

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed \$100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.

OMB NO: 2137-0047

EXPIRATION DATE 3/31/2024



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

ACCIDENT REPORT – HAZARDOUS LIQUID AND CARBON DIOXIDE PIPELINE SYSTEMS

Report Date **REPORT_RECEIVED_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**

COMMODITY_RELEASED_TYPE

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

☐ 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

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

☐ Ethanol Blend ➡ % Ethanol: / / / / / **BLEND_DETAILS**

☐ 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="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A10b. Contractor employees NUM_CONTR_FATALITIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A10c. Non-Operator emergency responders NUM_ER_FATALITIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A10d. Workers working on the right-of-way, but NOT associated with this Operator NUM_WORKER_FATALITIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A10e. General public NUM_GP_FATALITIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A10f. Total fatalities (sum of above) <i>calculated</i> FATAL</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:</p> <p>A11a. Operator employees NUM_EMP_INJURIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A11b. Contractor employees NUM_CONTR_INJURIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A11c. Non-Operator emergency responders NUM_ER_INJURIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A11d. Workers working on the right-of-way, but NOT associated with this Operator NUM_WORKER_INJURIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A11e. General public NUM_GP_INJURIES <div style="border-bottom: 1px solid black; width: 100px; margin: 0 auto;"></div></p> <p>A11f. Total injuries (sum of above) <i>calculated</i> INJURE</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**

Hour Month Day Year **STILL_SHUTDOWN_IND**
☐ 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

CONFIRMED_DISCOVERY_DATETIME

A20. Local time of confirmed discovery
Hour Month Day Year

NRC_RPT_DATETIME

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_NUM

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

A21c. Additional NRC Report numbers submitted by the operator: **ADDITIONAL_NRC_REPORT_NUMBERS**

