NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty 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 _____ No. _____ (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

A1. Operator's OPS-issued Operator Identification Number (OPID): /___/___/___/___/___/___/

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

A3. Address of Operator:

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

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

A3c. State: *auto-populated based on OPID*

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

A4. Earliest local time *(24-hr clock)* and date an accident reporting criteria was met:
/___/___/___/___/ (Hour) /___/___/ (Month) /___/___/ (Day) /___/___/ (Year)

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

A4b. Daylight Saving in effect? ○ Yes ○ No

A5. Location of Accident:
Latitude: /___/___/ . /___/___/___/___/___/
Longitude: - /___/___/___/ . /___/___/___/___/___/

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

☐ Crude Oil

☐ 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: _____

☐ 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: _____

☐ CO_2 (Carbon Dioxide)

☐ Biofuel / Alternative Fuel (including ethanol blends)
- ○ Fuel Grade Ethanol
- ○ Ethanol Blend ⇨ % Ethanol: /___/___/
- ○ Biodiesel ⇨ Blend (e.g. B2, B20, B100): B/___/___/___/
- ○ Other ⇨ Name: _____

A7. Estimated volume of commodity released unintentionally: /___/___/___/,/___/___/___/./___/___/ Barrels

A8. Estimated volume of intentional and/or controlled release/blowdown: /___/___/___/,/___/___/___/./___/___/ Barrels
(only reported for HVL and CO_2 Commodities)

A9. Estimated volume of commodity recovered: /___/___/___/,/___/___/___/./___/___/ Barrels

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A10. Were there fatalities? ○ Yes ○ No

If Yes, specify the number in each category:

A10a. Operator employees /___/___/___/___/

A10b. Contractor employees working for the Operator /___/___/___/___/

A10c. Non-Operator emergency responders /___/___/___/___/

A10d. Workers working on the right-of-way, but NOT associated with this Operator /___/___/___/___/

A10e. General public /___/___/___/___/

A10f. Total fatalities (sum of above) *calculated*

A11. Were there injuries requiring inpatient hospitalization? ○ Yes ○ No

If Yes, specify the number in each category:

A11a. Operator employees /___/___/___/___/

A11b. Contractor employees working for the Operator /___/___/___/___/

A11c. Non-Operator emergency responders /___/___/___/___/

A11d. Workers working on the right-of-way, but NOT associated with this Operator /___/___/___/___/

A11e. General public /___/___/___/___/

A11f. Total injuries (sum of above) *calculated*

A12. What was the Operator's initial indication of the Failure? *(select only one)*

- ☐ 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 _____

A12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in A12, specify the following: *(select only one)*

○ Operator employee ○ Contractor working for the Operator

A13. Local time Operator identified failure /___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year

A14. 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

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

○ Yes *(Complete Questions B3-B12)* ○ No *(Complete Questions B13-B15)*

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

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

○ Yes ○ No ⇨ Explain: _____

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

A17a. Local time and date of shutdown /___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year

A17b. Local time pipeline/facility restarted /___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year ○ Still shut down*

**Supplemental Report required*

If A12 = Notification from Emergency Responder, skip A18a. through A18c.

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

If No, skip A18b. and A18c.

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

/___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year

A19. Local time Operator responders arrived on site /___/___/___/___/ Hour /___/___/ Month /___/___/ Day /___/___/ Year

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A20. Local time of confirmed discovery /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A21a. Local time *(24-hr clock)* and date of initial operator report to the National Response Center:
/__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A21b. 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: _____

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

A22a. Local time of ignition /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A22b. How was the fire extinguished?
○ Operator/Contractor ○ Local/State/Federal Emergency Responder ○ Allowed to burn out ○ Other, specify:_____

A22c. Estimated volume of commodity consumed by fire (barrels): _____ (must be less than or equal to A7)

A22d. Did the commodity explode? ○ Yes ○ No

If A14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend", answer A23a through f:

A23a. Initial action taken to control flow upstream of failure location ○ Valve Closure ○ Operational Control - mandatory text field

If Valve Closure, answer A23b and c:

A23b. Local time of valve closure /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A23c. Type of upstream valve used to initially isolate release source:
○ Manual ○ Automatic ○ Remotely Controlled

A23d. Initial action taken to control flow downstream of failure location ○ Valve Closure ○ Operational Control - mandatory text field

If Valve Closure, answer A23.e and f:

A23e. Local time of valve closure /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A23f. Type of downstream valve used to initially isolate release source:
○ Manual ○ Automatic ○ Remotely Controlled ○ Check Valve

If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c:

A24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan? ○ Yes ○ No

If Yes, answer A24b.

A24b. Local time the "qualified individual" was notified. /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A24c. Did the operator activate an Oil Spill Removal Organization (OSRO)? ○ Yes ○ No

If Yes, answer A24d and e:

A24d. Local time operator activated OSRO /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A24e. Local time OSRO arrived on site /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

A25. Number of general public evacuated: /__/__/__/,/__/__/__/

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PART B – ADDITIONAL LOCATION INFORMATION

B1. Pipeline/Facility name: _____

B2. Segment name/ID: _____

If **Onshore**:

B3. State: /___/___/

B4. Zip Code: /___/___/___/___/___/ - /___/___/___/___/

B5._____ B6._____
City County or Parish

B7. Operator-designated location: *(select only one)* ☐ Milepost *(specify in shaded area below)*
☐ Survey Station No. *(specify in shaded area below)*

B8 /___/___/___/___/___/___/___/___/___/___/___/___/___/___/

B9. Was this onshore Accident on Federal land? ○ Yes ○ No

B10. Location of Accident: *(select only one)*

☐ Totally contained on Operator-controlled property ☐ Pipeline right-of-way
☐ Originated on Operator-controlled property, but then flowed or migrated off the property

B11. Area of Accident (as found): *(select only one)*

☐ Tank, including attached appurtenances
☐ Underground ⇨ Specify: ○ Under soil ○ Under a building ○ Under pavement ○ Exposed due to excavation
○ Exposed due to loss of cover ○ In underground enclosed space (e.g., vault) ○ Other _____

B11a. Depth-of-Cover (in): /___/,/___/___/___/ OR ○ Unknown

☐ Aboveground ⇨ Specify: ○ Typical aboveground facility piping or appurtenance ○ Overhead crossing ○ Inside a building
○ In or spanning an open ditch ○ Inside other enclosed space ○ Other _____
☐ Transition Area ⇨ Specify: ○ Soil/air interface ○ Wall sleeve ○ Pipe support or other close contact area ○ Other _____

B12. Did the Accident occur in a crossing? ○ Yes ○ No If B12 is Yes, specify type:
☐ Bridge crossing Specify: ○ Cased ○ Uncased
☐ Railroad crossing *(select all that apply)* ○ Cased ○ Uncased ○ Bored/drilled
☐ Road crossing *(select all that apply)* ○ Cased ○ Uncased ○ Bored/drilled
☐ Water crossing
Specify: ○ Cased ○ Uncased
Name of body of water, if commonly known: _____
Approx. water depth (ft) at the point of the Accident: _____ OR ○ Unknown
(select only one of the following)
○ Shoreline/Bank/Marsh crossing
○Below water, pipe buried below bottom (NOT in bored/drilled crossing)
○ Below water, pipe in bored/drilled crossing
○Below water, pipe on or above bottom
Is this water crossing 100 feet or more in length from high water mark to high water mark? ○ Yes ○ No

If **Offshore**:

B13. Approximate water depth (ft.) at the point of the Accident: /___/___/,/___/___/___/

B14. Origin of Accident: ☐ In State waters
Specify: State:___ Area: _____ Block/Tract #: /___/___/___/___/ Nearest County/Parish: _____
☐ On the Outer Continental Shelf (OCS) *(select only one)* ○ OCS – Alaska ○ OCS- Atlantic
○ OCS-Gulf of Mexico ○ OCS – Pacific
Specify: Area: _____ Block/Tract #: /___/___/___/___/

