod Platform				Trading Bay					
B Pipeline	1966	Crude Oil	Natural Gas	Production Facility	Monopod	Y	8.98	8.625	
King Salmon Platform			Crude Oil (Oil and		Trading Bay				
A Pipeline	1966	Natural Gas	Produced Water)	King Salmon	Production Facility	Y	7.16	8.625	
King Salmon Platform				Trading Bay					
B Pipeline	1966	Crude Oil	Natural Gas	Production Facility	King Salmon	Y	7.16	8.625	
Grayling Platform			Crude Oil (Oil and		Trading Bay				
A Pipeline	1966	Natural Gas	Produced Water)	Grayling	Production Facility	Y	6.42	10.75	
Grayling Platform				Trading Bay					
B Pipeline	1967	Crude Oil	Natural Gas	Production Facility	Grayling	Y	6.42	10.75	
Dolly Varden Platform			Crude Oil (Oil and		Trading Bay				
A Pipeline	1966	Natural Gas	Produced Water)	Dolly Varden	Production Facility	Y	5.32	8.625	
Dolly Varden Platform				Trading Bay					
B Pipeline	1967	Crude Oil	Natural Gas	Production Facility	Dolly Varden	Y	5.32	8.625	
Dolly Varden Platform			Out of service		Trading Bay				
C Pipeline	1966	Crude Oil	(Crude Oil)	Dolly Varden	Production Facility	Y	5.32	4.5	(1)
Steelhead Platform			Out of service		Trading Bay				
A Pipeline	1986	Natural Gas	(Natural Gas)	Steelhead	Production Facility	Y	6.47	10.75	(2)
Steelhead Platform					Trading Bay				
B Pipeline	1986	Natural Gas	Natural Gas	Steelhead	Production Facility	Y	6.47	10.75	
Steelhead Platform			Crude Oil (Oil and		Trading Bay				
C Pipeline	1986	Crude Oil	Produced Water)	Steelhead	Production Facility	Y	6.47	8.625	

NOTES:

Not in service. Pigs stuck in pipeline.
 Not in use. Filled with salt water. 2017 leak

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2.3. Granite Point Production Facilities

As shown in Figure 4 (see page 31), there are five offshore platforms and two onshore facilities associated with the Granite Point production facilities. Table 3 (see page 30) provides details about each pipeline associated with the Granite Point facilities.

Hilcorp acquired the Granite Point Tank Farm (GPTF), Anna Platform, Bruce Platform, and Granite Point Platform from Union Oil Company of California in early 2012. Hilcorp acquired the Granite Point Production Facility, Spark Platform, and Spurr Platform from Marathon Oil Company on February 1, 2013.

The Granite Point onshore facilities are located on the west side of the Upper Cook Inlet and consist of the Granite Point Production Facility and the GPTF. The five platforms are the Anna Platform, Bruce Platform, Granite Point Platform, Spark Platform, and Spurr Platform. The Anna Platform, Bruce Platform, and Granite Point Platform are active production platforms. The Spark Platform and Spurr Platform are inactive production platforms, are unmanned, and are considered to be in "lighthouse" mode.

The Granite Point onshore facilities include two adjacent facilities, the Granite Point Production Facility, and the GPTF. The Granite Point Production Facility is associated with the Spark and Spurr Platforms and is an inactive production facility for the most part.⁴² All offshore hazardous liquid and natural gas pipelines associated with the Granite Point Production Facility are PHMSA-regulated pipelines subject to the requirements of 49 CFR Part 192 or Part 195, with the exception of the A Pipeline, associated with the Spark Platform, which is an unregulated waste water outfall pipeline for GPTF.⁴³

(1) Spark Platform

- There is no active production on the Spark Platform, which is in "lighthouse" mode.
- There are two pipelines between the Spark Platform and the onshore Granite Point Production Facility and one pipeline between the Spark Platform and the Spurr Platform.⁴⁴
- The original gas pipeline between the Spark Platform and the onshore Granite Point Production Facility has been modified and converted to a wastewater outfall for the onshore GPTF.

⁴² There is a PHMSA-regulated natural gas transmission pipeline located onshore between the Granite Point Production Facility and the CIGGS pipeline.

⁴³ *Infra*, at Table 6.

⁴⁴ See infra, at Table 3 (summarizing pipeline characteristics).

- The gas pipeline between the Spark Platform and the onshore Granite Point Production Facility transports fuel gas for the Spark Platform and the Spurr Platform.
- The gas pipeline between the Spark Platform and the Spurr Platform transports fuel gas for the Spurr Platform.
- (2) Spurr Platform
 - There is no active production on the Spurr Platform and is in "lighthouse" mode.
 - There are two pipelines between the Spurr Platform and the onshore Granite Point Production Facility, and one pipeline between the Spurr Platform and the Spark Platform.⁴⁵
 - The liquids pipeline between the Spurr Platform and the onshore Granite Point Production Facility is out of service.⁴⁶
 - The gas pipeline between the Spurr Platform and the onshore Granite Point Production Facility is out of service.⁴⁷
 - As described above for the Spark Platform, the gas pipeline between the Spurr Platform and the Spark Platform transports fuel gas for the Spurr Platform.