IGNITE_IND

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

PART C – FACILITY INFORMATION	
<p>C1. Is the pipeline or facility: PIPE_FACILITY_TYPE</p> <p><input type="checkbox"/> Interstate</p> <p><input type="checkbox"/> Intrastate</p> <p>C2. reserved</p>	
<p>ITEM_INVOLVED</p> <p>C3. Item involved in Accident: <i>(select only one)</i> PIPE_TYPE</p> <p><input type="checkbox"/> Pipe ⇨ Specify: <input type="radio"/> Pipe Body <input type="radio"/> Pipe Seam</p> <p style="margin-left: 150px;">PUDDLE_WELD_IND</p> <p style="margin-left: 40px;">If Pipe Body: Was this a puddle/spot weld? <input type="radio"/> Yes <input type="radio"/> No</p> <p style="margin-left: 40px;">PIPE_DIAMETER</p> <p>C3a. Nominal Pipe Size: <u> / / / / / </u></p> <p style="margin-left: 150px;">PIPE_WALL_THICKNESS</p> <p>C3b Wall thickness (in): <u> / / / / / </u></p> <p>C3c. SMYS (Specified Minimum Yield Strength) of pipe (psi): <u> / / / / / </u> PIPE_SMYS</p> <p>C3d. Pipe specification: PIPE_SPECIFICATION OR <input type="radio"/> Unknown</p> <p style="margin-left: 40px;">PIPE_SEAM_TYPE</p> <p>C3e. Pipe Seam ⇨ Specify: <input type="radio"/> ERW - High Frequency <input type="radio"/> Single SAW <input type="radio"/> Flash Welded</p> <p><input type="radio"/> ERW - Low Frequency <input type="radio"/> DSAW <input type="radio"/> Continuous Welded <input type="radio"/> Longitudinal ERW – Unknown Frequency</p> <p><input type="radio"/> Furnace Butt Welded <input type="radio"/> Spiral Welded <input type="radio"/> Lap Welded <input type="radio"/> Seamless</p> <p><input type="radio"/> Other, describe: PIPE_SEAM_DETAILS</p> <p>C3f. Pipe manufacturer: PIPE_MANUFACTURER OR <input type="radio"/> Unknown</p> <p style="margin-left: 40px;">PIPE_COATING_TYPE</p> <p>C3g formerly C3.h Pipeline coating type at point of Accident</p> <p style="margin-left: 40px;">⇨ Specify: <input type="radio"/> Fusion Bonded Epoxy (FBE) <input type="radio"/> Coal Tar <input type="radio"/> Asphalt <input type="radio"/> Polyolefin <input type="radio"/> Extruded Polyethylene</p> <p><input type="radio"/> Epoxy other than FBE <input type="radio"/> Cold Applied Tape <input type="radio"/> Paint <input type="radio"/> Composite <input type="radio"/> None <input type="radio"/> Other, describe: PIPE_COATING_DETAILS</p> <p style="margin-left: 40px;">COATING_APPLIED_IND</p> <p>C3h. Coating field applied? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown</p> <p style="margin-left: 40px;">WELD_SUBTYPE</p> <p><input type="checkbox"/> Weld, including heat-affected zone ⇨ Specify: <input type="radio"/> Pipe Girth Weld <input type="radio"/> Other Butt Weld <input type="radio"/> Fillet Weld</p> <p style="margin-left: 40px;">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? <input type="radio"/> Yes <input type="radio"/> No DIFFERENT_GIRTH_WELD_IND</p> <p style="margin-left: 40px;">If Yes, enter the different value(s) below:</p> <p style="margin-left: 40px;">C3i. Wall thickness (in): <u> / / / / / </u> DIFF_GIRTH_WELD_WALL_THICKNESS</p> <p style="margin-left: 40px;">C3j. SMYS (Specified Minimum Yield Strength) of pipe (psi): <u> / / / / / </u> DIFF_GIRTH_WELD_SMYS</p> <p style="margin-left: 40px;">C3k. Pipe specification: DIFF_GIRTH_WELD_SPECIFICATION OR <input type="radio"/> Unknown</p> <p style="margin-left: 40px;">DIFF_GIRTH_WELD_SEAM_TYPE</p> <p style="margin-left: 40px;">C3l. Pipe Seam ⇨ Specify: <input type="radio"/> ERW - High Frequency <input type="radio"/> Single SAW <input type="radio"/> Flash Welded</p> <p><input type="radio"/> ERW - Low Frequency <input type="radio"/> DSAW <input type="radio"/> Continuous Welded <input type="radio"/> ERW – Unknown Frequency</p> <p><input type="radio"/> Furnace Butt Welded <input type="radio"/> Spiral Welded <input type="radio"/> Lap Welded <input type="radio"/> Seamless</p> <p><input type="radio"/> Other, describe: DIFF_GIRTH_WELD_SEAM_DETAIL</p> <p style="margin-left: 40px;">C3m. Pipe manufacturer: DIFF_GIRTH_WELD_MANUFACTURER OR <input type="radio"/> Unknown</p> <p style="margin-left: 40px;">DIFF_GIRTH_WELD_COATING_TYPE</p> <p>C3n. Pipeline coating type at point of Accident</p> <p style="margin-left: 40px;">⇨ Specify: <input type="radio"/> Fusion Bonded Epoxy (FBE) <input type="radio"/> Coal Tar <input type="radio"/> Asphalt <input type="radio"/> Polyolefin <input type="radio"/> Extruded Polyethylene</p> <p><input type="radio"/> Epoxy other than FBE <input type="radio"/> Cold Applied Tape <input type="radio"/> Paint <input type="radio"/> Composite <input type="radio"/> None <input type="radio"/> Other, describe: DIFF_GIRTH_WELD_COATING_DETAIL</p> <p style="margin-left: 40px;">DIFF_GIRTH_WELD_CTNG_APPLD_IND</p> <p>C3o. Coating field applied? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown</p> <p style="margin-left: 40px;">VALVE_MAINLINE_TYPE VALVE_MAINLINE_DETAILS</p> <p><input type="checkbox"/> Valve <input type="radio"/> Mainline ⇨ Specify: <input type="radio"/> Butterfly <input type="radio"/> Check <input type="radio"/> Gate <input type="radio"/> Plug <input type="radio"/> Ball <input type="radio"/> Globe <input type="radio"/> Other, describe: _____</p> <p style="margin-left: 40px;">VALVE_TYPE VALVE_MANUFACTURER</p> <p style="margin-left: 40px;">C3p. formerly C3.i Mainline valve manufacturer: _____ OR <input type="radio"/> Unknown</p> <p style="margin-left: 40px;"><input type="radio"/> Relief Valve – including thermal and pressure. Report tank relief valves under the Tank/Vessel, Relief Valve</p> <p style="margin-left: 40px;"><input type="radio"/> Auxiliary or Other Valve – report auxiliary valves on tanks under Tank/Vessel, Appurtenance</p> <p><input type="checkbox"/> Pump, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.</p> <p style="margin-left: 40px;">C3q. Type of pump PUMP_TYPE</p> <p style="margin-left: 60px;"><input type="checkbox"/> Positive displacement</p> <p style="margin-left: 60px;"><input type="checkbox"/> Centrifugal</p> <p style="margin-left: 60px;"><input type="checkbox"/> Gear</p> <p style="margin-left: 60px;"><input type="checkbox"/> Other (specify): PUMP_TYPE_DETAILS</p> <p style="margin-left: 40px;">C3r. Type of service PUMP_SERVICE_TYPE</p> <p style="margin-left: 60px;"><input type="checkbox"/> Mainline</p> <p style="margin-left: 60px;"><input type="checkbox"/> Injection</p> <p style="margin-left: 60px;"><input type="checkbox"/> Truck rack (if on terminal side of truck rack canopy)</p> <p style="margin-left: 60px;"><input type="checkbox"/> Other (specify): PUMP_SERVICE_TYPE_DETAILS</p> <p><input type="checkbox"/> Meter/Prover, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.</p> <p><input type="checkbox"/> Scraper/Pig Trap, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.</p> <p><input type="checkbox"/> Sump, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.</p>	

