



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

ACCIDENT REPORT – HAZARDOUS LIQUID AND CARBON DIOXIDE PIPELINE SYSTEMS

REPORT_RECEIVED_DATE
Report Date _____
REPORT_NUMBER
No. **SUPPLEMENTAL_NUMBER**
(DOT Use Only)

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. Public reporting for this collection of information is estimated to be approximately 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at <https://www.phmsa.dot.gov/pipeline/library/forms>.

PART A – KEY REPORT INFORMATION

Report Type: (select all that apply) ☐ Original ☐ Supplemental ☐ Final
REPORT_TYPE

A1. Operator's OPS-issued Operator Identification Number (OPID): ____ / ____ / ____ / ____ / ____ / ____ **OPERATOR_ID**

A2. Name of Operator: ____ *auto-populated based on OPID* **NAME**

A3. Address of Operator:

A3a. ____ *auto-populated based on OPID* **OPERATOR_STREET_ADDRESS**
(Street Address)

A3b. ____ *auto-populated based on OPID* **OPERATOR_CITY_NAME**
(City)

A3c. State: *auto-populated based on OPID* ____ / ____ / ____ **OPERATOR_STATE_ABBREVIATION**

A3d. Zip Code: *auto-populated based on OPID* ____ / ____ / ____ / ____ / ____ - ____ / ____ / ____ **OPERATOR_POSTAL_CODE**

A4. Earliest local time (24-hr clock) and date an accident reporting criteria was met:

____ / ____ / ____ **LOCAL_DATETIME**
Hour Month Day Year
TIME_ZONE

A4a. Time Zone for local time (select only one) ☐ Alaska ☐ Eastern ☐ Central ☐ Hawaii-Aleutian ☐ Mountain ☐ Pacific.

A4b. Daylight Saving in effect? ☐ Yes ☐ No **DAYLIGHT_SAVINGS_IND**

A5. Location of Accident:

Latitude: ____ / ____ / ____ **LOCATION_LATITUDE**

Longitude: - ____ / ____ / ____ **LOCATION_LONGITUDE**

A6. Commodity released: (select only one, based on predominant volume released) **COMMODITY_RELEASED_TYPE**

☐ Crude Oil

COMMODITY_SUBTYPE

☐ Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions

☐ Gasoline (non-Ethanol) ☐ Diesel, Fuel Oil, Kerosene, Jet Fuel

☐ Mixture of Refined Products (transmix or other mixture)

☐ Other ➡ Name: **COMMODITY_DETAILS**

☐ HVL or Other Flammable or Toxic Fluid which is a Gas at Ambient Conditions

☐ Anhydrous Ammonia

☐ LPG (Liquefied Petroleum Gas) / NGL (Natural Gas Liquid)

☐ Other HVL ➡ Name: **COMMODITY_DETAILS**

☐ CO₂ (Carbon Dioxide)

☐ Biofuel / Alternative Fuel (including ethanol blends)

☐ Fuel Grade Ethanol

BLEND_DETAILS

☐ Biodiesel ➡ Blend (e.g. B2, B20, B100): B/ ____ / ____ / ____

BLEND_DETAILS

☐ Ethanol Blend ➡ % Ethanol: ____ / ____ / ____

☐ Other ➡ Name: **BIO_DIESEL_DETAILS**

A7. Estimated volume of commodity released unintentionally:

____ / ____ / ____ / ____ / ____ / ____ **UNINTENTIONAL_RELEASE_BBLS**
/ Barrels

A8. Estimated volume of intentional and/or controlled release/blowdown:
(only reported for HVL and CO₂ Commodities)

____ / ____ / ____ / ____ / ____ / ____ **INTENTIONAL_RELEASE_BBLS**
/ Barrels

A9. Estimated volume of commodity recovered

____ / ____ / ____ / ____ / ____ / ____ **RECOVERED_BBLS**
/ Barrels

<p>A10. Were there fatalities? <input type="radio"/> Yes <input type="radio"/> No FATALITY_IND</p> <p>If Yes, specify the number in each category:</p> <p>A10a. Operator employees NUM_EMP_FATALITIES <div style="text-align: right;">/ / / / /</div></p> <p>A10b. Contractor employees NUM_CONTR_FATALITIES working for the Operator <div style="text-align: right;">/ / / / /</div></p> <p>A10c. Non-Operator NUM_ER_FATALITIES emergency responders <div style="text-align: right;">/ / / / /</div></p> <p>A10d. Workers working on the NUM_WORKER_FATALITIES right-of-way, but NOT associated with this Operator <div style="text-align: right;">/ / / / /</div></p> <p>A10e. General public NUM_GP_FATALITIES <div style="text-align: right;">/ / / / /</div></p> <p>A10f. Total fatalities (sum of above) FATAL <i>calculated</i></p>	<p style="text-align: right;">INJURY_IND</p> <p>A11. Were there injuries requiring inpatient hospitalization? <input type="radio"/> Yes <input type="radio"/> No</p> <p>If Yes, specify the number in each category: NUM_EMP_INJURIES</p> <p>A11a. Operator employees <div style="text-align: right;">/ / / / /</div></p> <p>A11b. Contractor employees NUM_CONTR_INJURIES working for the Operator <div style="text-align: right;">/ / / / /</div></p> <p>A11c. Non-Operator NUM_ER_INJURIES emergency responders <div style="text-align: right;">/ / / / /</div></p> <p>A11d. Workers working on the NUM_WORKER_INJURIES right-of-way, but NOT associated with this Operator <div style="text-align: right;">/ / / / /</div></p> <p>A11e. General public NUM_GP_INJURIES <div style="text-align: right;">/ / / / /</div></p> <p>A11f. Total injuries (sum of above) INJURE <i>calculated</i></p>
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A12. formerly E8. What was the Operator's initial indication of the Failure? (select only one) **ACCIDENT_IDENTIFIER**

- ☐ CPM leak detection system
☐ SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)
☐ Static Shut-in Test or Other Pressure or Leak Test
☐ Controller
☐ Air Patrol
☐ Notification from Public
☐ Notification from Third Party that caused the Accident
- ☐ Local Operating Personnel, including contractors
☐ Ground Patrol by Operator or its contractor
☐ Notification from Emergency Responder
☐ Other **ACCIDENT_DETAILS**

A12a. formerly E8.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify the following: (select only one) **OPERATOR_TYPE**

- ☐ Operator employee ☐ Contractor working for the Operator

A13. Formerly A18.a Local time Operator identified failure **INCIDENT_IDENTIFIED_DATETIME**
SYSTEM_PART_INVOLVED
Hour Month Day Year

A14. formerly C2 Part of system involved in Accident: (select only one)

- ☐ Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances
☐ Onshore Terminal/Tank Farm Equipment and Piping
☐ Onshore Equipment and Piping Associated with Belowground Storage
☐ Onshore Pump/Meter Station Equipment and Piping
☐ Onshore Pipeline, Including Valve Sites
☐ Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping
☐ Offshore Pipeline, Including Riser and Riser Bend

ON_OFF_SHORE

A15. formerly B1 Auto-populated based on A14 Was the origin of the Accident onshore?

- ☒ Yes (Complete Questions B3-B12) ☐ No (Complete Questions B13-B15)

STATUS_WHEN_IDENTIFIED

A16. Operational Status at time Operator identified failure (select only one)

- ☐ Post-Construction Commissioning
☐ Post-Maintenance/Repair
☐ Routine Start-Up
☐ Routine Shutdown
☐ Normal Operation, include pauses between batches and during maintenance
☐ Idle

SHUTDOWN_DUE_ACCIDENT_IND

A17. formerly A14. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?

- ☐ Yes ☐ No ☐ Explain: **SHUTDOWN_EXPLAIN**

If Yes, complete Questions A17.a and A17.b: (use local time, 24-hr clock)

A17a. formerly A14.a Local time and date of shutdown **SHUTDOWN_DATETIME**
Hour Month Day Year

A17b. formerly A14.b Local time pipeline/facility restarted **RESTART_DATETIME** **STILL_SHUTDOWN_IND**
Hour Month Day Year ☐ Still shut down*
*Supplemental Report required

If A12 = Notification from Emergency Responder, skip A18.a through A18.c. **COMMUNICATION_STATE_FED_IND**

A18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident? ☐ Yes ☐ No

If No, skip A18b. and A18c

PARTY_INITIATED_COMMUNICATION

A18b. Which party initiated communication about the accident? ☐ Operator ☐ Local/State/Federal Emergency Responder

A18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication **INITIAL_RESPONDER_COM_DATETIME**

Hour Month Day Year

A19. formerly A18.b Local time Operator responders arrived on site **ON_SITE_DATETIME**
Hour Month Day Year

A20. Local time of confirmed discovery **CONFIRMED_DISCOVERY_DATETIME**
Hour Month Day Year

A21a. formerly A7. Local time (24-hr clock) and date of initial operator report to the National Response Center :

Hour Month Day Year **NRC_RPT_DATETIME**

NRC_RPT_NUM

A21b. formerly A6. Initial Operator National Response Center Report Number OR ☐ NRC Notification Not Required OR
☐ NRC Notification Required But Not Made