B15. Area of Accident: *(select only one)*
☐ Shoreline/Bank/Marsh crossing or shore approach
☐ Below water, pipe buried or jetted below seabed
☐ Below water, pipe on or above seabed
☐ Splash Zone of riser
☐ Portion of riser outside of Splash Zone, including riser bend
☐ Platform

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PART C – ADDITIONAL FACILITY INFORMATION

C1. Is the pipeline or facility:

☐ Interstate

☐ Intrastate

C2. reserved

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

☐ Pipe ⇨ Specify: ○ Pipe Body ○ Pipe Seam

If Pipe Body: Was this a puddle/spot weld? ○ Yes ○ No

C3a. Nominal Pipe Size: /___/___/./___/___/ C3.b Wall thickness (in): /___/./___/___/___/

C3c. SMYS (Specified Minimum Yield Strength) of pipe (psi): /___/___/___/,/___/___/___/

C3d. Pipe specification: _____ OR ○ Unknown

C3e. Pipe Seam

⇨ 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: _____

C3f. Pipe manufacturer: _____ OR ○ Unknown

C3g Pipeline coating type at point of Accident

⇨ Specify: ○ Fusion Bonded Epoxy (FBE) ○ Coal Tar ○ Asphalt ○ Polyolefin ○ Extruded Polyethylene

○ Epoxy other than FBE ○ Cold Applied Tape ○ Paint ○ Composite ○ None ○ Other, describe: _____

C3h. Coating field applied? ○ Yes ○ No ○ Unknown

☐ Weld, including heat-affected zone ⇨ 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 though h values different on either side of the girth weld?
○ Yes ○ No

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

C3i. Wall thickness (in): /___/./___/___/___/

C3j. SMYS (Specified Minimum Yield Strength) of pipe (psi): /___/___/___/,/___/___/___/

C3k. Pipe specification: _____ OR ○ Unknown

C3l. Pipe Seam

⇨ 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: _____

C3m. Pipe manufacturer: _____ OR ○ Unknown

C3n. Pipeline coating type at point of Accident

⇨ Specify: ○ Fusion Bonded Epoxy (FBE) ○ Coal Tar ○ Asphalt ○ Polyolefin ○ Extruded Polyethylene

○ Epoxy other than FBE ○ Cold Applied Tape ○ Paint ○ Composite ○ None ○ Other, describe: _____

C3o. Coating field applied? ○ Yes ○ No ○ Unknown

☐ Valve ○ Mainline ⇨ Specify: ○ Butterfly ○ Check ○ Gate ○ Plug ○ Ball ○ Globe ○ Other, describe: _____

C3p. Mainline 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

- ☐ Positive displacement
- ☐ Centrifugal
- ☐ Gear
- ☐ Other (specify): _____

C3r. Type of service

- ☐ Mainline
- ☐ Injection
- ☐ Truck rack (if on terminal side of truck rack canopy)
- ☐ Other (specify): _____

☐ 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.

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☐ 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
- ☐ Stainless steel
- ☐ Carbon steel
- ☐ Copper
- ☐ Other

C3t. Type of tubing
- ☐ 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 ○ Roof Drain System ○ Mixer ○ Pressure Vessel Head or Wall ○ Appurtenance ○ Relief Valve ○ Other, describe: _____

C3v. Tank Type ○ Atmospheric ○ Pressurized

If C3v. = Pressurized:
- C3v1. Tank Maximum Operating Pressure
- C3v2. What is the set point of the primary pressure relief device on the tank? _____
- C3v3. Did the thermal or pressure relief valve activate? ○ Yes ○ No
- C3v4. Was the MOP of the tank exceeded? ○ Yes ○ No