The GPTF is associated with the Anna Platform, the Bruce Platform, and the Granite Point Platform.⁴⁸ All offshore hazardous liquid and natural gas pipelines associated with the GPTF are PHMSA-regulated pipelines subject to the requirements of 49 CFR Part 192 or Part 195. In addition, all offshore hazardous liquids pipelines associated with the GPTF are also subject to ADEC's Oil and Other Hazardous Substance Pollution Control authority, 18 AAC 75, *et seq.*⁴⁹

⁴⁷ *Id*.

⁴⁹ *Infra*, at Table 6; *see also infra*, at Section 4 (discussing the authority of PHMSA and ADEC to each exercise regulatory oversight on certain hazardous liquid pipelines).

⁴⁵ *Id*.

⁴⁶ *Infra*, at Table 6.

⁴⁸ The Cook Inlet Pipe Line, a PHMSA-regulated onshore hazardous liquids pipeline, transports crude oil from the GPTF. There is also an onshore PHMSA-regulated natural gas pipeline between the GPTF and the CIGGS pipeline. The onshore natural gas pipeline transports gas to or from the GPTF.

(3) Anna Platform

- There are two pipelines between the Anna Platform and the Bruce Platform and two pipelines between the Anna Platform and the MGS onshore facility.⁵⁰
- The liquids pipeline between the Anna Platform and the Bruce Platform (the A Pipeline) transports produced fluids from the Anna Platform to the Bruce Platform, where the produced fluids from each platform are commingled.
- The gas pipeline between the Anna Platform and the Bruce Platform (the B Pipeline) transports gas between the two platforms.
- The two pipelines between the Anna Platform and the MGS onshore facility are now out of service.

(4) Bruce Platform

- There are two pipelines between the Bruce Platform and the onshore GPTF and two pipelines between the Bruce Platform and the Anna Platform.⁵¹
- The liquids pipeline between the Bruce Platform and the onshore GPTF (the GP1 Pipeline) transports commingled produced fluids from the Bruce Platform and the Anna Platform to the onshore GPTF.
- The gas pipeline between the Bruce Platform and the onshore GPTF (the GP2 Pipeline) transports gas between the Bruce Platform and the onshore GPTF.
- As described above for the Anna Platform, the liquids pipeline between the Bruce Platform and the Anna Platform (the A Pipeline) transports produced fluids from the Anna Platform to the Bruce Platform, where the produced fluids from each platform are commingled.
- As described above for the Anna Platform, the gas pipeline between the Bruce Platform and the Anna Platform (the B Pipeline) transports gas between the two platforms.
- (5) Granite Point Platform
 - There are two pipelines between the Granite Point Platform and the onshore GPTF.⁵²

⁵² *Id*.

⁵⁰ Id.

⁵¹ See infra, at Table 3 (summarizing pipeline characteristics).

- The liquids pipeline between the Granite Point Platform and the onshore GPTF (the B Pipeline) transports produced fluids from the Bruce Platform to the onshore GPTF.
- The gas pipeline between the Bruce Platform and the onshore GPTF (the A Pipeline) transports gas between the Bruce Platform and the onshore GPTF.

Table 3 Granite Point Production Facility Pipelines

	Construction	Original	Present	Origination	Termination	Piggable	Length	O.D.	
Functional Name	Year	Commodity	Commodity	Facility	Facility	(Y/N)	(Miles)	(inches)	Notes
Anna Platform			Crude Oil (Oil and						
A Pipeline	1966	Natural Gas	Produced Water)	Anna Platform	Bruce Platform	Y	1.62	8.625	
Anna Platform									
B Pipeline	1966	Crude Oil	Natural Gas	Bruce Platform	Anna Platform	Y	1.62	8.625	
Bruce Platform			Crude Oil (Oil and		Granite Point Tank				
GP1 pipeline	1974	Crude Oil	Produced Water)	Bruce Platform	Farm	Y	5.30	6.625	
Bruce Platform				Granite Point Tank					
GP2 pipeline	1974	Natural Gas	Natural Gas	Farm	Bruce Platform	N	5.30	6.625	
Granite Point Platform			Crude Oil (Oil and	Granite Point	Granite Point Tank				
B Pipeline	1966	Crude Oil	Produced Water)	Platform	Farm	Y	6.00	8.625	
Granite Point Platform				Granite Point Tank	Granite Point				
A Pipeline	1966	Natural Gas	Natural Gas	Farm	Platform	Y	6.00	8.625	
Spark Platform				Granite Point					
B Pipeline	1968	Crude Oil	Natural Gas	Production Facility	Spark Platform	Y	7.20	6.625	(1)
Spark Platform			Waste Water	Granite Point	Cook inlet near				
A Pipeline	1968	Natural Gas	Outfall	Production Facility	Spark Platform	Unknown	7.20	6.625	
Spurr Platform			Out of service		Granite Point				
Gas Pipeline	1968	Natural Gas	(Natural Gas)	Spurr Platform	Production Facility	N	8.40	6.625	
Spurr Platform			Out of service		Granite Point				
Oil Pipeline	1968	Crude Oil	(Crude Oil)	Spurr Platform	Production Facility	N	8.40	6.625	(2)
Spark Platform / Spurr Platform									
Gas Pipeline	1968	Natural Gas	Natural Gas	Spark Platform	Spurr Platform	Unknown	1.20	6.625	(1)

NOTES:

(1) Fuel gas for lighthouse platform

(2) Last service was crude oil. Pigged, purged, and kept as spare for fuel gas

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2.4. Other Hilcorp Facilities

Table 4 (see page 34) provides details about other pipelines operated by Hilcorp or its midstream subsidiary, Harvest Alaska.