ADDITIONAL_NRC_REPORT_NUMBERS

A21c. Additional NRC Report numbers submitted by the operator: _____

IGNITE_IND

A22. formerly A15. Did the commodity ignite? ☐ Yes ☐ No If Yes, answer A22.a through d:

B1. formerly B7. Pipeline/Facility name: PIPE_FAC_NAME

B2. formerly B8. Segment name/ID: SEGMENT_NAME

PART C – ADDITIONAL FACILITY INFORMATIONC1. Is the pipeline or facility: **PIPE_FACILITY_TYPE**

- ☐ Interstate
☐ Intrastate

C2. reserved

ITEM INVOLVED

C3. Item involved in Accident: (select only one)

- ☐ **PIPE_TYPE** Pipe \Rightarrow Specify: ☐ Pipe Body ☐ Pipe Seam

If Pipe Body: **PUDDLE_WELD_IND** Was this a puddle/spot weld? ☐ Yes ☐ No

C3a. Nominal Pipe Size: **PIPE_DIAMETER** C3.b. Wall thickness (in): **PIPE_WALL_THICKNESS**

C3c. SMYS (Specified Minimum Yield Strength) of pipe (psi): **PIPE_SMYS**

C3d. Pipe specification: **PIPE_SPECIFICATION** OR ☐ Unknown

PIPE_SEAM_TYPE
C3e. Pipe Seam \Rightarrow Specify: ☐ ERW - High Frequency ☐ Single SAW ☐ Flash Welded

☐ ERW - Low Frequency ☐ DSAW ☐ Continuous Welded ☐ Longitudinal ERW – Unknown Frequency

☐ Furnace Butt Welded ☐ Spiral Welded ☐ Lap Welded ☐ Seamless

☐ Other, describe: **PIPE_SEAM_DETAILS**

C3f. Pipe manufacturer: **PIPE_MANUFACTURER** OR ☐ Unknown

PIPE_COATING_TYPE
C3g formerly C3.h Pipeline coating type at point of Accident

\Rightarrow Specify: ☐ Fusion Bonded Epoxy (FBE) ☐ Coal Tar ☐ Asphalt ☐ Polyolefin ☐ Extruded Polyethylene

☐ Epoxy other than FBE ☐ Cold Applied Tape ☐ Paint ☐ Composite ☐ None ☐ Other, describe: **PIPE_COATING_DETAILS**

COATING_APPLIED_IND
C3h. Coating field applied? ☐ Yes ☐ No ☐ Unknown

☐ **WELD_SUBTYPE** Weld, including heat-affected zone \Rightarrow Specify: ☐ Pipe Girth Weld ☐ Other Butt Weld ☐ Fillet Weld

If Pipe Girth Weld is selected, complete items C3a through h above. Are any of the C3b through h values different on either side of the girth weld? ☐ Yes ☐ No **DIFFERENT_GIRTH_WELD_IND**

If Yes, enter the different value(s) below:

C3i. Wall thickness (in): **DIFF_GIRTH_WELD_WALL_THICKNESS**

C3j. SMYS (Specified Minimum Yield Strength) of pipe (psi): **DIFF_GIRTH_WELD_SMYS**

C3k. Pipe specification: **DIFF_GIRTH_WELD_SPECIFICATION** OR ☐ Unknown

DIFF_GIRTH_WELD_SEAM_TYPE

C3l. Pipe Seam \Rightarrow Specify: ☐ ERW - High Frequency ☐ Single SAW ☐ Flash Welded

☐ ERW - Low Frequency ☐ DSAW ☐ Continuous Welded ☐ ERW – Unknown Frequency

☐ Furnace Butt Welded ☐ Spiral Welded ☐ Lap Welded ☐ Seamless

☐ Other, describe: **DIFF_GIRTH_WELD_SEAM_DETAIL**

C3m. Pipe manufacturer: **DIFF_GIRTH_WELD_MANUFACTURER** OR ☐ Unknown

C3n. Pipeline coating type at point of Accident **DIFF_GIRTH_WELD_COATING_TYPE**

\Rightarrow Specify: ☐ Fusion Bonded Epoxy (FBE) ☐ Coal Tar ☐ Asphalt ☐ Polyolefin ☐ Extruded Polyethylene

☐ Epoxy other than FBE ☐ Cold Applied Tape ☐ Paint ☐ Composite ☐ None ☐ Other, describe: **DIFF_GIRTH_WELD_COATING_DETAIL**

DIFF_GIRTH_WELD_CTNG_APPLD_IND
C3o. Coating field applied? ☐ Yes ☐ No ☐ Unknown

☐ **VALVE_TYPE** Valve \Rightarrow Specify: ☐ Butterfly ☐ Check ☐ Gate ☐ Plug ☐ Ball ☐ Globe ☐ Other, describe: **VALVE_MAINLINE_DETAILS**

C3p. formerly C3.i Mainline valve manufacturer: **VALVE_MANUFACTURER** OR ☐ Unknown

☐ Relief Valve – including thermal and pressure. Report tank relief valves under the Tank/Vessel, Relief Valve

☐ Auxiliary or Other Valve – report auxiliary valves on tanks under Tank/Vessel, Appurtenance

☐ Pump, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

C3q. Type of pump **PUMP_TYPE**

☐ Positive displacement

☐ Centrifugal

☐ Gear

☐ Other (specify): **PUMP_TYPE_DETAILS**

C3r. Type of service **PUMP_SERVICE_TYPE**

☐ Mainline

☐ Injection

☐ Truck rack (if on terminal side of truck rack canopy)

☐ Other (specify): **PUMP_SERVICE_TYPE_DETAILS**

☐ Meter/Prover, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

☐ Scraper/Pig Trap, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

☐ Sump, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

- ☐ Filter, Strainer, Separator, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.
- ☐ Repair Sleeve or Clamp
- ☐ Tapping Equipment
- ☐ Tap Fitting (stopple, thread-o-ring, weld-o-let, etc.)
- ☐ Flange Assembly, including Gaskets
- ☐ Relief Lines and Relief Equipment
- ☐ Drain Lines
- ☐ Tubing, including Fittings
- C3s. Tubing material **TUBING_MATERIAL**
- Y Stainless steel
- Y Carbon steel
- Y Copper
- Y Other
- C3t. Type of tubing **TUBING_TYPE**
- Y Rigid
- Y Flexible
- ☐ Instrumentation, including Programmable Logic Controllers and Controls
- ☐ Tank/Vessel ⇒ C3u. Specify: ☐ Single Bottom System ☐ Double Bottom System ☐ Tank Shell ☐ Chime ☐ Roof/Roof Seal
- TANK_VESSEL_SUBTYPE** ☐ Roof Drain System ☐ Mixer ☐ Pressure Vessel Head or Wall ☐ Appurtenance
- ☐ Relief Valve ☐ Other, describe: **TANK_VESSEL_DETAILS**
- C3v. formerly part of C2. Tank Type ☐ Atmospheric ☐ Pressurized
- If C3v. = Pressurized: **TANK_TYPE**
- C3v1. Tank Maximum Operating Pressure **TANK_MAX_PRESSURE**
- C3v2. What is the set point of the primary pressure relief device on the tank? **TANK_SET_POINT_RELIEF_DEVICE**
- C3v3. Did the thermal or pressure relief valve activate? ☐ Yes ☐ No **TANK_RELIEF_VALVE_ACTVTD_IND**
- C3v4. Was the MOP of the tank exceeded? ☐ Yes ☐ No **TANK_MOP_EXCEEDED_IND**
- If C3v = Atmospheric or Low Pressure:
- C3v5. Safe-Fill-Level (in feet) at the time of the accident? **SAFE_FILL_LEVEL**
- C3v6. Was the SafeFill-Level exceeded? ☐ Yes ☐ No **SAFE_FILL_LEVEL_EXCEEDED_IND**
- C3v7. formerly G1, 14.a Year of most recent API Std 653 Out-of-Service Inspection **API_STD_OUT_OF_SERVICE_YEAR** ☐ **API_STD_OUT_OF_SRVC_NONE_IND** OR ☐ None
- C3v8. formerly G1, 14.b API Std 653 In-Service Inspection **API_STD_IN_SERVICE_YEAR** ☐ **API_STD_NO_IN_SERVICE_IND** OR ☐ No In-Service Inspection completed
- ☐ Other _____ mandatory text field **ITEM_INVOLVED_DETAILS**
- INSTALLATION_YEAR**
- C4. Year item involved in Accident was installed: **MANUFACTURED_YEAR** ☐ **API_STD_OUT_OF_SRVC_NONE_IND** OR ☐ Unknown
- C4a. Year item involved in Accident was manufactured: **API_STD_IN_SERVICE_YEAR** ☐ **API_STD_NO_IN_SERVICE_IND** OR ☐ Unknown

C5. Material involved in Accident: (select only one) **MATERIAL_INVOLVED**

- ☐ Carbon Steel
- ☐ Material other than Carbon Steel ⇒ Specify: **MATERIAL_DETAILS**

C6. Type of Accident involved: (select only one)