- ☐ 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**
- ☐ Stainless steel
- ☐ Carbon steel
- ☐ Copper
- ☐ Other
- C3t. Type of tubing **TUBING_TYPE**
- ☐ Rigid
- ☐ 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
- TANK_TYPE** ☐ Relief Valve ☐ Other, describe: **TANK_VESSEL_DETAILS**
- C3v. formerly part of C2. Tank Type ☐ Atmospheric ☐ Pressurized
- If C3v. = Pressurized: **TANK_MAX_PRESSURE**
- C3v1. Tank Maximum Operating 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** **API_STD_OUT_OF_SERVICE_YEAR** **API_STD_OUT_OF_SRVC_NONE_IND**
- 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 / / / / / OR ☐ None
- C3v8. formerly G1, 14.b API Std 653 In-Service Inspection / / / / / OR ☐ No In-Service Inspection completed
- API_STD_IN_SERVICE_YEAR** **API_STD_NO_IN_SERVICE_IND**
- ☐ Other _____ mandatory text field **ITEM_INVOLVED_DETAILS**
- C4. Year item involved in Accident was installed: / / / / / OR ☐ Unknown
- INSTALLATION_YEAR**
- C4a. Year item involved in Accident was manufactured: / / / / / OR ☐ Unknown
- MANUFACTURED_YEAR**

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

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

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

- PUNCTURE_AXIAL** **PUNCTURE_CIRCUM**
- ☐ Mechanical Puncture ⇒ Approx. size: / / / / / in. (axial) by / / / / / in. (circumferential)
- ☐ Leak ⇒ Select Type: ☐ Pinhole ☐ Crack ☐ Connection Failure ☐ Seal or Packing ☐ Other **LEAK_TYPE_OTHER**
- ☐ Rupture ⇒ Select Orientation: ☐ Circumferential ☐ Longitudinal ☐ Other **RUPTURE_DETAILS**
- RUPTURE_ORIENT** **RUPTURE_WIDTH**
- Approx. size: / / / / / in. (widest opening) by / / / / / in. (length circumferentially or axially)
- RUPTURE_LENGTH**
- ☐ Overfill or Overflow
- ☐ Other ⇒ Describe: **RELEASE_TYPE_DETAILS**

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) **REMEDIATION_IND**

D4a. If Yes, specify all that apply: **GROUNDWATER** **VEGETATION_REMED_IND**

SURFACE_WATER_REMED_IND ☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife **WILDLIFE_REMED_IND**

D5. Water contamination: ☐ Yes ⇒ (Complete 5a – 5c below) ☐ No

WATER_CONTAM_IND

D5a. Specify all that apply:

- ☐ Ocean/Seawater **OCEAN_SEAWATER_IND**

☐ Surface **SURFACE_CONTAM_IND**

☐ Groundwater **GROUNDWATER_CONTAM_IND**

☐ Drinking water **DRINKING_WATER_CONTAM_IND**

PUBLIC_WATER_CONTAM_IND

☐ Drinking water ➡ (Select one or both) ☐ Private Well ☐ Public Water Intake

D5b. Estimated amount released in or reaching water: **AMOUNT_RELEASED** / / / / / / / / / / Barrels

D5c. Name of body of water, if commonly known: **REL_WATER_NAME**

D6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program? ☐ Yes ☐ No **COULD_BE_HCA**

D7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? ☐ Yes ☐ No

COMMODITY_REACHED_HCA

D7a. If Yes, specify HCA type(s): (select all that apply)

☐ Commercially Navigable Waterway **COMMERCIALLY_NAV_IND**

Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?

☐ Yes ☐ No **COMMERCIALLY_NAV_YES_NO**

☐ High Population Area **HIGH_POP_IND**

Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?

☐ Yes ☐ No **HIGH_POP_YES_NO**

☐ Other Populated Area **OTHER_POP_IND**

Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?

☐ Yes ☐ No **OTHER_POP_YES_NO**

☐ Unusually Sensitive Area (USA) – Drinking Water **USA_DRINKING_IND**

Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?