2.4.1. Tyonek Platform Pipelines

The Tyonek Platform pipeline system transports natural gas produced on the Tyonek Platform to a Liquefied Natural Gas (LNG) plant located in Nikiski, Alaska. In addition, natural gas can be transferred to other natural gas pipelines in the Nikiski area. The offshore portion of the pipeline system consist of two pipelines, which come ashore at Moose Point (see Table 4 on page 33 for pipeline specifics), where the two offshore pipelines transition into a single onshore pipeline terminating at the LNG plant in Nikiski. The gas produced on the platform is processed (using separators, scrubbers, and absorbers) and compressed on the platform prior to entering the pipeline system for transportation to the LNG plant. The offshore natural gas pipelines associated with the Tyonek Platform are PHMSA-regulated pipelines subject to the requirements of 49 CFR Part 192.⁵³

Hilcorp is currently constructing two new pipelines between the Tyonek Platform and the west side of Cook Inlet. The pipelines are referred to as the "Tyonek West 10" (or "W10") and "Tyonek West 8" (or "W8"). Both pipelines are under construction at the time of this report and are anticipated to be completed in late October 2018, with the W10 going into service upon completion. There is currently no tentative or proposed date for when the W8 will be placed in service.

When completed, flow in the two previously-existing Tyonek gas pipelines (north and south natural gas pipelines⁵⁴) will be reversed so that gas flows from Moose Point to the Tyonek platform, where it will connect to the newly constructed W10. The W10 will then transport gas from the existing pipelines and additional gas produced on the Tyonek platform to Hilcorp's on-shore Beluga pipeline located on the west side of Cook Inlet.

The W8 is being constructed in anticipation of future oil production at the Tyonek Platform. The W8 follows the same alignment as the W10, but there is currently no on-shore oil pipeline for the W8 to tie into where it comes on shore.

2.4.2. Cook Inlet Gas Gathering System (CIGGS)

CIGGS is a natural gas transmission system with both onshore and offshore segments. The offshore segments (sometimes referred to as the "Dual Marine CIGGS") consist of two 21-mile-long, 10-inch-diameter pipelines between the east and west sides of Cook Inlet. The two offshore segments (Dual Marine CIGGS) are PHMSA-regulated pipelines subject to the

⁵⁴ Id.

⁵³ *Infra*, at Table 6.

requirements of 49 CFR Part 192.⁵⁵ One of the two pipelines will be converted from gas service to hazardous liquid service; as of the date of this report, both pipelines are still in gas service.

2.4.3. Christy Lee Loading Lines

The Christy Lee Loading Lines consist of two 2-mile-long, 30-inch-diameter pipelines between the Drift River Terminal and the Christy Lee Loading Platform. The Terminal and Loading Platform are located on the west side of Cook Inlet, southwest of the TBPF. An onshore pipeline ships all crude oil produced on the west side of Cook Inlet (which includes the TBPF, the GPPF, and the Osprey Platform (discussed in Section 3.2 below)) to the Drift River Terminal. The two Christy Lee Loading Lines are used to transfer crude oil from tanks at the Terminal to tankers at the Loading Platform. The tankers then ship the crude to the Kenai refinery on the east side of Cook Inlet. The offshore hazardous liquids pipelines associated with the Christy Lee Loading Platform are USCG-regulated pipelines.⁵⁶

⁵⁶ Id.

⁵⁵ Id.

Table 4 Other Hilcorp/Harvest Pipelines

	Construction	Original	Present	Origination	Termination	Piggable	Length	O.D.	
Functional Name	Year	Commodity	Commodity	Facility	Facility	(Y/N)	(Miles)	(inches)	Notes
Dual Marine CIGGS					Cook Inlet Field				
A Pipeline	1972	Natural Gas	Natural Gas	Kaloa Junction	Office	Y	21	10	
Dual Marine CIGGS					Cook Inlet Field				
B Pipeline	1972	Natural Gas	Natural Gas	Kaloa Junction	Office	Y	21	10	
Tyonek Platform					Moose Point Tie-				
North Pipeline	1968-1969	Natural Gas	Natural Gas	Tyonek Platform	In	Y	13	10	
Tyonek Platform					Moose Point Tie-				
South Pipeline	1968-1969	Natural Gas	Natural Gas	Tyonek Platform	In	Y	13	10	
Tyonek Platform					Beluga Pipeline				
Tyonek W10	2018	N/A	N/A	Tyonek Platform	Tie-In	Y	7	10	(1)
Tyonek Platform					Beluga Pipeline				
Tyonek W8	2018	N/A	N/A	Tyonek Platform	Tie-In	Y	7	8	(1)
Drift River Terminal			Crude Oil (Sale	Drift River Tank	Christy Lee				
Christy Lee Loading Line	1968	Crude Oil	Quality)	Farm	Loading Platform	N	2	30	
Drift River Terminal			Crude Oil (Sale	Drift River Tank	Christy Lee				
Christy Lee Loading Line	1968	Crude Oil	Quality)	Farm	Loading Platform	N	2	30	