- ☐ Mechanical Puncture ⇒ Approx. size: **PUNCTURE_AXIAL** **PUNCTURE_CIRCUM** **LEAK_TYPE_OTHER**
- LEAK_TYPE** ☐ Leak ⇒ Select Type: ☐ Pinhole ☐ Crack ☐ Connection Failure ☐ Seal or Packing ☐ Other
- RUPTURE_ORIENT** ☐ Rupture ⇒ Select Orientation: ☐ Circumferential ☐ Longitudinal ☐ Other **RUPTURE_DETAILS**
- Approx. size: **RUPTURE_WIDTH** **RUPTURE_LENGTH** ☐ **RUPTURE_DETAILS**
- ☐ Overfill or Overflow **RELEASE_TYPE_DETAIL**
- ☐ Other ⇒ Describe: **S**

PART D – ADDITIONAL CONSEQUENCE INFORMATION

- D1. Wildlife impact: ☐ Yes ☐ No **WILDLIFE_IMPACT_IND**
- D1a. If Yes, specify all that apply:
- ☐ Fish/aquatic **FISH_AQUATIC_IMPACT_IND**
- ☐ Birds **BIRDS_IMPACT_IND**
- ☐ Terrestrial **TERRESTRIAL_IMPACT_IND**
- D2. Soil contamination: ☐ Yes ☐ No **SOIL_CONTAMINATION**
- D3. Long term impact assessment performed or planned: ☐ Yes ☐ No **LONG_TERM_ASSESSMENT**
- D4. Anticipated remediation: ☐ Yes ☐ No (not needed) **REMEDATION_IND**
- D4a. If Yes, specify all that apply:
- SURFACE_WATER_REMED_IND** ☐ Surface water **GROUNDWATER_REMED_IND** ☐ Groundwater **SOIL_REMED_IND** ☐ Soil **VEGETATION_REMED_IND** ☐ Vegetation **WILDLIFE_REMED_IND** ☐ Wildlife
- WATER_CONTAM_IND**
- D5. Water contamination: ☐ Yes ⇒ (Complete 5a – 5c below) ☐ No
- D5a. Specify all that apply:
- ☐ Ocean/Seawater **OCEAN_SEAWATER_IND**

E1. Estimated pressure at the point and time of the Accident (psig): **ACCIDENT_PSIG** / / / / / /

If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3.

E2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig) : **MOP_PSIG** / / / / / /

E2a. Limiting factor establishing MOP (select only one): **MOP_CFR_SECTION**

☐ Internal Design Pressure §195.406(a)(1)
☐ Component Design Pressure §195.406(a)(2)
☐ SubPart E Pressure Test §195.406(a)(3)
☐ Excepted Component Pressure Test §195.406(a)(4)
☐ Four Hour Test or Operation §195.406(a)(5)
☐ Other; describe: **MOP_CFR_SECTION_DETAILS**

E2b. Date MOP established **MAOP_ESTABLISHED_DATE** **MAOP_REVERSAL_FLOW_IND**

E2c. Was the MOP established in conjunction with a reversal of flow direction? ☐ Yes ☐ No ☐ Bi-Directional

If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident? **SURGE_ANALYSIS_DATE**

E3. Describe the pressure on the system or facility relating to the Accident: (calculated) **ACCIDENT_PRESSURE**

☐ Pressure did not exceed MOP
☐ Pressure exceeded MOP, but did not exceed 110% of MOP
☐ Pressure exceeded 110% of MOP

PRESSURE_RESTRICTION_IND

E4. Was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?

☐ No
☐ Yes ⇨ (Complete 4.a and 4.b below) **EXCEED_RESTRICTION_IND**

E4a. Did the pressure exceed this established pressure restriction? ☐ Yes ☐ No

PHMSA_RESTRICTION_IND

E4b. Was this pressure restriction mandated by PHMSA or the State? ☐ PHMSA ☐ State ☐ Not mandated

If A14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend", complete E5 through E7

LENGTH_SEGMENT_ISOLATED

E5. formerly E5.c Answer E5 only when both A23a and A23d are Valve Closure

Length of segment initially isolated between valves (ft): / / / /

INTERNAL_INSPECTION_IND

E6. formerly E5.d Is the pipeline configured to accommodate internal inspection tools?

☐ Yes
☐ No ⇨ Which physical features limit tool accommodation? (select all that apply)

☐ Changes in line pipe diameter **DIAMETER_CHANGE_IND**
☐ Presence of unsuitable mainline valves **UNSUITABLE_MAINLINE_IND**
☐ Tight or mitered pipe bends **TIGHT_MITERED_IND**
☐ Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.) **OTHER_RESTRICTIONS_IND**
☐ Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools) **EXTRA_THICK_WALL_IND**
☐ Other ⇨ Describe: **OTHER_INSPECTION_IND** **INTERNAL_INSPECTION_DETAILS**

OPERATION_COMPLICATIONS_IND

E7. formerly E5.e For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?

☐ No
☐ Yes ⇨ Which operational factors complicate execution? (select all that apply)

☐ Excessive debris or scale, wax, or other wall build-up **EXCESS_DEBRIS_IND**
☐ Low operating pressure(s) **LOW_OP_PRESSURE_IND**
☐ Low flow or absence of flow **LOW_FLOW_IND**
☐ Incompatible commodity **INCOMPAT_COMMOD_IND**
☐ Other ⇨ Describe: **OTHER_COMPLICATIONS_IND** **INSPECT_COMP_DETAILS**

PIPELINE_FUNCTION

E8. formerly E5.f Function of pipeline system: (select only one)

☐ > 20% SMYS Regulated Transmission ☐ > 20% SMYS Regulated Gathering
☐ ≤ 20% SMYS Regulated Transmission ☐ ≤ 20% SMYS Regulated Gathering

E9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?

☐ No **SCADA_IN_PLACE_IND**

☐ Yes ➡ E9a. Was it operating at the time of the Accident? ☐ Yes ☐ No **SCADA_OPERATING_IND**

E9b. Was it fully functional at the time of the Accident? ☐ Yes ☐ No **SCADA_FUNCTIONAL_IND**

E9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the initial indication of the Accident? **SCADA_DETECTION_IND** ☐ Yes ☐ No

E9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Accident? **SCADA_CONF_IND** ☐ Yes ☐ No

CPM_IN_PLACE_IND

E10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?

☐ No

☐ Yes ➡ E10a. Was it operating at the time of the Accident? ☐ Yes ☐ No **CPM_OPERATING_IND**

E10b. Was it fully functional at the time of the Accident? ☐ Yes ☐ No **CPM_FUNCTIONAL_IND**

E10c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the initial indication of the Accident? **CPM_DETECTION_IND** ☐ Yes ☐ No

E10d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Accident? **CPM_CONF_IND** ☐ Yes ☐ No

E11. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident? (select only one) **INVESTIGATION_STATUS**

☐ Yes, but the investigation of the control room and/or controller actions has not yet been completed by the Operator (Supplemental Report required)

☐ No, the facility was not monitored by a controller(s) at the time of the Accident

☐ No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)

INVESTIGATION_STATUS_DETAILS

☐ Yes, specify investigation result(s): (select all that apply) **INVEST_SCHEDULE_IND**

☐ Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue **INVEST_NO_SCHEDULE_IND**

☐ Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue (provide an explanation for why not)

INVEST_NO_SCHEDULE_IND_DETAILS

☐ Investigation identified no control room issues **INVEST_NO_CONTROL_ROOM_IND**

☐ Investigation identified no controller issues **INVEST_NO_CONTROLLER_IND**

☐ Investigation identified incorrect controller action or controller error **INVEST_INCORRECT_ACTION_IND**

☐ Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response **INVEST_FATIGUE_IND**

☐ Investigation identified incorrect procedures **INVEST_INCORRECT_PROCEDURE_IND**

☐ Investigation identified incorrect control room equipment operation **INVEST_INCORRECT_CONTROL_IND**

☐ Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response **INVEST_MAINT_IND**

☐ Investigation identified areas other than those above ➡ Describe: **INVEST_OTHER_IND, INVEST_OTHER_IND_DETAILS**

PART F – DRUG & ALCOHOL TESTING INFORMATION	
<p>F1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations? EMPLOYEE_DRUG_TEST_IND</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Yes ➡ F1a. Specify how many were tested: <u> </u> / <u> </u> / <u> </u> NUM_EMPLOYEES_TESTED</p> <p style="margin-left: 100px;">F1b. Specify how many failed: <u> </u> / <u> </u> / <u> </u> NUM_EMPLOYEES_FAILED</p> <p>F2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations? CONTRACTOR_DRUG_TEST_IND</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Yes ➡ F2a. Specify how many were tested: <u> </u> / <u> </u> / <u> </u> NUM_CONTRACTORS_TESTED</p> <p style="margin-left: 100px;">F2b. Specify how many failed: <u> </u> / <u> </u> / <u> </u> NUM_CONTRACTORS_FAILED</p>	