☐ Yes ☐ No **USA_DRINKING_YES_NO**

☐ Unusually Sensitive Area (USA) – Ecological **USA_ECOLOGICAL_IND**

Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?

☐ Yes ☐ No **USA_ECOLOGICAL_YES_NO**

D8. Estimated Property Damage:

D8a. Estimated cost of public and non-Operator private property damage \$ / / / / / / / / / / **EST_COST_OPER_PAID**

D8b. Estimated cost of commodity lost \$ / / / / / / / / / / **EST_COST_GAS_RELEASED**

D8c. Estimated cost of Operator's property damage & repairs \$ / / / / / / / / / / **EST_COST_PROP_DAMAGE**

D8d. Estimated cost of emergency response \$ / / / / / / / / / / **EST_COST_EMERGENCY**

D8e. Estimated cost of environmental remediation \$ / / / / / / / / / / **EST_COST_ENVIRONMENTAL**

D8f. Estimated other costs \$ / / / / / / / / / / **EST_COST_OTHER**

Describe **EST_COST_OTHER_DETAILS**

D8g. Total estimated property damage (sum of above) **PRPTY** \$ calculated

Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. **If a person is included in A11, do not include them in D9.**

NUM_PERSONS_HOSP_NOT_OVNGHT

D9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:

If a person is included in D9, do not include them in D10.

NUM_INJURED_TREATED_BY_EMT

D10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:

Buildings Affected

NUM_RESIDENT_BUILDING_AFFCTD

D11. Number of residential buildings affected (evacuated or required repair):

NUM_BUSINESS_BUILDING_AFFCTD

D12. Number of business buildings affected (evacuated or required repair):

PART E – ADDITIONAL OPERATING INFORMATION

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. **MOP_PSIG**

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

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

- ☐ 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

E5. formerly E5.c Answer E5 only when both A23a and A23d are Valve Closure
Length of segment initially isolated between valves (ft): / / / / **LENGTH_SEGMENT_ISOLATED**

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

- ☐ 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_RESTRICTIONS_IND**
- ☐ Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.) **EXTRA_THICK_WALL_IND**
- ☐ Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
- ☐ 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 **EXCESSIVE_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? ☐ Yes ☐ No **SCADA_DETECTION_IND**

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? ☐ Yes ☐ No **SCADA_CONF_IND**

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? ☐ Yes ☐ No **CPM_DETECTION_IND**

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? ☐ Yes ☐ No **CPM_CONF_IND**

INVESTIGATION_STATUS

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)*

☐ 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_DETAILS**

INVEST_OTHER_IND

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="padding-left: 40px;">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="padding-left: 40px;">F2b. Specify how many failed: <u> </u> / <u> </u> / <u> </u> NUM_CONTRACTORS_FAILED</p>