NOTES:

(1) The Tyonek W10 and W8 pipelines are under construction as of the publishing of this report. Each will be approximately 7 miles long, 5.5 miles will be off-shore and 1.5 miles will be on-shore. The Tyonek W10 will be natural gas service. The Tyonek W8 is being installed in anticipation of future oil production from the Tyonek Platform.

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3. Cook Inlet Pipeline and Facility Descriptions: Other Operators

Table 5 (see page 37) provides details about pipelines in Cook Inlet other than those operated by Hilcorp or its subsidiary, Harvest Alaska.

3.1. Former BP/Amoco Pipeline

There are two 10-inch pipelines between the Anna Platform on the west side of Upper Cook Inlet and the Middle Ground Shoal Onshore Facility on the east side. These pipelines are abandoned.⁵⁷ In or around June 2012, portions of these pipelines on and near the beach at the Middle Ground Shoal Production Facility were removed, leaving a gap that allowed the former XTO lines⁵⁸ to be lowered, with the remainder of the pipelines shore-side, starting at the toe of the bluff, left in place.

3.2. Glacier Oil and Gas Corporation

Glacier Oil and Gas Corporation operates the Osprey Platform and the onshore Kustatan Production Facility (KPF) on the west side of the Upper Cook Inlet. There are three 3.6-mile-long offshore pipelines between the platform and the KPF. One pipeline carries produced fluids from the Osprey Platform to the KPF for processing and is regulated by ADEC.⁵⁹ The second pipeline carries produced water from the KPF to the Osprey for disposal and is unregulated.⁶⁰ The third pipeline car carry either produced fluids or natural gas and is also unregulated.⁶¹

3.3. Tesoro Alaska Pipeline Company, LLC

The Tesoro Alaska Pipeline is a 10.75-inch pipeline that transports jet fuel, gasoline, and diesel fuel from Tesoro's Nikiski Refinery to the Port of Alaska. The pipeline is approximately 68 miles long and was constructed in 1976. Approximately 14 miles of the pipeline is located offshore in northeast Cook Inlet. The pipeline is a PHMSA-regulated pipeline subject to the requirements of 49 CFR Part 195.⁶²

⁶⁰ Id.

⁶² Infra, at Table 9.

⁵⁷ See Belmar Study, at Section 1.2.1 (identifying the pipelines as abandoned).

⁵⁸ *See infra*, at Table 6 (identifying these lines as the A and B Pipelines associated with the Middle Ground Shoal Production Facility A Platform).

⁵⁹ *Infra*, at Table 8.

⁶¹ See infra, at Section 4, p. 40, n. 72 (noting that additional research is necessary to determine if this pipeline remains exempt from PHMSA's regulations or should now be classified as a PHMSA-regulated pipeline).

Andeavor, the parent company of Tesoro Alaska Pipeline Company, also operates the refinery and a tank farm at the Port of Alaska. Both facilities have over-water piping that are subject to Coast Guard regulations.

3.4. Aircraft Service International Group

Aircraft Service International Group (ASIG) operates a 7.6-mile-long, 12.75-inch jet fuel pipeline from the Port of Alaska to the Anchorage Airport storage tanks. Approximately four miles of the pipeline are buried in Cook Inlet mudflats west of Anchorage. These mudflats are within the inter-tidal area, and as such the soil above the pipeline is intermittently submerged beneath the waters of Cook Inlet. The pipeline is a PHMSA-regulated pipeline subject to the requirements of 49 CFR Part 195.⁶³

3.5. Alaska Pipeline Company

Alaska Pipeline Co. operates the Kenai Transmission System, which includes two lines, the A Pipeline and the B Pipeline. These two parallel pipelines are each approximately 71 miles long and transport natural gas from the Kenai Peninsula to the Anchorage area. Each pipeline is offshore for approximately eight miles below the Turnagain Arm of the Upper Cook Inlet. These pipelines are PHMSA-regulated pipelines subject to the requirements of 49 CFR Part 192.⁶⁴

3.6. Furie Operating Alaska, LLC

Furie Operating Alaska, LLC, operates the Julius R Platform and a 16-mile-long, 10-inch offshore pipeline. According to the operator, the pipeline carries unprocessed natural gas from the platform to an on-shore gas processing facility on the east side of Cook Inlet. This pipeline carries unprocessed gas and is exempt from PHMSA regulation.⁶⁵

⁶³ See infra, at Table 10.

⁶⁴ See infra, at Table 11.