If C3v = Atmospheric:
- C3v5. Safe-Fill-Level (in feet) at the time of the accident? _____
- C3v6. Was the SafeFill-Level exceeded? ○ Yes ○ No
- C3v7. Year of most recent API Std 653 Out-of-Service Inspection /___/___/___/___/ OR ○ None
- C3v8. API Std 653 In-Service Inspection /___/___/___/___/ OR ○ No In-Service Inspection completed

☐ Other mandatory text field

C4. Year item involved in Accident was installed: /___/___/___/___/ OR ○ Unknown

C4a. Year item involved in Accident was manufactured: /___/___/___/___/ OR ○ Unknown

C5. Material involved in Accident: (*select only one)*
- ☐ Carbon Steel
- ☐ Material other than Carbon Steel ⇨ Specify: _____

C6. Type of Accident involved: *(select only one)*
- ☐ Mechanical Puncture ⇨ Approx. size: /__/__/__/__/./__/in. (axial) by /__/__/__/__/./__/in. (circumferential)
- ☐ Leak ⇨ Select Type: ○ Pinhole ○ Crack ○ Connection Failure ○ Seal or Packing ○ Other
- ☐ Rupture ⇨ Select Orientation: ○ Circumferential ○ Longitudinal ○ Other _____
  Approx. size: /__/__/__/__/./__/ in. (widest opening) by /__/__/__/__/__/./__/in. (length circumferentially or axially)
- ☐ Overfill or Overflow
- ☐ Other ⇨ Describe: _____

PART D – ADDITIONAL CONSEQUENCE INFORMATION

D1. Wildlife impact: ○ Yes ○ No

D1a If Yes, specify all that apply:
- ☐ Fish/aquatic
- ☐ Birds
- ☐ Terrestrial

D2. Soil contamination: ○ Yes ○ No

D3. Long term impact assessment performed or planned: ○ Yes ○ No

D4. Anticipated remediation: ○ Yes ○ No (not needed)

D4a. If Yes, specify all that apply:
☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife

D5. Water contamination: ○ Yes ⇨ *(Complete 5a – 5c below)* ○ No

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D5a. Specify all that apply:

☐ Ocean/Seawater

☐ Surface

☐ Groundwater

☐ Drinking water ⇨ *(Select one or both)* ○ Private Well ○ Public Water Intake

D5b. Estimated amount released in or reaching water: /___/___/___/,/___/___/___/./___/___/ Barrels

D5c. Name of body of water, if commonly known: _____

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

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

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

☐ Commercially Navigable Waterway
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
○ Yes ○ No

☐ High Population Area
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
○ Yes ○ No

☐ Other Populated Area
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
○ Yes ○ No

☐ Unusually Sensitive Area (USA) – Drinking Water
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
○ Yes ○ No

☐ Unusually Sensitive Area (USA) – Ecological
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?
○ Yes ○ No

D8. Estimated Property Damage:

D8a. Estimated cost of public and non-Operator private property damage $ /___/___/___/,/___/___/___/,/___/___/___/

D8b. Estimated cost of commodity lost $ /___/___/___/,/___/___/___/,/___/___/___/

D8c. Estimated cost of Operator's property damage & repairs $ /___/___/___/,/___/___/___/,/___/___/___/

D8d. Estimated cost of emergency response $ /___/___/___/,/___/___/___/,/___/___/___/

D8e. Estimated cost of environmental remediation $ /___/___/___/,/___/___/___/,/___/___/___/

D8f. Estimated other costs $ /___/___/___/,/___/___/___/,/___/___/___/

Describe _____

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

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.