PART G – APPARENT CAUSE	<i>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).</i>
G1 - Corrosion Failure – *only one sub-cause can be picked from shaded left-hand column	
<div style="display: flex; justify-content: space-around;"> CAUSE, CAUSE_DETAILS </div>	
<div style="display: flex; justify-content: space-between;"> INTERNAL EXTERNAL </div> <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: <i>(select all that apply)</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> GALVANIC_ <input type="radio"/> Galvanic <input type="radio"/> Other OTHER_CORROSION_IND, </div> <div style="width: 20%;"> ATMOSPHERE_ <input type="radio"/> Atmospheric <input type="radio"/> Other CORROSION_TYPE_DETAILS </div> <div style="width: 20%;"> STRAY_CURRENT_ <input type="radio"/> Stray Current <input type="radio"/> Other CORROSION_TYPE_DETAILS </div> <div style="width: 20%;"> MICROBIOLOGICAL_ <input type="radio"/> Microbiological <input type="radio"/> Other CORROSION_TYPE_DETAILS </div> <div style="width: 20%;"> SELECTIVE_SEAM_ <input type="radio"/> Selective Seam <input type="radio"/> Other CORROSION_TYPE_DETAILS </div> </div> <p style="text-align: center; color: red;">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: <i>(select all that apply)</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> FIELD_EXAM_BASIS_IND <input type="radio"/> Field examination <input type="radio"/> Other OTHER_BASIS_IND, </div> <div style="width: 50%;"> METALLURGICAL_BASIS_IND <input type="radio"/> Determined by metallurgical analysis <input type="radio"/> Other CORROSION_BASIS_DETAILS </div> </div> <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="padding-left: 40px;"><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="padding-left: 40px;"><input type="radio"/> No SHIELDING_EVIDENT</p> <p>4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?</p> <p style="padding-left: 40px;"><input type="radio"/> Yes <input type="radio"/> No</p> <p style="text-align: center; color: red;">CATHODIC_SURVEY_TYPE,</p> <p>4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident? <i>(select all that apply)</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> 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 </div> <div style="width: 50%;"> 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 </div> </div> <p style="padding-left: 40px;">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="padding-left: 40px;">Describe other CP survey OTHER_CP_SURVEY_DETAILS OTHER_CP_SURVEY_YEAR</p> <p><input type="radio"/> No</p> <p style="text-align: center; color: red;">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="text-align: center; color: red;">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	<p>6. Results of visual examination: INT_VISUAL_EXAM_RESULTS <input type="radio"/> Localized Pitting <input type="radio"/> General Corrosion <input type="radio"/> Not cut open <input type="radio"/> Other INT_VISUAL_EXAM_DETAILS</p> <p>7. Cause of corrosion: (select all that apply) INT_CORROSIVE INT_WATER INT_MICROBIOLOGICAL <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_OTHER_CORROSION_IND, INT_CORROSION_TYPE_DETAILS INT_EROSION_IND</p> <p>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</p> <p>9. Location of corrosion: (select all that apply) INT_LOW_POINT INT_ELBOW INT_DEAD_LEG <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</p> <p>10. Was the commodity treated with corrosion inhibitors or biocides? <input type="radio"/> Yes <input type="radio"/> No CORROSION_LINING</p> <p>11. Was the interior coated or lined with protective coating? <input type="radio"/> Yes <input type="radio"/> No CLEANING_DEWATERING</p> <p>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</p> <p>13. Were corrosion coupons routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No</p>
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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	<p>1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide EARTH_SUBTYPE <input type="radio"/> Other _____</p>
<input type="checkbox"/> Heavy Rains/Floods	<p>2. Specify: HEAVY_RAINS_SUBTYPE <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other _____</p>
<input type="checkbox"/> Lightning	<p>3. Specify: LIGHTNING_SUBTYPE <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires</p>
<input type="checkbox"/> Temperature	<p>4. Specify: TEMPERATURE_SUBTYPE <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave <input type="radio"/> Frozen Components <input type="radio"/> Other _____</p>
<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	<p>5. Describe: NF_OTHER_DETAILS</p>
<p>Complete the following if any Natural Force Damage sub-cause is selected.</p> <p>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_EXTREME_WEATHER_IND</p> <p>6a. If Yes, specify: (select all that apply) NF_HURRICANE_IND NF_TROPICAL_STORM_IND NF_TORNADO_IND <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Other NF_OTHER_IND, NF_EXTREME_WEATHER_DETAILS</p>	

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

2. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)? ☐ Yes ☐ No **NOTIFY_CGA_DIRT**

- ☐ Public \Rightarrow Specify: ☐ City Street ☐ State Highway ☐ County Road ☐ Interstate Highway ☐ Other
☐ Private \Rightarrow Specify: ☐ Private Landowner ☐ Private Business ☐ Private Easement
☐ Pipeline Property/Easement ☐ Power/Transmission Line ☐ Railroad
☐ Dedicated Public Utility Easement
☐ Federal Land
☐ Unknown/Other

4 Was the facility part of a Joint Trench? ☐ Yes ☐ No JOINT_TRENCH_IND

5. Did this event involve a Cross Bore? ☐ Yes ☐ No **CROSS BORE IND**

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)*

- | | | | | |
|--|--|--|---|--|
| <input type="radio"/> Agriculture | <input type="radio"/> Cable TV | <input type="radio"/> Curb/Sidewalk | <input type="radio"/> Building Construction | <input type="radio"/> Building Demolition |
| <input type="radio"/> Drainage | <input type="radio"/> Driveway | <input type="radio"/> Electric | <input type="radio"/> Engineering/Surveying | <input type="radio"/> Fencing |
| <input type="radio"/> Grading | <input type="radio"/> Irrigation | <input type="radio"/> Landscaping | <input type="radio"/> Liquid Pipeline | <input type="radio"/> Milling |
| <input type="radio"/> Natural Gas | <input type="radio"/> Pole | <input type="radio"/> Public Transit Authority | <input type="radio"/> Railroad Maintenance | <input type="radio"/> Road Work |
| <input type="radio"/> Sewer (Sanitary/Storm) | <input type="radio"/> Site Development | <input type="radio"/> Steam | <input type="radio"/> Storm Drain/Culvert | <input type="radio"/> Street Light |
| <input type="radio"/> Telecommunications | <input type="radio"/> Traffic Signal | <input type="radio"/> Traffic Sign | <input type="radio"/> Water | <input type="radio"/> Waterway Improvement |
| <input type="radio"/> Data not collected | <input type="radio"/> Unknown/Other | | | |