⁶⁵ See infra, at Section 4, p. 40, n. 72 (noting that additional research is necessary to determine if this pipeline remains exempt from PHMSA's regulations or should now be classified as a PHMSA-regulated pipeline).

Table 5 Other Operator's Pipelines

	Construction	Original	Present			Piggable	Length	0.D.			
Functional Name	Year	Commodity	Commodity	Origination Facility	Termination Facility	(Y/N)	(Miles)	(inches)	Notes		
Former BP/Amoco											
Anna Platform				Near or on the Anna	Middle Ground Shoal						
Pipeline to East Forelands	1966	Gas	Abandoned	Platform.	Onshore Facility	Unknown	19.90	10.75	(1)		
Anna Platform				Near or on the Anna	Middle Ground Shoal						
Pipeline to East Forelands	1966	Crude Oil	Abandoned	Platform.	Onshore Facility	Unknown	19.90	10.75	(1)		
Glacier Oil and Gas											
Osprey Platform					Kustutan Production						
Platform to Shore	2002	Unknown	Production Fluids	Osprey Platform	Facility	Y	3.6	8.625			
Osprey Platform					Kustutan Production						
Shore to Platform	2002	Unknown	Natural Gas	Osprey Platform	Facility	Unknown	3.6	6.625	(2)		
Osprey Platform				Kustatan Production							
Shore to Platform	2002	Unknown	Produced Water	Facility	Osprey Platform	Y	3.6	8.625			
Tesoro Alaska Pipeline Co											
Kenai Refinery		Refined	Refined								
Tesoro Alaska Pipeline	1976	Hazardous Liquid	Hazardous Liquid	Tesoro Kenai Refinery	Port of Anchorage	Y	68	10.75			
Kenai Refinery											
Refinery Loading Lines	Unknown	Unknown	Crude Oil	Marine Loading	Kenai Refinery	Unknown	Unknown	Unknown			
Tesoro Port of Alaska (POA)			Refined		Port of Alsaka Tank						
POA Overwater Pipe	Unknown	Unknown	Hazardous Liquid	Marine Loading	Farm	Unknown	Unknown	Unknown			
Aircraft Service Group International											
Signature Flight Support Pipeline	1996	Jet Fuel	Jet Fuel	Port of Anchorage	Anchorage Airport	Y	7.1	12.75	(3)		
Alaska Pipeline Company/Enstar Pipe	elines										
Kenai Transmission Pipeline											
A Pipeline	1961	Natural Gas	Natural Gas	Kalifornsky Station	Potter Gate	Y	71	12	(4)		
Kenai Transmission Pipeline											
B Pipeline	1961	Natural Gas	Natural Gas	Kalifornsky Station	Potter Gate	Y	71	12	(4)		
Furie											
Julius-R Platform					Furie Processing						
Furie Pipeline	2015	Natural Gas	Natural Gas	Julius-R Platform	Facility	Unknown	16	10	(5)		

NOTES:

(1) Previously BP/Amoco. Last service is unknown. Belmar Study, Section 2.2.1, identifies pipelines as abandoned.

(2) Can be used for multi-phase flow or gas. Present service and flow direction unknown.

(3) Parallels Cook Inlet shoreline in the mudflats

(4) Approximately 8 miles offshore; remainder on-shore

(5) Gas is processed on-shore

Inventory and Identification of Pipeline Facilities

October 2018

4. Summary of PHMSA's Cook Inlet Pipeline Inventory Review⁶⁶

A. Gas Pipelines

• The natural gas pipelines associated with the Middle Ground Shoal Production Facility (MGS) and the Trading Bay Production Facility (TBPF) are PHMSA-regulated pipelines.

B. Liquid Pipelines

- Five of the seven in-service hazardous liquids pipelines associated with the MGS and the TBPF are exempt from Part 195 requirements under 49 CFR § 195.1(b)(5), which is a change from their historical status. Those pipelines are as follows:
 - 1. MGS A Platform B Pipeline
 - 2. MGS C Platform B Pipeline
 - 3. TBPF Grayling Platform A Pipeline
 - 4. TBPF King Salmon Platform A Pipeline
 - 5. TBPF Steelhead Platform C Pipeline

The predominate reasons for the change in regulatory status are the reduction of natural gas produced on the individual platforms and the associated change in the operational characteristics of the pipelines. The overall production associated with the MGS and TBPF platforms has declined with time, including natural gas production. In the past, the MGS and TBPF platforms produced excess natural gas (i.e., the platform's natural gas production was greater than the platform's natural gas demand) and the excess natural gas was exported by pipeline to an onshore facility.