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

Buildings Affected

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

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): /___/___/,/___/___/___/

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) : /___/___/,/___/___/___/

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: _____

E2b. Date MOP established _____

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

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

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

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

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)*

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

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

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

E6. 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
○ Presence of unsuitable mainline valves
○ Tight or mitered pipe bends
○ Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)
○ Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
○ Other ⇨ Describe:_____

E7. 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
○ Low operating pressure(s)
○ Low flow or absence of flow
○ Incompatible commodity
○ Other ⇨ Describe:_____

E8. 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
☐ Yes ⇨ E9a. Was it operating at the time of the Accident? ○ Yes ○ No

E9b. Was it fully functional at the time of the Accident? ○ Yes ○ No

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

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

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

E10b. Was it fully functional at the time of the Accident? ○ Yes ○ No

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

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

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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)*

_____

_____

_____

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

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

○ 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)*

_____

_____

_____

○ Investigation identified no control room issues

○ Investigation identified no controller issues

○ Investigation identified incorrect controller action or controller error

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

○ Investigation identified incorrect procedures

○ Investigation identified incorrect control room equipment operation

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

○ Investigation identified areas other than those above ⇨ Describe: _____

PART F – DRUG & ALCOHOL TESTING INFORMATION

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?

○ No

○ Yes ⇨ F1a. Specify how many were tested: /___/___/

F1b. Specify how many failed: /___/___/

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?

○ No

○ Yes ⇨ F2a. Specify how many were tested: /___/___/

F2b. Specify how many failed: /___/___/

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PART G – APPARENT CAUSE	***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).***

G1 - Corrosion Failure – *only one **sub-cause** can be picked from shaded left-hand column

☐ **External Corrosion**	1. Results of visual examination: ○ Localized Pitting ○ General Corrosion ○ Other _____ 2. Type of corrosion: *(select all that apply)* ○ Galvanic ○ Atmospheric ○ Stray Current ○ Microbiological ○ Selective Seam ○ Other _____ 2a. If 2 is Stray Current, specify ○ Alternating Current ○ Direct Current AND 2b. Describe the stray current source: _____ 3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)* ○ Field examination ○ Determined by metallurgical analysis ○ Other _____ 4. Was the failed item buried or submerged? ○ Yes ⇨ 4a. Was failed item considered to be under cathodic protection at the time of the Accident? ○ Yes ⇨ Year protection started: /___/___/___/___/ ○ No 4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident? ○ Yes ○ No 4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident? *(select all that apply)* ○ Yes, CP Annual Survey ⇨ Most recent year conducted: /___/___/___/___/ ○ Yes, Close Interval Survey ⇨ Most recent year conducted: /___/___/___/___/ ○ Yes, Other CP Survey ⇨ Most recent year conducted: /___/___/___/___/ Describe other CP survey: _____ ○ No ○ No ⇨ 4d. Was the failed item externally coated or painted? ○ Yes ○ No 5. Was there observable damage to the coating or paint in the vicinity of the corrosion? ○ Yes ○ No ○ N/A Bare/Ineffectively Coated Pipe
☐ **Internal Corrosion**	6. Results of visual examination: ○ Localized Pitting ○ General Corrosion ○ Not cut open ○ Other _____ 7. Cause of corrosion: *(select all that apply)* ○ Corrosive Commodity ○ Water drop-out/Acid ○ Microbiological ○ Erosion ○ Other _____ 8. The cause(s) of corrosion selected in Question 7 is based on the following: *(select all that apply)* ○ Field examination ○ Determined by metallurgical analysis ○ Other _____ 9. Location of corrosion: *(select all that apply)* ○ Low point in pipe ○ Elbow ○ Dead-Leg ○ Other_____ 10. Was the commodity treated with corrosion inhibitors or biocides? ○ Yes ○ No 11. Was the interior coated or lined with protective coating? ○ Yes ○ No 12. Were cleaning/dewatering pigs (or other operations) routinely utilized? ○ Not applicable - Not mainline pipe ○ Yes ○ No 13. Were corrosion coupons routinely utilized? ○ Not applicable - Not mainline pipe ○ Yes ○ No

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G2 - Natural Force Damage - *only one **sub-cause** can be picked from shaded left-hand column	
☐ **Earth Movement, NOT due to Heavy Rains/Floods**	1. Specify: ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
☐ **Heavy Rains/Floods**	2. Specify: ○ Washout/Scouring ○ Flotation ○ Mudslide ○ Other _____
☐ **Lightning**	3. Specify: ○ Direct hit ○ Secondary impact such as resulting nearby fires
☐ **Temperature**	4. Specify: ○ Thermal Stress ○ Frost Heave ○ Frozen Components ○ Other _____
☐ **High Winds**	
☐ **Tree/Vegetation Root**	
☐ **Snow/Ice impact or Accumulation**	
☐ **Other Natural Force Damage**	5. Describe: _____

Complete the following if any Natural Force Damage sub-cause is selected.