PART G – APPARENT CAUSE CAUSE CAUSE_DETAILS	Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Accident in the narrative (PART H).
<p>G1 - Corrosion Failure – *only one sub-cause can be picked from shaded left-hand column</p> <p style="text-align: center;">INTERNAL_EXTERNAL</p>	
<input type="checkbox"/> External Corrosion	<p>1. Results of visual examination: VISUAL_EXAM_RESULTS</p> <p><input type="radio"/> Localized Pitting <input type="radio"/> General Corrosion</p> <p><input type="radio"/> Other VISUAL_EXAM_DETAILS</p> <p>2. Type of corrosion: (select all that apply)</p> <p>GALVANIC_CORROSION_IND, ATMOSPHERE_CORROSION_IND, STRAY_CURRENT_CORROSION_IND, MICROBIOLOGICAL_CORROSION_IND, SELECTIVE_SEAM_CORROSION_IND</p> <p><input type="radio"/> Galvanic <input type="radio"/> Atmospheric <input type="radio"/> Stray Current <input type="radio"/> Microbiological <input type="radio"/> Selective Seam</p> <p><input type="radio"/> Other OTHER_CORROSION_IND CORROSION_TYPE_DETAILS</p> <p style="text-align: center;">STRAY_CURRENT_TYPE</p> <p>2a. If 2 is Stray Current, specify <input type="radio"/> Alternating Current <input type="radio"/> Direct Current AND</p> <p>2b. Describe the stray current source: STRAY_CURRENT_DETAILS</p> <p>3. The type(s) of corrosion selected in Question 2 is based on the following: (select all that apply) FIELD_EXAM_BASIS_IND METALLURGICAL_BASIS_IND</p> <p><input type="radio"/> Field examination <input type="radio"/> Determined by metallurgical analysis</p> <p><input type="radio"/> Other OTHER_BASIS_IND CORROSION_BASIS_DETAILS</p> <p>4. Was the failed item buried or submerged? UNDERGROUND_LOCATION</p> <p><input type="radio"/> Yes ➡ 4a. Was failed item considered to be under cathodic protection at the time of the Accident? UNDER_CATHODIC_PROTECTION_IND</p> <p style="margin-left: 100px;"><input type="radio"/> Yes ➡ Year protection started: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> CATHODIC_PRO_START_YEAR</p> <p style="margin-left: 100px;"><input type="radio"/> No</p> <p style="margin-left: 100px;">4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident? SHIELDING_EVIDENT</p> <p style="margin-left: 100px;"><input type="radio"/> Yes <input type="radio"/> No</p> <p style="margin-left: 100px;">CATHODIC_SURVEY_TYPE</p> <p style="margin-left: 100px;">4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident? (select all that apply)</p> <p>CP_ANNUAL_SURVEY_IND <input type="radio"/> Yes, CP Annual Survey ➡ Most recent year conducted: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> CP_ANNUAL_SURVEY_YEAR</p> <p>CLOSE_INTERVAL_SURVEY_IND <input type="radio"/> Yes, Close Interval Survey ➡ Most recent year conducted: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> CLOSE_INTERVAL_SURVEY_YEAR</p> <p>OTHER_CP_SURVEY_IND <input type="radio"/> Yes, Other CP Survey ➡ Most recent year conducted: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> OTHER_CP_SURVEY_YEAR</p> <p style="margin-left: 100px;">Describe other CP survey OTHER_CP_SURVEY_DETAILS</p> <p style="margin-left: 100px;"><input type="radio"/> No</p> <p style="margin-left: 100px;">EXTERNALLY_COATED</p> <p><input type="radio"/> No ➡ 4d. Was the failed item externally coated or painted? <input type="radio"/> Yes <input type="radio"/> No</p> <p style="margin-left: 100px;">PRIOR_DAMAGE</p> <p>5. Was there observable damage to the coating or paint in the vicinity of the corrosion?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A Bare/Ineffectively Coated Pipe</p>

<input type="checkbox"/> Internal Corrosion INT_CORROSIVE_COMMODITY_IND INT_OTHER_CORROSION_IND	INT_VISUAL_EXAM_RESULTS 6. Results of visual examination: <input type="radio"/> Localized Pitting <input type="radio"/> General Corrosion <input type="radio"/> Not cut open <input type="radio"/> Other INT_VISUAL_EXAM_DETAILS
	INT_WATER_ACID_IND INT_MICROBIOLOGICAL_IND INT_EROSION_IND 7. Cause of corrosion: (select all that apply) <input type="radio"/> Corrosive Commodity <input type="radio"/> Water drop-out/Acid <input type="radio"/> Microbiological <input type="radio"/> Erosion <input type="radio"/> Other INT_CORROSION_TYPE_DETAILS
	8. The cause(s) of corrosion selected in Question 7 is based on the following: (select all that apply) INT_FIELD_EXAM_BASIS_IND INT_METALLURGICAL_BASIS_IND <input type="radio"/> Field examination <input type="radio"/> Determined by metallurgical analysis <input type="radio"/> Other INT_OTHER_BASIS_IND INT_CORROSION_BASIS_DETAILS
	INT_LOW_POINT INT_ELBOW INT_DEAD_LEG 9. Location of corrosion: (select all that apply) <input type="radio"/> Low point in pipe <input type="radio"/> Elbow <input type="radio"/> Dead-Leg <input type="radio"/> Other INT_OTHER_LOC_IND CORROSION_INHIBITORS CORROSION_LOCATION_DETAILS
	10. Was the commodity treated with corrosion inhibitors or biocides? <input type="radio"/> Yes <input type="radio"/> No CORROSION_LINING
	11. Was the interior coated or lined with protective coating? <input type="radio"/> Yes <input type="radio"/> No CLEANING_DEWATERING
	12. Were cleaning/dewatering pigs (or other operations) routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No
	CORROSION_COUPONS 13. Were corrosion coupons routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No

G2 - Natural Force Damage - *only one sub-cause can be picked from shaded left-hand column NATURAL_FORCE_TYPE	
<input type="checkbox"/> Earth Movement, NOT due to Heavy Rains/Floods	EARTH_SUBTYPE 1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> Heavy Rains/Floods	HEAVY_RAINS_SUBTYPE 2. Specify: <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> Lightning	LIGHTNING_SUBTYPE 3. Specify: <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires
<input type="checkbox"/> Temperature	TEMPERATURE_SUBTYPE 4. Specify: <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave <input type="radio"/> Frozen Components <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> High Winds	
<input type="checkbox"/> Tree/Vegetation Root	
<input type="checkbox"/> Snow/Ice impact or Accumulation	
<input type="checkbox"/> Other Natural Force Damage	5. Describe: NF_OTHER_DETAILS
Complete the following if any Natural Force Damage sub-cause is selected. NF_EXTREME_WEATHER_IND 6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event? <input type="radio"/> Yes <input type="radio"/> No NF_HURRICANE_IND NF_TROPICAL_STORM_IND NF_TORNADO_IND 6a. If Yes, specify: (select all that apply) <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Other NF_OTHER_IND NF_EXTREME_WEATHER_DETAILS	

G3 – Excavation Damage - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Excavation Damage by Operator (First Party) PARTY_TYPE	
<input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party)	
<input type="checkbox"/> Excavation Damage by Third Party	
<input type="checkbox"/> Previous Damage due to Excavation Activity	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause. PRIOR_NOTIFICATION_IND 1. Did the Operator get prior notification of the excavation activity? <input type="radio"/> Yes <input type="radio"/> No	

- ONE_CALL_SYSTEM_IND EXCAVATOR_IND CONTRACTOR_IND LANDOWNER_IND**
- 1a. If Yes, Notification received from: *(select all that apply)* ☐ One-Call System ☐ Excavator ☐ Contractor ☐ Landowner
- 1b. Per the primary Accident Investigator results, did State law exempt the excavator from notifying the one-call center?
☐ Yes ☐ No ☐ Unknown **STATE_LAW_EXEMPT_IND**
- If yes, answer 1c through 1e. **STATE_LAW_EXEMPT_TYPE**
- 1c. select one of the following:
☐ Excavator is exempt
☐ Activity is exempt and did not exceed the limits of the exemption
☐ Activity is exempt and exceeded the limits of the exemption
☐ Other mandatory text field: **STATE_LAW_EXEMPT_DETAIL**
- 1d. Exempting authority: **STATE_LAW_EXEMPT_AUTHORITY**
- 1e. Exempting criteria: **STATE_LAW_EXEMPT_CRITERIA**

Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.