The decline in natural gas production associated with certain platforms has resulted in those platforms becoming gas deficient (platform's natural gas production is less than the platform's natural gas demand), and natural gas is therefore imported by pipeline from an onshore facility to meet the platform's demand for natural gas, which includes supporting production operations. PHMSA previously concluded that when a platform was gas deficient such that all the gas separated on the platform was used on the platform to enhance production, the gas separation from the produced fluids on the platform did not constitute the point at which "produced hydrocarbons . . . are first

⁶⁶ The pipelines identified in this report may also be subject to regulatory oversight by state or federal agencies not identified on Tables 6-12. For example, some lines may also be subject to: lease, permitting, or easement conditions imposed by DNR; regulatory oversight by the EPA pursuant to 40 CFR § 112.1, or other regulatory requirements, such as spill response and on-scene coordinator responsibilities, all of which are beyond the scope of this report. Nothing in this report supersedes or otherwise invalidates applicable regulatory or contractual requirements that are beyond the scope of this report and not specifically mentioned herein.

separated, dehydrated, or otherwise processed." 49 CFR § 195.1(b)(5).67

However, these pipelines are still regulated by ADEC pursuant to the Oil and Other Hazardous Substance Pollution Control requirements, 18 AAC 75, *et seq*.

- Eight of Hilcorp's Cook Inlet hazardous liquids pipelines are PHMSA-regulated pipelines subject to the requirements of 49 CFR Part 195.⁶⁸ Of these, three are noted as having unique circumstances that warrant additional explanation, as provided below:
 - Dolly Varden Platform A Pipeline: There is a free water knockout unit installed and available for operations on the Dolly Varden Platform. The free water knockout unit's availability for operation results in the liquids pipeline (the A Pipeline) being regulated by PHMSA because water separation from the produced fluids on the platform is characterized as a type of processing of hydrocarbons for purposes of further transportation by pipeline. If the free water knockout unit were permanently removed from operation, the A Pipeline would be exempt from PHMSA regulation under 49 CFR § 195.1(b)(5).
 - 2. Dillon Platform B Pipeline: This pipeline was regulated by PHMSA at the time production on the Dillon Platform was terminated. The pipeline has not been abandoned in accordance with 49 C.F.R. § 195.59 requirements, and therefore remains a PHMSA-regulated pipeline.
 - 3. Spurr Platform Oil Pipeline: Oil production on the Spurr Platform terminated in the early 1990s, and there is insufficient information to show that the pipeline was properly abandoned in accordance with 49 C.F.R. § 195.59 requirements. Therefore, PHMSA considers the Spurr Platform Oil Pipeline a PHMSA-regulated pipeline.
- Within the waters of Cook Inlet, five hazardous liquid pipelines are subject to ADEC's Oil and Other Hazardous Substances Pollution Control authority pursuant to 18 AAC 75 *et seq.*, and PHMSA's regulatory oversight pursuant to 49 CFR Part 195.⁶⁹ Those pipelines are as follows:
 - 1. TBPF Dolly Varden Platform A Pipeline;
 - 2. TBPF Monopod Platform A Pipeline;
 - 3. Granite Point Tank Farm Anna Platform A Pipeline;
 - 4. Granite Point Tank Farm Bruce Platform GP1 Pipeline; and

⁶⁸ Infra, at Table 6.

⁶⁷ See PHMSA Letter of Interpretation to L.G. Otteman, Offshore Operators Committee (Aug. 2, 1979) ("The separation to which [the exemptions] refer is a type of processing of hydrocarbons for purposes of their further transportation by pipeline This type of processing does not include separation of minor amounts of gas exclusively for the purposes of running instruments or equipment [on the platforms].").

⁶⁹ See infra, at Table 6 (identifying these pipelines with yellow highlight).

5. Granite Point Tank Farm – Granite Point Platform – B Pipeline.

The authority of ADEC and PHMSA to exercise regulatory oversight of these pipelines is a result of ADEC's and PHMSA's regulations promulgated under different authorizing statutes. PHMSA's jurisdictional authority is codified in the Federal Pipeline Safety Statutes, 49 U.S.C. § 60101 *et seq.*, while ADEC's jurisdictional authority relevant to the pipelines discussed in this report is derived from the Clean Water Act, as amended by the Oil Pollution Act of 1990, and codified in AS 46.03.020 (Powers of the Department), AS 46.04.030 (Oil Discharge Prevention and Contingency Plans), 46.04.060 (Inspections). PHMSA promulgated implementing regulations, 49 CFR Part 192 and 49 CFR Part 195, to exercise its statutory authority under the Federal Pipeline Statutes, while ADEC promulgated implementing regulations, 18 AAC 75 *et seq.*, Oil and Other Hazardous Substances Pollution Control, to exercise its statutory authority under Title 46 of the Alaska Statutes.

- There are three abandoned liquid pipelines that are not subject to regulation from a pipeline safety perspective.⁷⁰ Those pipelines are as follows:
 - 1. MGS Dillon Platform C Pipeline;
 - 2. MGS Anna Platform to East Forelands Liquids Pipeline; and
 - 3. MGS Anna Platform to East Forelands Gas Pipeline.
- There are two wastewater pipelines that are not subject to regulation from a pipeline safety perspective.⁷¹ Those pipelines are as follows:
 - 1. The Granite Point Production Facility Spark Platform A Pipeline; and
 - 2. The Kustutan Production Facility Osprey Platform Wastewater Pipeline.
- There are two in-service natural gas pipelines not currently subject to regulation from a pipeline safety perspective.⁷² Those pipelines are as follows:
 - 1. Kustutan Production Facility Osprey Platform Gas Pipeline; and
 - 2. The Furie Production Facility Julius-R Platform Furie Pipeline.