ONE CALL NOTIFIED IND

10. Was the One-Call Center notified? ☐ Yes ☐ No If No, skip to question 11

ONE CALL TICKET NUM

*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	2. Select one or more of the following IF an extreme weather event was a factor: OSF_HURRICANE_IND OSF_TROPICAL_STORM_IND OSF_TORNADO_IND <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other OSF_OTHER_WEATHER_IND 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
7. Estimated speed of the vehicle at the time of impact (miles per hour)? **ESTIMATED_SPEED** or ☐ Unknown **ESTIMATED_SPEED_UNKNOWN_IND**
- VEHICLE_TYPE**
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
10. Shortest distance from answer in 9. to the damaged pipeline facility (in feet): **VEHICLE_TRAVEL_DISTANCE_FT**
- 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> <div>FIELD_EXAM_IND</div> <div>METALLURGICAL_IND</div> <div>OTHER_ANALYSIS_IND</div> </div> <div> <input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis <div>OTHER_ANALYSIS_DETAILS</div> </div> <div> <input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation <i>(Supplemental Report required)+</i> <div>STILL_UNDER_INVEST_IND</div> </div>			
<div> <div>FAILURE_TYPE</div> <input type="checkbox"/> Design-, Construction-, Installation-, or Fabrication-related </div>		2. List contributing factors: <i>(select all that apply)</i> <div> <div>FAILURE_SUBTYPE_1</div> <div>FAILURE_SUBTYPE_2</div> </div> <div> <input type="checkbox"/> Fatigue- or Vibration-related: <div> <div>FATIGUE_VIBR_RELATED_1</div> <div>FATIGUE_VIBR_RELATED_2</div> </div> <div> <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 <div>FATIGUE_VIBR_RELATED_OTHER_1</div> <div>FATIGUE_VIBR_RELATED_OTHER_2</div> </div> </div> <div> <input type="checkbox"/> Mechanical Stress <div>MECHANICAL_STRESS_1</div> <div>MECHANICAL_STRESS_2</div> <input type="checkbox"/> Other <div>OTHER_FACTOR_1</div> <div>OTHER_FACTOR_DETAILS_1</div> <div>OTHER_FACTOR_2</div> <div>OTHER_FACTOR_DETAILS_2</div> </div>	
<div> <input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field) </div>			
<div> <input type="checkbox"/> Environmental Cracking-related </div>		<div> <div>STRESS_SUBTYPE</div> <div>3. Specify:</div> <div> <input type="radio"/> Stress Corrosion Cracking <input type="radio"/> Sulfide Stress Cracking </div> <div> <input type="radio"/> Hydrogen Stress Cracking <input type="radio"/> Hard Spot </div> <div> <input type="radio"/> Other <div>STRESS_DETAILS</div> </div> </div>	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.			
<div> <div>ADDITIONAL_DENT_IND</div> <div>ADDITIONAL_GOUGE_IND</div> <div>ADDITIONAL_PIPE_BEND_IND</div> <div>ADDITIONAL_ARC_BURN_IND</div> <div>ADDITIONAL_CRACK_IND</div> </div> <div> 4. Additional factors: <i>(select all that apply)</i> <input type="radio"/> Dent <input type="radio"/> Gouge <input type="radio"/> Pipe Bend <input type="radio"/> Arc Burn <input type="radio"/> Crack <input type="radio"/> Lack of Fusion <div>ADDITIONAL_LACK_FUSION_IND</div> </div> <div> <div>ADDITIONAL_LAMINATION_IND</div> <div>ADDITIONAL_BUCKLE_IND</div> <div>ADDITIONAL_WRINKLE_IND</div> <div>ADDITIONAL_BURNT_STEEL_IND</div> </div> <div> <input type="radio"/> Lamination <input type="radio"/> Buckle <input type="radio"/> Wrinkle <input type="radio"/> Misalignment <input type="radio"/> Burnt Steel <input type="radio"/> Other <div>PWF_ADDITIONAL_OTHER_IND</div> <div>PWF_ADDL_MISALIGNMENT_IND</div> <div>ADDITIONAL_FACTOR_DETAILS</div> </div>			