- NOTIFY CGA_DIRT**
2. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)? ☐ Yes ☐ No
3. Right-of-Way where event occurred: *(select all that apply)*
PUBLIC_ROW_IND PUBLIC_SUBTYPE
☐ Public ☐ Specify: ☐ City Street ☐ State Highway ☐ County Road ☐ Interstate Highway ☐ Other
PRIVATE_ROW_IND PRIVATE_SUBTYPE
☐ Private ☐ Specify: ☐ Private Landowner ☐ Private Business ☐ Private Easement
☐ Pipeline Property/Easement **PIPELINE_EASEMENT_ROW_IND**
☐ Power/Transmission Line **POWER_TRANSMISSION_ROW_IND**
☐ Railroad **RAILROAD_ROW_IND**
☐ Dedicated Public Utility Easement **PUBLIC_UTIL_EASEMENT_ROW_IND**
☐ Federal Land **FEDERAL_LAND_ROW_IND**
☐ Unknown/Other **UNKNOWN_ROW_IND**
- JOINT_TRENCH_IND**
4. Was the facility part of a Joint Trench? ☐ Yes ☐ No
- CROSS_BORE_IND**
5. Did this event involve a Cross Bore? ☐ Yes ☐ No
6. Measured Depth from Grade **DEPTH_OF_GRADE**
☐ Embedded in Concrete/Asphalt Pavement ☐ <18" /46 cm ☐ 18" – 36" /46 cm – 91 cm ☐ > 36" / 91 cm
☐ Measured depth From Grade _____ in/cm **DEPTH_OF_GRADE_DETAIL**
7. Type of excavator: *(select only one)* **EXCAVATOR_TYPE**
☐ Contractor ☐ County ☐ Developer ☐ Farmer ☐ Municipality ☐ Occupant
☐ Railroad ☐ State ☐ Utility ☐ Unknown/Other
- EXCAVATOR_EQUIPMENT**
8. Type of excavation equipment: *(select only one)*
☐ Auger ☐ Backhoe/Trackhoe ☐ Boring ☐ Drilling ☐ Directional Drilling
☐ Explosives ☐ Farm Equipment ☐ Grader/Scraper ☐ Hand Tools ☐ Milling Equipment
☐ Probing Device ☐ Trencher ☐ Vacuum Equipment ☐ Bulldozer ☐ Unknown/Other
- WORK_PERFORMED**
9. Type of work performed: *(select only one)*
☐ Agriculture ☐ Cable TV ☐ Curb/Sidewalk ☐ Building Construction ☐ Building Demolition
☐ Drainage ☐ Driveway ☐ Electric ☐ Engineering/Surveying ☐ Fencing
☐ Grading ☐ Irrigation ☐ Landscaping ☐ Liquid Pipeline ☐ Milling
☐ Natural Gas ☐ Pole ☐ Public Transit Authority ☐ Railroad Maintenance ☐ Road Work
☐ Sewer (Sanitary/Storm) ☐ Site Development ☐ Steam ☐ Storm Drain/Culvert ☐ Street Light
☐ Telecommunications ☐ Traffic Signal ☐ Traffic Sign ☐ Water ☐ Waterway Improvement
☐ Data not collected ☐ Unknown/Other
- ONE_CALL_NOTIFIED_IND ONE_CALL_TICKET_NUM**
10. Was the One-Call Center notified? ☐ Yes ☐ No If No, skip to question 11
- *10a. If Yes, specify ticket number: /
- ONE_CALL_CENTER_NAME**
- *10b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:
- *10 c. Was work area white lined? ☐ No ☐ Yes ☐ Unknown
WHITE_LINED_IND
- LOCATOR_TYPE**
11. Type of Locator: ☐ Facility Owner ☐ Contract Locator ☐ Unknown/Other
- VISIBLE_MARKS**
12. Were facility locate marks visible in the area of excavation? ☐ No ☐ Yes ☐ Unknown/
- SERVICE_INTERRUPTION**
13. Did the damage cause an interruption in service? ☐ No ☐ Yes ☐ Unknown/Other
- SERVICE_INTERRUPTION_HOURS**
- 11a. If Yes, specify duration of the interruption: / hours
- ROOT_CAUSE_CATEGORY**
14. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*
ROOT_CAUSE_TYPE

Notification Issue

- ☐ No notification made to the One-Call Center/811
- ☐ Excavator dug outside area described on ticket
- ☐ Excavator dug prior to valid start date/time
- ☐ Excavator dug after valid ticket expired
- ☐ Excavator provided incorrect notification information

Excavation Issue

- ☐ Excavator dug prior to verifying marks by test-hole (pothole)
- ☐ Excavator failed to maintain clearance after verifying marks
- ☐ Excavator failed to protect/shore/support facilities
- ☐ Improper backfilling practices
- ☐ Marks faded or not maintained
- ☐ Improper excavation practice not listed above

Locating Issue

Facility not marked due to:

- ☐ Abandoned facility
- ☐ Incorrect facility records/maps
- ☐ Locator error
- ☐ No response from operator/contract locator
- ☐ Incomplete marks at damage location
- ☐ Tracer wire issue
- ☐ Unlocatable Facility

Facility marked inaccurately due to:

- ☐ Abandoned facility
- ☐ Incorrect facility records/maps
- ☐ Locator error
- ☐ Tracer wire issue

Miscellaneous Root Causes

- ☐ Deteriorated facility
- ☐ One Call Center Error
- ☐ Previous damage
- ☐ Root Cause not listed (comment required) ROOT_CAUSE_TYPE_OTHER

G4 - Other Outside Force Damage - *only one sub-cause can be picked from shaded left-hand column

OUTSIDE_FORCE_TYPE

<input type="checkbox"/> Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Accident	
<input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation	VEHICLE_SUBTYPE 1. Vehicle/Equipment operated by: (<i>select only one</i>) <input type="radio"/> Operator <input type="radio"/> Operator's Contractor <input type="radio"/> Third Party If this sub-section is picked, please complete questions 5-11 below
<input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring	OSF_HURRICANE_IND OSF_TROPICAL_STORM_IND OSF_TORNADO_IND 2. Select one or more of the following IF an extreme weather event was a factor: <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other <u>OSF_OTHER_WEATHER_IND</u> OSF_HEAVY_RAINS_IND OSF_OTHER_WEATHER_DETAILS
<input type="checkbox"/> Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation	

<input type="checkbox"/> Electrical Arcing from Other Equipment or Facility	
<input type="checkbox"/> Previous Mechanical Damage NOT Related to Excavation	
<input type="checkbox"/> Intentional Damage	3. Specify: INTENTIONAL_SUBTYPE <input type="radio"/> Vandalism <input type="radio"/> Terrorism <input type="radio"/> Theft of transported commodity <input type="radio"/> Theft of equipment <input type="radio"/> Other INTENTIONAL_DETAILS
<input type="checkbox"/> Other Outside Force Damage	4. Describe: OSF_OTHER_DETAILS

Complete the following if Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation sub-cause is selected.

DRIVER ISSUED CITATION_IND

5. Was the driver of the vehicle or equipment issued one or more citations related to the accident? ☐ Yes ☐ No ☐ Unknown

If 5 is Yes, what was the nature of the citations (select all that apply)

5a. Excessive Speed **CITATION_SPEED_IND**

5b. Reckless Driving **CITATION_RECKLESS_IND**

5c. Driving Under the Influence **CITATION_DUI_IND**

5e. Other, describe: **CITATION_OTHER_IND CITATION_OTHER_DETAIL**

DRIVER IN CONTROL_IND

6. Was the driver under control of the vehicle at the time of the collision? ☐ Yes ☐ No ☐ Unknown

ESTIMATED_SPEED

ESTIMATED_SPEED_UNKNOWN_IND

7. Estimated speed of the vehicle at the time of impact (miles per hour)? _____ or ☐ Unknown

8. Type of vehicle? (select only one) ☐ Motorcycle/ATV ☐ Passenger Car ☐ Small Truck ☐ Bus ☐ Large Truck

VEHICLE TRAVEL FROM

9. Where did the vehicle travel from to hit the pipeline facility? (select only one)

☐ Roadway ☐ Driveway ☐ Parking Lot ☐ Loading Dock ☐ Off-Road

VEHICLE TRAVEL DISTANCE_FT

10. Shortest distance from answer in 9. to the damaged pipeline facility (in feet): . _____

PROTECTIONS INSTALLED_IND

11. At the time of the accident, were protections installed to protect the damaged pipeline facility from vehicular damage? ☐ Yes ☐ No

If 11 is Yes, specify type of protection (select all that apply):

11a. Bollards/Guard Posts **PROTECTION_BOLLARDS_POST_IND**

11b. Barricades – include Jersey barriers and fences in instructions **PROTECTION_BARRICADES_IND**