⁷⁰ See infra, at Tables 6 & 7 (identifying these pipelines with blue highlight).

⁷¹ See infra, at Tables 6 & 8 (identifying these pipelines with green highlight).

⁷² See infra, at Tables 8 & 12 (identifying these pipelines with red highlight). Unlike ADEC's regulations on hazardous liquid pipelines, there is no state agency in Alaska with regulations specific to the operation and maintenance of natural gas pipelines. Based on the last known information regarding the operational characteristics of these pipelines, they are exempt from PHMSA's regulations. Additional verification of the pertinent facts regarding these pipelines is necessary to confirm if they remain exempt from PHMSA's regulations.

- There are seven out-of-service pipelines that remain PHMSA-regulated until they are abandoned pursuant to PHMSA's regulations.⁷³ Those pipelines are as follows:
 - 1. MGS Baker Platform A Pipeline;
 - 2. MGS Dillon Platform B Pipeline
 - 3. MGS Dillon Platform D Pipeline;
 - 4. TBPF Dolly Varden Platform C Pipeline;
 - 5. TBPF Steelhead Platform A Pipeline;
 - 6. Granite Point Production Facility Spurr Platform Oil Pipeline; and
 - 7. Granite Point Production Facility Spurr Platform Gas Pipeline.

Introduction to Tables 6 through 12

The following tables present a matrix identifying the agency, or agencies, responsible for regulatory oversight of pipelines within the waters of Upper Cook Inlet.⁷⁴ For some liquid pipelines, both PHMSA and ADEC are the regulating agencies. The tables do not identify all agencies with spill prevention and response regulatory authority, or with lease, permit, easement, or contractual conditions on the pipelines.⁷⁵ Further, with regard to ADEC's authority, Tables 6 through 12 do not identify all pipelines that ADEC may regulate under 18 AAC 75, *et seq.* Rather, Tables 6 through 12 identify ADEC-regulated pipelines only where the pipeline is classified by ADEC as a "flow line" and regulated as such under 18 AAC 75.047 and associated requirements. Importantly, some of the pipelines identified in Tables 6 through 12 may be regulated by ADEC under different parts of 18 AAC 75, *et seq.*, notwithstanding the "No" designation.⁷⁶

In general, pipelines located offshore in state waters, which is the regulatory classification of all pipelines located in Upper Cook Inlet, are PHMSA-regulated pipelines, unless a regulatory exemption applies.⁷⁷

⁷⁵ Id.

⁷³ See infra, at Table 6 (identifying these pipelines with grey highlight).

⁷⁴ *Supra*, at n. 66.

⁷⁶ For example, some of the pipelines with a "No" designation under the ADEC column on Tables 6 through 12 may be subject to ADEC's regulations for transfer piping or facility piping. The identification of all facility piping and transfer piping, as classified by ADEC, is beyond the scope of this report. *Supra*, at n. 66.

⁷⁷ See 49 CFR § 192.1(b)(1) and 49 CFR § 195.1(b)(5) (detailing the regulatory exemptions for pipelines located offshore in state waters).

Key to Tables 6 through 12:

Red highlight identifies an in-service pipeline that is not subject to PHMSA, ADEC, or USCG regulations.

Yellow highlight identifies a pipeline that is subject to PHMSA's pipeline safety regulations pursuant to 49 C.F.R. Part 195, and ADEC's Oil and Other Hazardous Substance Pollution Control authority pursuant to 18 AAC 75, *et seq.*

Gray highlight identifies an out-of-service pipeline that remains subject to PHMSA's regulations

Blue highlight identifies an out-of-service pipeline that is abandoned and is not subject to PHMSA, ADEC, or USCG regulations.

Purple highlight identifies a pipeline that is under construction at the time of this report with unknown future operational service.

Green highlight identifies a wastewater pipeline that is not subject to regulatory oversight from a pipeline safety perspective.