6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event? ○ Yes ○ No

6a. If Yes, specify: (*select all that apply*) ○ Hurricane ○ Tropical Storm ○ Tornado ○ Other: _____

G3 – Excavation Damage - *only one **sub-cause** can be picked from shaded left-hand column	
☐ **Excavation Damage by Operator (First Party)**	
☐ **Excavation Damage by Operator's Contractor (Second Party)**	
☐ **Excavation Damage by Third Party**	
☐ **Previous Damage due to Excavation Activity**	

Complete the following if Excavation Damage by Third Party is selected as the sub-cause.

1. Did the Operator get prior notification of the excavation activity? ○ Yes ○ No

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

If yes, answer 1c through 1e.

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:

1d. Exempting authority: _____

1e. Exempting criteria: _____

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

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 ⇨ Specify: ○ City Street ○ State Highway ○ County Road ○ Interstate Highway ○ Other

☐ Private ⇨ 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

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5. Did this event involve a Cross Bore? ○Yes ○ No

6. Measured Depth from Grade *(select only one)*
○ Embedded in Concrete/Asphalt Pavement ○ <18 inches ○ 18 – 36 inches ○ > 36 inches
○ Measured depth from grade _____ inches

7. Type of excavator: *(select only one)*
○ Contractor ○ County ○ Developer ○ Farmer ○ Municipality ○ Occupant
○ Railroad ○ State ○ Utility ○ Unknown/Other

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

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

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

10a. If Yes, specify ticket number: /__/

10b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified: _____

10c. Was work area white lined? ○ No ○ Yes ○ Unknown

11. Type of Locator: ○ Facility Owner ○ Contract Locator ○ Unknown/Other

12. Were facility locate marks visible in the area of excavation? ○ No ○ Yes ○ Unknown

13. Did the damage cause an interruption in service? ○ No ○ Yes ○ Unknown/Other

13a. If Yes, specify duration of the interruption: /___/___/___/___/ hours

14. Description of the CGA-DIRT Root Cause *(select the predominant CGA-DIRT Root Cause from the list below)*:

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
☐ Facility not marked due to Incorrect facility records/maps
☐ Facility not marked due to Locator error
☐ Facility not marked due to No response from operator/contract locator
☐ Facility not marked due to Tracer wire issue
☐ Facility not marked due to Unlocatable Facility
☐ Facility marked inaccurately due to Abandoned facility
☐ Facility marked inaccurately due to Incorrect facility records/maps
☐ Facility marked inaccurately due to Locator error
☐ Facility marked inaccurately due to Tracer wire issue

Miscellaneous Root Causes
☐ Deteriorated facility
☐ One Call Center Error
☐ Previous damage
☐ Root Cause not listed (comment required): _____

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G4 - Other Outside Force Damage - *only one **sub-cause** can be picked from shaded left-hand column	
☐ **Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Accident**	
☐ **Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation**	1. Vehicle/Equipment operated by: *(select only one)* ○ Operator ○ Operator's Contractor ○ Third Party If this sub-section is picked, please complete questions 5-11 below
☐ **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: ○ Hurricane ○ Tropical Storm ○ Tornado ○ Heavy Rains/Flood ○ Other _____
☐ **Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation**	
☐ **Electrical Arcing from Other Equipment or Facility**	
☐ **Previous Mechanical Damage NOT Related to Excavation**	
☐ **Intentional Damage**	3. Specify: ○ Vandalism ○ Terrorism ○ Theft of transported commodity ○ Theft of equipment ○ Other _____
☐ **Other Outside Force Damage**	4. Describe: _____