11c. Guard Rails **PROTECTION_GUARD_RAILS_IND**

11d. Other, describe: **PROTECTION_OTHER_IND PROTECTION_OTHER_DETAIL**

G5 - Material Failure of Pipe or Weld		Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld." *Only one sub-cause can be picked from shaded left-hand column	
1. The sub-cause selected below is based on the following: <i>(select all that apply)</i> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> FIELD_EXAM_IND <input type="checkbox"/> METALLURGICAL_IND <input type="checkbox"/> OTHER_ANALYSIS_IND <input type="checkbox"/> OTHER_ANALYSIS_DETAILS </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> STILL_UNDER_INVEST_IND <input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation <i>(Supplemental Report required)</i> </div>			
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <input type="checkbox"/> FAILURE_TYPE Design-, Construction-, Installation-, or Fabrication-related </div> <div style="border: 1px solid black; padding: 2px;"> <input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field) </div>		2. List contributing factors: <i>(select all that apply)</i> FAILURE_SUBTYPE <input type="checkbox"/> Fatigue- or Vibration-related: FATIGUE_VIBR_RELATED <div style="margin-left: 20px;"> <input type="checkbox"/> Mechanically induced prior to installation (such as during transport of pipe) <input type="checkbox"/> Mechanical Vibration <input type="checkbox"/> Pressure-related <input type="checkbox"/> Thermal <input type="checkbox"/> Other FATIGUE_VIBR_RELATED_OTHER </div> <input type="checkbox"/> Mechanical Stress MECHANICAL_STRESS <input type="checkbox"/> Other OTHER_FACTOR OTHER_FACTOR_DETAILS	
<input type="checkbox"/> Environmental Cracking-related		3. Specify: STRESS_SUBTYPE <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Stress Corrosion Cracking <input type="checkbox"/> Hydrogen Stress Cracking <input type="checkbox"/> Other STRESS_DETAILS </div> <div> <input type="checkbox"/> Sulfide Stress Cracking <input type="checkbox"/> Hard Spot </div> </div>	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected. ADDITIONAL_CRACK_IND ADDITIONAL_DENT_IND, ADDITIONAL_GOUGE_IND, ADDITIONAL_PIPE_BEND_IND, ADDITIONAL_ARC_BURN_IND, IND 4. Additional factors: <i>(select all that apply)</i> <input type="checkbox"/> Dent <input type="checkbox"/> Gouge <input type="checkbox"/> Pipe Bend <input type="checkbox"/> Arc Burn <input type="checkbox"/> Crack <input type="checkbox"/> Lack of Fusion ADDITIONAL_LAMINATION_IND ADDITIONAL_BUCKLE_IND ADDITIONAL_WRINKLE_IND ADDITIONAL_LACK_FUSION_IND <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Lamination <input type="checkbox"/> Buckle <input type="checkbox"/> Wrinkle <input type="checkbox"/> Misalignment <input type="checkbox"/> Burnt Steel </div> <div> <input type="checkbox"/> Other PWF_ADDL_MISALIGNMENT_IND ADDITIONAL_BURNT_STEEL_IND </div> </div> <input type="checkbox"/> Other PWF_ADDITIONAL_OTHER_IND			

G6 - Equipment Failure - *only one sub-cause can be picked from shaded left-hand column

EQ_FAILURE_TYPE

<input type="checkbox"/> Malfunction of Control/Relief Equipment	1. Specify: <i>(select all that apply)</i> <div style="display: flex; justify-content: space-between;"> <div> CONTROL_VALVE_IND COMMUNICATIONS_IND RELIEF_VALVE_IND ESD_SYSTEM_FAILURE_IND OTHER_CONTROL_RELIEF_IND </div> <div> <input type="radio"/> Control Valve <input type="radio"/> Communications <input type="radio"/> Relief Valve <input type="radio"/> ESD System Failure <input type="radio"/> Other _____ </div> <div> INSTRUMENTATION_IND BLOCK_VALVE_IND POWER_FAILURE_IND OTHER_CONTROL_RELIEF_DETAILS </div> <div> SCADA_IND CHECK_VALVE_IND STOPPLE_CONTROL_FITTING_IND </div> </div>
<input type="checkbox"/> Pump or Pump-related Equipment	OTHER_PUMP_IND 2. Specify: <input type="radio"/> Seal/Packing Failure <input type="radio"/> Body Failure <input type="radio"/> Crack in Body <input type="radio"/> Appurtenance Failure <input type="radio"/> Other _____ OTHER_PUMP_DETAILS
<input type="checkbox"/> Threaded Connection/Coupling Failure	OTHER_STRIPPED_IND 3. Specify: <input type="radio"/> Pipe Nipple <input type="radio"/> Valve Threads <input type="radio"/> Mechanical Coupling <input type="radio"/> Threaded Pipe Collar <input type="radio"/> Threaded Fitting <input type="radio"/> Other _____ OTHER_STRIPPED_DETAILS
<input type="checkbox"/> Non-threaded Connection Failure	OTHER_NON_THREADED_IND 4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT pump seal) or Packing <input type="radio"/> Other _____ OTHER_NON_THREADED_DETAILS
<input type="checkbox"/> Defective or Loose Tubing or Fitting	
<input type="checkbox"/> Failure of Equipment Body (except Pump), Tank Plate, or other Material	
<input type="checkbox"/> Other Equipment Failure	5. Describe: _____ FAILURE_DETAILS _____

Complete the following if any Equipment Failure sub-cause is selected.

6. Additional factors that contributed to the equipment failure: *(select all that apply)*

- ☐ Excessive vibration **ADDITIONAL_VIBRATION_IND**
- ☐ Overpressurization **ADDITIONAL_OVERPRESSURE_IND**
- ☐ No support or loss of support **ADDITIONAL_SUPPORT_IND**
- ☐ Manufacturing defect **ADDITIONAL_DEFECT_IND**
- ☐ Loss of electricity **ADDITIONAL_ELECTRICITY_IND**
- ☐ Improper installation **ADDITIONAL_INSTALLATION_IND**
- ☐ Improper maintenance **ADDITIONAL_IMPROPER_MNTNCE_IND**
- ☐ Mismatched items (different manufacturer for tubing and tubing fittings) **ADDITIONAL_MISMATCH_IND**
- ☐ Dissimilar metals **ADDITIONAL_DISSIMILAR_IND**
- ☐ Breakdown of soft goods due to compatibility issues with transported commodity **ADDITIONAL_BREAKDOWN_IND**
- ☐ Valve vault or valve can contributed to the release **ADDITIONAL_VALVE_IND**
- ☐ Alarm/status failure **ADDITIONAL_ALARM_IND**
- ☐ Misalignment **IEF_ADDL_MISALIGNMENT_IND**
- ☐ Thermal stress **ADDITIONAL_THERMAL_IND**
- ☐ Erosion/Abnormal Wear **ADDITIONAL_EROSION_WEAR_IND**
- ☐ Other _____ **EQ_ADDITIONAL_OTHER_IND** **EQ_ADDITIONAL_OTHER_DETAILS**

G7 - Incorrect Operation - *only one **sub-cause** can be picked from shaded left-hand column
OPERATION_TYPE

<input type="checkbox"/> Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage	
<input type="checkbox"/> Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	OVERFLOW_OTHER_IND 1. Specify: <input type="radio"/> Valve misalignment <input type="radio"/> Incorrect reference data/calculation <input type="radio"/> Miscommunication <input type="radio"/> Inadequate monitoring <input type="radio"/> Other: OVERFLOW_OTHER_DETAILS
<input type="checkbox"/> Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure	
<input type="checkbox"/> Pipeline or Equipment Overpressured	
<input type="checkbox"/> Equipment Not Installed Properly	
<input type="checkbox"/> Wrong Equipment Specified or Installed	
<input type="checkbox"/> Other Incorrect Operation	2. Describe: OPERATION_DETAILS

Complete the following if any Incorrect Operation sub-cause is selected.

3. Was this Accident related to: (select all that apply)
- ☐ Inadequate procedure **RELATED_INADEQUATE_PROC_IND**
 - ☐ No procedure established **RELATED_NO_PROC_IND**
 - ☐ Failure to follow procedure **RELATED_FAILURE_FOLLOW_IND**
 - ☐ Other: **RELATED_OTHER_IND** **OPERATION_RELATED_DETAILS**
4. What category type was the activity that caused the Accident: **CATEGORY_TYPE**
- ☐ Construction
 - ☐ Commissioning
 - ☐ Decommissioning
 - ☐ Right-of-Way activities
 - ☐ Routine maintenance
 - ☐ Other maintenance
 - ☐ Normal operating conditions
 - ☐ Non-routine operating conditions (abnormal operations or emergencies)
- OPERATOR_QUALIFICATION_IND**
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? ☐ Yes ☐ No
- 5a. If Yes, were the individuals performing the task(s) qualified for the task(s)? **QUALIFIED_INDIVIDUALS**
- ☐ Yes, they were qualified for the task(s)
 - ☐ No, but they were performing the task(s) under the direction and observation of a qualified individual
 - ☐ No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual

G8 – Other Accident Cause - *only one **sub-cause** can be picked from shaded left-hand column **OTHER_TYPE**

<input type="checkbox"/> Miscellaneous	1. Describe: MISC_DETAILS
<input type="checkbox"/> Unknown	UNKNOWN_SUBTYPE 2. Specify: <input type="radio"/> Investigation complete, cause of Accident unknown. Mandatory comment field: INCIDENT_UNKNOWN_COMMENTS <input type="radio"/> Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART J – COMPLETED INTEGRITY INSPECTIONS

Formerly at multiple locations in Part G

Complete the following if the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld and the "Cause" (from Part G) is:
 Corrosion (any subCause in Part G1); or
 Previous Damage due to Excavation Activity (subCause in Part G3); or
 Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4); or
 Material Failure of Pipe or Weld (any subCause in Part G5)

COLLECTED DATA IND

J1. Have internal inspection tools collected data at the point of the Accident?