Table 6 - Regulatory Agency Matrix for Hilcorp/Harvest Pipelines											
		Pipel	ine	Pipeline	Regulatory	Agency					
Facility	Platform	Name	Туре	ADEC	PHMSA	USCG					
	A Diatform	A Pipeline	Gas	No	Yes	No					
	A Platform	B Pipeline	Liquids	Yes	No	No					
	Baker	A Pipeline	Gas	No	Yes	No					
Middle	Platform	B Pipeline	Gas	No	Yes	No					
Ground	C Diatform	A Pipeline	Gas	No	Yes	No					
Shoal	CPIALIOITI	B Pipeline	Liquids	Yes	No	No					
Production		A Pipeline	Gas	No	Yes	No					
Facilities	Dillon	B Pipeline	Liquids	No	Yes	No					
	Platform	C Pipeline	Liquids	No	No	No					
		D Pipeline	Gas	No	Yes	No					
	Dolly Vardan	A Pipeline	Liquids	Yes	Yes	No					
	Dolly Varden	B Pipeline	Gas	No	Yes	No					
	Platform	C Pipeline	Liquids	No	Yes	No					
	Grayling	A Pipeline	Liquids	Yes	No	No					
	Platform	B Pipeline	Gas	No	Yes	No					
Trading Bay	King Salmon	A Pipeline	Liquids	Yes	No	No					
Production	Platform	B Pipeline	Gas	No	Yes	No					
Facilities	Monopod	A Pipeline	Liquids	Yes	Yes	No					
	Platform	B Pipeline	Gas	No	Yes	No					
	Charlesed	A Pipeline	Gas	No	Yes	No					
	Blatform	B Pipeline	Gas	No	Yes	No					
	Flation	C Pipeline	Liquids	Yes	No	No					
	Anna	A Pipeline	Liquids	Yes	Yes	No					
	Platform	B Pipeline	Gas	No	Yes	No					
Granite	Bruce	GP1 Pipeline	Liquids	Yes	Yes	No					
Form	Platform	GP2 Pipeline	Gas	No	Yes	No					
1 di ili	Granite Point	A Pipeline	Gas	No	Yes	No					
	Platform	B Pipeline	Liquids	Yes	Yes	No					
	Spark	A Pipeline	Wastewater	No	No	No					
Granite	Platform	B Pipeline	Gas	No	Yes	No					
Point	C	Oil Pipeline	Liquids	No	Yes	No					
Figure	Spurr	Gas Pipeline	Gas	No	Yes	No					
i denity	Platform	Gas Pipeline	Gas	No	Yes	No					

Та	Table 6 - Regulatory Agency Matrix for Hilcorp/Harvest Pipeline (continued)												
	Diatform	Pipeline	Pipeline Regulatory Agency										
Facility	Platform	Name	Туре	ADEC	PHMSA	USCG							
	Tyonek Platform	South Pipeline	Gas	No	Yes	No							
Tyonek		North Pipeline	Gas	No	Yes	No							
Platform		Tyonek W10 ⁷⁸	Gas	No	Yes	No							
		Tyonek W8	Oil	TBD	TBD	No							
Cook Inlet		A Pipeline	Gas ⁷⁹	No	Yes	No							
Gas Gathering System	N/A	B Pipeline	Gas	No	Yes	No							
Drift River	Christy Lee	South Loading Line	Crude Oil	No	No	Yes							
Terminal	Platform	North Loading Line	Crude Oil	No	No	Yes							

	Table 7 - Regulatory Agency Matrix for Former BP/Amoco Lines										
	Diatform	Pipeline	Pipeline Regulatory Agency								
Facility	Platform	Name	Туре	ADEC	PHMSA	USCG					
Middle Ground	Anna	to East Forelands	Liquids	No	No	No					
Production Facilities		to East Forelands	Gas	No	No	No					

Table 8 - Regulatory Agency Matrix for Glacier Oil and Gas										
Feeilit	Diatform	Pipeline	Pipeline Regulatory Agency							
Facility	Platform	Name	Туре	ADEC	PHMSA	USCG				
Kustutan	Osprey	Gas	Gas	No	No ⁸⁰	No				
Production		Wastewater	Wastewater	No	No	No				
Facility		Liquids	Liquids	Yes	No	No				

 $^{^{78}}$ The Tyonek W10 is under construction as of the publishing of this report. The Tyonek W10 will be a PHMSA-regulated natural gas pipeline.

⁷⁹ As of the date of this report, the CIGGS-A pipeline is in natural gas service but will be converted to hazardous liquid service.

⁸⁰ See supra, at Section 4, p. 40, n. 72 (noting that additional research is necessary to determine if any processing occurs on the platform, which could subject the pipeline to Part 192).

Table 9 - Regulatory Agency Matrix for Tesoro Alaska Pipeline Co.						
Facility	Pipeline		Pipeline Regulatory Agency			
	Name	Туре	ADEC	PHMSA	USCG	
Kenai Refinery	Tesoro Alaska Pipeline	Liquids	No	Yes	No	
Kenai Refinery	Refinery Loading Line	Liquids	No	No	Yes	
Tesoro Port of Alaska	POA Overwater Pipe	Liquids	No	No	Yes	

Table 10 - Regulatory Agency Matrix for Aircraft Service International Group						
Facility	Pipeline		Pipeline Regulatory Agency			
	Name	Туре	ADEC	PHMSA	USCG	
Anchorage Airport	Signature Flight Support Pipeline	Liquids	No	Yes	No	

Table 11 - Regulatory Agency Matrix for Alaska Pipeline Company						
Facility	Pipeline		Pipeline Regulatory Agency			
	Name	Туре	ADEC	PHMSA	USCG	
Kenai Transmission Pipeline	A Pipeline	Gas	No	Yes	No	
	B Pipeline	Gas	No	Yes	No	

Table 12 - Regulatory Agency Matrix for Furie							
Facility	Platform	Pipeline		Pipeline Regulatory Agency			
		Name	Туре	ADEC	PHMSA	USCG	
Furie Production Facility	Julius-R	Furie Pipeline	Gas	No	No ⁸¹	No	