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	<p>1. Specify: <i>(select all that apply)</i></p> <div> <div>CONTROL_VALVE_IND, ○ Control Valve COMMUNICATIONS_IND ○ Communications RELIEF_VALVE_IND ○ Relief Valve ESD_SYSTEM_FAILURE_IND ○ ESD System Failure OTHER_CONTROL_RELIEF_IND ○ Other _____</div> <div>INSTRUMENTATION_IND, ○ Instrumentation BLOCK_VALVE_IND ○ Block Valve POWER_FAILURE_IND ○ Power Failure ESD_SYSTEM_FAILURE_IND ○ ESD System Failure OTHER_CONTROL_RELIEF_IND ○ Other _____</div> <div>SCADA_IND ○ SCADA CHECK_VALVE_IND ○ Check Valve STOPPLE_CONTROL_FITTING_IND ○ Stopple/Control Fitting</div> </div> <p>OTHER_CONTROL_RELIEF_DETAILS</p>
<input type="checkbox"/> Pump or Pump-related Equipment	<p>OTHER_PUMP_IND</p> <p>2. Specify: ○ Seal/Packing Failure ○ Body Failure ○ Crack in Body</p> <p>○ Appurtenance Failure OTHER_PUMP_DETAILS</p> <p>○ Other _____</p>
<input type="checkbox"/> Threaded Connection/Coupling Failure	<p>OTHER_STRIPPED_IND</p> <p>3. Specify: ○ Pipe Nipple ○ Valve Threads ○ Mechanical Coupling</p> <p>○ Threaded Pipe Collar ○ Threaded Fitting</p> <p>○ Other _____ OTHER_STRIPPED_DETAILS</p>
<input type="checkbox"/> Non-threaded Connection Failure	<p>OTHER_NON_THREADED_IND</p> <p>4. Specify: ○ O-Ring ○ Gasket ○ Seal (NOT pump seal) or Packing</p> <p>○ Other _____ OTHER_NON_THREADED_DETAILS</p>
<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	<p>5. Describe: _____ FAILURE_DETAILS</p>
<p>Complete the following if any Equipment Failure sub-cause is selected.</p> <p>6. Additional factors that contributed to the equipment failure: <i>(select all that apply)</i></p> <div> <div>○ Excessive vibration ADDITIONAL_VIBRATION_IND</div> <div>○ Overpressurization ADDITIONAL_OVERPRESSURE_IND</div> <div>○ No support or loss of support ADDITIONAL_SUPPORT_IND</div> <div>○ Manufacturing defect ADDITIONAL_DEFECT_IND</div> <div>○ Loss of electricity ADDITIONAL_ELECTRICITY_IND</div> <div>○ Improper installation ADDITIONAL_INSTALLATION_IND</div> <div>○ Improper maintenance ADDITIONAL_IMPROPER_MNTNCE_IND</div> <div>○ Mismatched items (different manufacturer for tubing and tubing fittings) ADDITIONAL_MISMATCH_IND</div> <div>○ Dissimilar metals ADDITIONAL_DISSIMILAR_IND</div> <div>○ Breakdown of soft goods due to compatibility issues with transported commodity ADDITIONAL_BREAKDOWN_IND</div> <div>○ Valve vault or valve can contributed to the release ADDITIONAL_VALVE_IND</div> <div>○ Alarm/status failure ADDITIONAL_ALARM_IND</div> <div>○ Misalignment IEF_ADDL_MISALIGNMENT_IND</div> <div>○ Thermal stress ADDITIONAL_THERMAL_IND</div> <div>○ Erosion/Abnormal Wear ADDITIONAL_EROSION_WEAR_IND</div> <div>○ Other EQ_ADDITIONAL_OTHER_IND, EQ_ADDITIONAL_OTHER_DETAILS</div> </div>	

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	1. Specify: OVERFLOW_OTHER_IND <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_IND5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? ☐ Yes ☐ No5a. 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	2. Specify: INCIDENT_UNKNOWN_COMMENTS comment field: <input type="radio"/> Investigation complete, cause of Accident unknown. Mandatory UNKNOWN_SUBTYPE <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

AXIAL_RCNT_ATND_DTCT_METAL

If Metal Loss, specify (select only one):

☐ Other Describe: **AXIAL_RCNT_ATND_DTCT_DTLS**

☐ 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

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

AXIAL_PREV_ATTUNED_DETECT

If Metal Loss, specify (select only one):

☐ Other Describe: **AXIAL_PREV_ATND_DTCT_DTLS**

☐ 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

Most recent run Resolution (select only one):

CIRC_WV_RCNT_RESOLUTION

☐ 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

Previous run Resolution (select only one):

CIRC_WV_PREV_RESOLUTION

☐ 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

Most recent run Attuned to (select only one)

ULTRASONIC_RCNT_ATTUNED

☐ Wall Measurement ☐ Crack

ULTRA_RCNT_ATT_METL_RESOLUTION

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

☐ Standard Resolution ☐ Other Describe:

ULTRA_RCNT_ATT_METL_RES_DTLS

Previous run Year: **ULTRA_PREVIOUS_YEAR**

ULTRA_PREV_PROPUL_METHOD

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

Most recent run Attuned to (select only one)

ULTRA_PREV_ATTUNED

☐ Wall Measurement ☐ Crack

ULTRA_PREV_ATT_METL_RESOLUTION

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

☐ Standard Resolution ☐ Other Describe:

ULTRA_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):

GEOMETRY_RCNT_RESOLUTION

☐ 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):

GEOMETRY_PREV_RESOLUTION

☐ 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

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)

HAS_HYDRTST_CONDUCT_BEFORE_IND

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?