☐ Yes ☐ No

J1a. If Yes, for each tool and technology used provide the information below for the most recent and previous tool runs:

AXIAL_MAGNETIC_FLX_LKG_IND

☐ Axial Magnetic Flux Leakage

Most recent run Year: **AXIAL_RECENT_YEAR**

AXIAL_RCNT_PROPUL_METHOD

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

AXIAL_RCNT_ATTUNED_DETECT

Most recent run Attuned to Detect (select only one): ☐ Metal Loss ☐ Hard Spots ☐ Girth Weld Anomalies

☐ Other Describe: **AXIAL_RCNT_ATND_DTCT_DTLS**

AXIAL_RCNT_ATND_DTCT_METAL

If Metal Loss, specify (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: **AXIAL_RCNT_ATT_DT_METAL_DTLS**

Previous run Year: **AXIAL_PREVIOUS_YEAR**

AXIAL_PREV_PROPUL_METHOD

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

AXIAL_PREV_ATTUNED_DETECT

Previous run Attuned to Detect (select only one): ☐ Metal Loss ☐ Hard Spots ☐ Girth Weld Anomalies

☐ Other Describe: **AXIAL_PREV_ATND_DTCT_DTLS**

AXIAL_PREV_ATND_DTCT_METAL

If Metal Loss, specify (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: **AXIAL_PREV_ATT_DT_METAL_DTLS**

CIR_TRN_WAVE_MGN_FLX_LKG_IND

☐ Circumferential/Transverse Wave Magnetic Flux Leakage

Most recent run Year: **CIRC_WAVE_RECENT_YEAR**

CIRC_WV_RCNT_PROPUL_METHOD

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

CIRC_WV_RCNT_RESOLUTION

Most recent run Resolution (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: **CIRC_WV_RCNT_RESOLUTION_DTLS**

Previous run Year: **CIRC_WV_PREVIOUS_YEAR**

CIRC_WV_PREV_PROPUL_METHOD

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

CIRC_WV_PREV_RESOLUTION

Previous run Resolution (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: **CIRC_WV_PREV_RESOLUTION_DTLS**

ULTRASONIC_IND

☐ Ultrasonic

Most recent run Year: **ULTRASONIC_RECENT_YEAR**

ULTRASONIC_RCNT_PROPUL_METHOD

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

ULTRASONIC_RCNT_ATTUNED

Most recent run Attuned to (select only one) ☐ Wall Measurement ☐ Crack

UTRA_RCNT_ATT_METL_RESOLUTION

If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one):

☐ Standard Resolution ☐ Other Describe: **UTRA_RCNT_ATT_METL_RES_DTLS**

Previous run Year: **ULTR_PREVIOUS_YEAR**

ULTRA_PREV_PROPUL_METHOD

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

ULTRA_PREV_ATTUNED

Most recent run Attuned to (select only one) ☐ Wall Measurement ☐ Crack

UTRA_PREV_ATT_METL_RESOLUTION

If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one):

☐ Standard Resolution ☐ Other Describe: **UTRA_PREV_ATT_METL_RES_DTLS**

GEOMETRY_DEFORMATION_IND

☐ Geometry/Deformation

Most recent run Year: **GEOMETRY_RECENT_YEAR**

GEOMETRY_RCNT_PROPUL_METHOD

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Most recent run Resolution (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: **GEOMETRY_RCNT_RESOLUTION_DTLS**

GEOMETRT_RCNT_MEASUR_CUPS

Most recent run Measurement Cups (select only one): ☐ Inside ILI Cups ☐ No Cups

Previous run Year: **GEOMETRY_PREVIOUS_YEAR**

GEOMETRY_PREV_PROPUL_METHOD

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Previous run Resolution (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: **GEOMETRY_PREV_RESOLUTION_DTLS**

GEOMETRT_PREV_MEASUR_CUPS

Previous run Measurement Cups (select only one): ☐ Inside ILI Cups ☐ No Cups

- EMAT_IND**
☐ Electromagnetic Acoustic Transducer (EMAT)
 Most recent run Year: **EMAT_RECENT_YEAR** **EMAT_RCNT_PROPUL_METHOD**
 Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered
 Previous run Year: **EMAT_PREVIOUS_YEAR** **EMAT_PREV_PROPUL_METHOD**
 Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered
- CPCM_IND**
☐ Cathodic Protection Current Measurement (CPCM)
 Most recent run Year: **CPCM_RECENT_YEAR** **CPCM_RCNT_PROPUL_METHOD**
 Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered
 Previous run Year: **CPCM_PREVIOUS_YEAR** **CPCM_PREV_PROPUL_METHOD**
 Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered
- OTHER_TOOL_TECH_IND**
☐ Other, specify tool: **OTHER_TOOL**
 Most recent run Year: **OTHER_RECENT_YEAR** **OTHER_RCNT_PROPUL_METHOD**
 Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered
 Previous run Year: **OTHER_PREVIOUS_YEAR** **OTHER_PREV_PROPUL_METHOD**
 Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Answer J1.b only when the cause is:

Previous Damage due to Excavation Activity (subCause in Part G3); or

Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4)

INSP_COMPL_BEFORE_DAMAGE_IND

J1b. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? ☐ Yes ☐ No

HAS_HYDRTST_CONDUCT_BEFORE_IND

J2. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
 (initial post construction pressure test is NOT reported here)

HYDRTST_MOST_RCNT_YEAR **HYDRTST_MOST_RCNT_PRESSURE**
☐ Yes ⇒ Most recent year tested: / / / / / Test pressure (psig): / / / / /
☐ No

DIRECT_ASMNT_CONDUCTED

J3. Has Direct Assessment been conducted on the pipeline segment?

☐ Yes, and an investigative dig was conducted at the point of the Accident ⇒ Most recent year conducted: / / / / / **DIRECT_ASMNT_AT_PNT_ACCDNT_YR**
☐ Yes, but the point of the Accident was not identified as a dig site ⇒ Most recent year conducted: / / / / /
☐ No **DIRECT_ASMNT_PNT_NOT_IDNTF_YR**

If J3 is Yes, J3a. For each type, indicate the year of the most recent assessment:

External Corrosion Direct Assessment (ECDA)

Other, specify type: **ASMNT_OTHER_TYPE**

 / / / / /

 / / / / /

ASMNT_ECDA_RCNT_YEAR, **ASMNT_ECDA_RCNT_IND**

ASMNT_OTHER_RCNT_YEAR, **ASMNT_OTHER_RCNT_IND**

J4. Has one or more non-destructive examination been conducted prior to the Accident at the point of the Accident since January 1, 2002?

☐ Yes ☐ No **NON_DESTRUCTIVE_EXAM_IND**

J4a. If Yes, for each examination conducted, select type of non-destructive examination and indicate most recent year the examination was conducted:

☐ Radiography / / / / / **EXM_RADIOGRAPHY_RCNT_YEAR**, **EXM_RADIOGRAPHY_RCNT_IND**
☐ Guided Wave Ultrasonic / / / / / **EXM_WAVE_ULTRASONIC_RCNT_YEAR**, **EXM_WAVE_ULTRASONIC_RCNT_IND**
☐ Handheld Ultrasonic Tool / / / / / **EXM_HANDL_ULTRASONIC_RCNT_YEAR**, **EXM_HANDL_ULTRASONIC_RCNT_IND**
☐ Wet Magnetic Particle Test / / / / / **EXM_WET_MGNT_PARTCL_RCNT_YEAR**, **EXM_WET_MGNT_PARTCL_RCNT_IND**
☐ Dry Magnetic Particle Test / / / / / **EXM_DRY_MGNT_PARTCL_RCNT_YEAR**, **EXM_DRY_MGNT_PARTCL_RCNT_IND**
☐ Other, specify type **EXM_OTHER_TYPE** / / / / / **EXM_OTHER_RCNT_YEAR** **EXM_OTHER_RCNT_IND**

PART K – CONTRIBUTING FACTORS

The Apparent Cause of the accident is contained in Part G. Do not report the Apparent Cause again in this Part K. If Contributing Factors were identified during a root cause analysis, select all that apply below and explain each in the Narrative:

External Corrosion

- ☐ External Corrosion, Galvanic **EXTRNL_COR_GALVANIC_IND**
☐ External Corrosion, Atmospheric **EXTRNL_COR_ATMOSPHERIC_IND**
☐ External Corrosion, Stray Current Induced **EXTRNL_COR_STRAY_CURRENT_IND**
☐ External Corrosion, Microbiologically Induced **EXTRNL_COR_MICROBIOLOGIC_IND**
☐ External Corrosion, Selective Seam **EXTRNL_COR_SELECTIVE_SEAM_IND**

Internal Corrosion

- ☐ Internal Corrosion, Corrosive Commodity **INTRNL_COR_CORROSIVE_CMDTY_IND**
☐ Internal Corrosion, Water drop-out/Acid **INTRNL_COR_WTR_DRPOUT_ACID_IND**
☐ Internal Corrosion, Microbiological **INTRNL_COR_MICROBIOLOGIC_IND**
☐ Internal Corrosion, Erosion **INTRNL_COR_EROSION_IND**

Pipe/Weld Failure

- ☐ Design-related **PWF_DESIGN_IND**
☐ Construction-related **PWF_CONSTRUCTION_IND**
☐ Installation-related **PWF_INSTALLATION_IND**
☐ Fabrication-related **PWF_FABRICATION_IND**
☐ Original Manufacturing-related **PWF_MANUFACTURING_IND**
☐ Environmental Cracking-related, Stress Corrosion Cracking **PWF_ENV_STRESS_CORROSION_IND**
☐ Environmental Cracking-related, Sulfide Stress Cracking **PWF_ENV_SULFIDE_STRESS_IND**
☐ Environmental Cracking-related, Hydrogen Stress Cracking **PWF_ENV_HYDROGEN_STRESS_IND**
☐ Environmental Cracking-related, Hard Spot **PWF_ENV_HARD_SPOT_IND**