DIRECT_ASMNT_AT_PNT_ACCDNT_YR

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

 / / / / /

ASMNT_ECDA_RCNT_YEAR

Other, specify type: **ASMNT_OTHER_TYPE**

 / / / / /

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:

- | | | | |
|---|---|---------------------------------------|---------------------------------------|
| <input type="radio"/> Radiography | <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> | EXM_RADIOGRAPHY_RCNT_IND, | EXM_RADIOGRAPHY_RCNT_YEAR |
| <input type="radio"/> Guided Wave Ultrasonic | <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> | EXM_WAVE_ULTRASONIC_RCNT_IND, | EXM_WAVE_ULTRASONIC_RCNT_YEAR |
| <input type="radio"/> Handheld Ultrasonic Tool | <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> | EXM_HANDL_ULTRASONIC_RCNT_IND, | EXM_HANDL_ULTRASONIC_RCNT_YEAR |
| <input type="radio"/> Wet Magnetic Particle Test | <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> | EXM_WET_MGNT_PARTCL_RCNT_IND, | EXM_WET_MGNT_PARTCL_RCNT_YEAR |
| <input type="radio"/> Dry Magnetic Particle Test | <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> | EXM_DRY_MGNT_PARTCL_RCNT_IND, | EXM_DRY_MGNT_PARTCL_RCNT_YEAR |
| <input type="radio"/> Other, specify type EXM_OTHER_TYPE | <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> | EXM_OTHER_RCNT_IND, | EXM_OTHER_RCNT_YEAR |

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

EXTRNL_COR_GALVANIC_IND

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

Internal Corrosion

INTRNL_COR_CORROSIVE_CMDTY_IND

- ☐ Internal Corrosion, Corrosive Commodity **INTRNL_COR_WTR_DRPOUT_ACID_IND**
- ☐ Internal Corrosion, Water drop-out/Acid **INTRNL_COR_MICROBIOLOGIC_IND**
- ☐ Internal Corrosion, Microbiological
- ☐ 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_VEGITATION_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 OSF_VEHICLE_IND</p> <p><input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation OSF_BOAT_IND</p> <p><input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Adrift Maritime Equipment OSF_OTHER_MARITIME_IND</p> <p><input type="checkbox"/> Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation OSF_ELECTRICAL_ARCING_IND</p> <p><input type="checkbox"/> Electrical Arcing from Other Equipment or Facility</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</p> <p><input type="checkbox"/> Non-threaded Connection Failure EQF_NON_THREADED_IND</p> <p><input type="checkbox"/> Defective or Loose Tubing or Fitting EQF_DEFECTIVE_FITTING_IND</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</p> <p><input type="checkbox"/> Equipment Not Installed Properly IO_NOT_INSTALLED_PROPERLY_IND</p> <p><input type="checkbox"/> Wrong Equipment Specified or Installed IO_WRONG_EQUIPMENT_IND</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		
NARRATIVE		
PART I – PREPARER AND AUTHORIZED SIGNATURE		
Preparer's Name (type or print)	PREPARER_NAME	PREPARER_TELEPHONE
		Preparer's Telephone Number
Preparer's Title (type or print)	PREPARER_TITLE	
Preparer's E-mail Address	PREPARER_EMAIL	PREPARER_FAX
		Preparer's Facsimile Number
Local Contact Name: optional	LOCAL_CONTACT_NAME	
Local Contact Email: optional	LOCAL_CONTACT_EMAIL	
Local Contact Phone: optional	LOCAL_CONTACT_TELEPHONE	
Authorized Signer's Name	AUTHORIZER_NAME	AUTHORIZER_TELEPHONE
	PREPARED_DATE Date	Authorized Signer Telephone Number
Authorized Signer's Title	AUTHORIZER_TITLE	AUTHORIZER_EMAIL
		Authorized Signer's E-mail Address

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

Field Name	Field Name Description
IYEAR	<i>Year accident occurred, derived from accident date</i>
WELD_DETAILS	<i>The fieldname was used in Rev 7-2014 for "Weld, including heat affected zone Other" and removed from Rev 3-2021</i>