<p>Natural Forces NF_EARTH_MOVEMENT_IND</p> <p><input type="checkbox"/> Earth Movement, NOT due to Heavy Rains/Floods</p> <p><input type="checkbox"/> Heavy Rains/Floods NF_HEAVY_RAINS_IND</p> <p><input type="checkbox"/> Lightning NF_LIGHTNING_IND</p> <p><input type="checkbox"/> Temperature NF_TEMPERATURE_IND</p> <p><input type="checkbox"/> High Winds NF_HIGH_WINDS_IND</p> <p><input type="checkbox"/> Tree/Vegetation Root NF_VEGETATION_ROOT_IND</p> <p>Excavation Damage EXCVTN_DMG_OPERATOR_IND</p> <p><input type="checkbox"/> Excavation Damage by Operator (First Party) EXCVTN_DMG_OP_CONTRACTOR_IND</p> <p><input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party) EXCVTN_DMG_THIRD_PARTY_IND</p> <p><input type="checkbox"/> Excavation Damage by Third Party EXCVTN_DMG_PREVIOUS_DAMAGE_IND</p> <p><input type="checkbox"/> Previous Damage due to Excavation Activity</p> <p>Other Outside Force OSF_NEARBY_INDUSTRIAL_IND</p> <p><input type="checkbox"/> Nearby Industrial, Man-made, or Other Fire/Explosion</p> <p><input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation OSF_VEHICLE_IND</p> <p><input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Adrift Maritime Equipment OSF_BOAT_IND</p> <p><input type="checkbox"/> Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation OSF_OTHER_MARITIME_IND</p> <p><input type="checkbox"/> Electrical Arcing from Other Equipment or Facility OSF_ELECTRICAL_ARCING_IND</p> <p><input type="checkbox"/> Previous Mechanical Damage NOT Related to Excavation OSF_PREVIOUS_MECHANICAL_IND</p> <p><input type="checkbox"/> Intentional Damage OSF_INTENTIONAL_IND</p>	<p>Equipment Failure EQF_CONTROL_RELEASE_IND</p> <p><input type="checkbox"/> Malfunction of Control/Relief Equipment EQF_PUMP_EQUIPMENT_IND</p> <p><input type="checkbox"/> Pump or Pump-related Equipment EQF_THREADED_COUPLING_IND</p> <p><input type="checkbox"/> Threaded Connection/Coupling Failure EQF_NON_THREADED_IND</p> <p><input type="checkbox"/> Non-threaded Connection Failure EQF_DEFECTIVE_FITTING_IND</p> <p><input type="checkbox"/> Defective or Loose Tubing or Fitting</p> <p><input type="checkbox"/> Failure of Equipment Body (except Compressor), Vessel Plate, or other Material EQF_EQUIPMENT_BODY_IND</p> <p>Incorrect Operation IO_DAMAGE_BY_OPERATOR_IND</p> <p><input type="checkbox"/> Damage by Operator or Operator's Contractor NOT Excavation and NOT Vehicle/Equipment Damage IO_TANK_VESSEL_IND</p> <p><input type="checkbox"/> Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow IO_VALVE_POSITION_IND</p> <p><input type="checkbox"/> Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure IO_EQUIPMENT_OVERPRESSURE_IND</p> <p><input type="checkbox"/> Pipeline or Equipment Overpressured IO_NOT_INSTALLED_PROPERLY_IND</p> <p><input type="checkbox"/> Equipment Not Installed Properly IO_WRONG_EQUIPMENT_IND</p> <p><input type="checkbox"/> Wrong Equipment Specified or Installed</p> <p><input type="checkbox"/> Inadequate Procedure IO_INADEQUATE_PROCEDURE_IND</p> <p><input type="checkbox"/> No procedure established IO_NO_PROCEDURE_IND</p> <p><input type="checkbox"/> Failure to follow procedures IO_FOLLOW_PROCEDURE_IND</p>
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PART H – NARRATIVE DESCRIPTION OF THE ACCIDENT	
<p style="color: red; margin: 0;">NARRATIVE</p>	
PART I – PREPARER AND AUTHORIZED SIGNATURE	
<p style="color: red; margin: 0;">PREPARER_NAME Preparer's Name (type or print)</p> <p style="color: red; margin: 0;">PREPARER_TITLE Preparer's Title (type or print)</p> <p style="color: red; margin: 0;">PREPARER_EMAIL Preparer's E-mail Address</p> <p style="margin: 0;">Local Contact Name: optional LOCAL_CONTACT_NAME Local Contact Email: optional LOCAL_CONTACT_EMAIL Local Contact Phone: optional LOCAL_CONTACT_TELEPHONE</p> <p style="color: red; margin: 0;">AUTHORIZER_NAME <u>Authorized Signer's Name</u></p> <p style="color: red; margin: 0;">AUTHORIZER_TITLE <u>Authorized Signer's Title</u></p>	<p style="color: red; margin: 0;">PREPARER_TELEPHONE <u>Preparer's Telephone Number</u></p> <p style="color: red; margin: 0;">PREPARER_FAX <u>Preparer's Facsimile Number</u></p> <p style="color: red; margin: 0;">AUTHORIZER_TELEPHONE <u>Authorized Signer Telephone Number</u></p> <p style="color: red; margin: 0;">AUTHORIZER_EMAIL <u>Authorized Signer's E-mail Address</u></p>

Note: Field names not on the form are as following:

Field Name	Field Name Description
DATAFILE_AS_OF	<i>Data as of date</i>
SIGNIFICANT	<i>Identify if record meets the significant criteria or not: If there was fatality, injury, or total property damage \$50K or more in 1984 dollars, then SIGNIFICANT='YES', else SIGNIFICANT='NO'.</i>
IYEAR	<i>Year accident occurred, derived from accident date</i>
NET_LOSS_BBLs	<i>UNINTENTIONAL_RELEASE_BBLs – RECOVERED_BBLs</i>
EST_COST_OPER_PAID_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_GAS_RELEASED_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_PROP_DAMAGE_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_EMERGENCY_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_ENVIRONMENTAL_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_OTHER_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
TOTAL_COST_IN84	<i>Converted Property Damage to Year 1984 dollars</i>
TOTAL_COST_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
MAP_SEVEN_CAUSE	<i>Cause by PHMSA for 20 year accident trending</i>
MAP_SEVEN_SUBCAUSE	<i>SubCause by PHMSA for 20 year accident trending</i>
MAP_EIGHT_CAUSE	<i>Cause by PHMSA for 20 year accident trending</i>
MAP_EIGHT_SUBCAUSE	<i>SubCause by PHMSA for 20 year accident trending</i>
SPILL_TYPE_CATEGORY	<i>Spill type category by PHMSA for accident trending; If there was fatality, injury, fire, explosion, water contamination, total property damage > \$50K, or unintentional loss >= 5bbls, then SPILL_TYPE_CATEGORY='LARGE', else SPILL_TYPE_CATEGORY='SMALL'.</i>
SERIOUS	<i>Identify if record meets the SERIOUS criteria or not: If there was fatality or injury then SERIOUS = 'YES' else SERIOUS = 'NO'.</i>
IPE	<i>Impacting People or the Environment (IPE) - when commodity (A8) is crude oil, refined petroleum products, of biofuel, if either criterion 1 or 2 below is met, the accident counts as IPE : 1. Regardless of Location of Accident (B10): Fatality (A10) greater than</i>

	<i>zero; or Injury requiring in-patient hospitalization (A11) greater than zero; or Ignition (A22) = Yes; or Explosion (A22d) = Yes; or Evacuation (A25) greater than zero; or Wildlife impact (D1) = Yes; or Water contamination (D5a) = Ocean/Seawater, Groundwater, or Drinking water; or Public/Non-Operator Private Property Damage (D8a) greater than zero 2. For Location of Accident (B10) not "TOTALLY CONTAINED ON OPERATOR CONTROLLED PROPERTY": Unintentional Release Volume (A7) greater than or equal to 5 gallons AND HCA (D7) = Yes; or Unintentional Release Volume (A7) greater than or equal to 5 barrels AND HCA (D7) = No; or Water contamination (D5a) = Surface; or Soil contamination (D2) = Yes</i>
IA_IPE	<i>Integrity Assessment Target - accidents Impacting People or the Environment (IPE) and one of these causes: Corrosion, Pipeline/Weld Material Failure, Failure of Previously Damage Pipe - caused by Excavation Damage or Other Outside Force Damage.</i>
OM_IPE	<i>Operation & Maintenance Target - accidents Impacting People or the Environment (IPE) and one of these causes: Equipment Failure, Incorrect Operation, 1st & 2nd Party Excavation Damage, 3rd Party Excavation Damage with Root Cause = Locating Practices Not Sufficient.</i>