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

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
5b. Reckless Driving
5c. Driving Under the Influence
5e. Other, describe: _____

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)? _____ or ○ Unknown

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

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): _____

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
11b. Barricades – include Jersey barriers and fences in instructions
11c. Guard Rails
11d. Other, describe: _____

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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: *(select all that apply)*

☐ Field Examination ☐ Determined by Metallurgical Analysis ☐ Other Analysis_____

☐ Sub-cause is Tentative or Suspected; Still Under Investigation *(Supplemental Report required)*

☐ **Design-, Construction-, Installation-, or Fabrication-related**	2. List contributing factors: *(select all that apply)* ☐ Fatigue- or Vibration-related: ○ Mechanically-induced prior to installation (such as during transport of pipe) ○ Mechanical Vibration ○ Pressure-related ○ Thermal ○ Other _____ ☐ Mechanical Stress ☐ Other _____
☐ **Original Manufacturing-related (NOT girth weld or other welds formed in the field)**	
☐ **Environmental Cracking-related**	3. Specify: ○ Stress Corrosion Cracking ○ Sulfide Stress Cracking ○ Hydrogen Stress Cracking ○ Hard Spot ○ Other _____

Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.

4. Additional factors: *(select all that apply)* ○ Dent ○ Gouge ○ Pipe Bend ○ Arc Burn ○ Crack ○ Lack of Fusion ○ Lamination ○ Buckle ○ Wrinkle ○ Misalignment ○ Burnt Steel ○ Other: _____

G6 - Equipment Failure - *only one **sub-cause** can be picked from shaded left-hand column	
☐ **Malfunction of Control/Relief Equipment**	1. Specify: *(select all that apply)* ○ Control Valve ○ Instrumentation ○ SCADA ○ Communications ○ Block Valve ○ Check Valve ○ Relief Valve ○ Power Failure ○ Stopple/Control Fitting ○ ESD System Failure ○ Other _____
☐ **Pump or Pump-related Equipment**	2. Specify: ○ Seal/Packing Failure ○ Body Failure ○ Crack in Body ○ Appurtenance Failure ○ Other _____
☐ **Threaded Connection/Coupling Failure**	3. Specify: ○ Pipe Nipple ○ Valve Threads ○ Mechanical Coupling ○ Threaded Pipe Collar ○ Threaded Fitting ○ Other _____
☐ **Non-threaded Connection Failure**	4. Specify: ○ O-Ring ○ Gasket ○ Seal (NOT pump seal) or Packing ○ Other _____
☐ **Defective or Loose Tubing or Fitting**	
☐ **Failure of Equipment Body (except Pump), Tank Plate, or other Material**	
☐ **Other Equipment Failure**	5. Describe: _____ _____

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
○ Overpressurization
○ No support or loss of support
○ Manufacturing defect
○ Loss of electricity
○ Improper installation

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- ○ Improper maintenance
- ○ Mismatched items (different manufacturer for tubing and tubing fittings)
- ○ Dissimilar metals
- ○ Breakdown of soft goods due to compatibility issues with transported commodity
- ○ Valve vault or valve can contributed to the release
- ○ Alarm/status failure
- ○ Misalignment
- ○ Thermal stress
- ○ Erosion/Abnormal Wear
- ○ Other _____

G7 - Incorrect Operation - *only one **sub-cause** can be picked from shaded left-hand column	
☐ **Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage**	
☐ **Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow**	1. Specify: ○ Valve misalignment ○ Incorrect reference data/calculation ○ Miscommunication ○ Inadequate monitoring ○ Other _____
☐ **Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure**	
☐ **Pipeline or Equipment Overpressured**	
☐ **Equipment Not Installed Properly**	
☐ **Wrong Equipment Specified or Installed**	
☐ **Other Incorrect Operation**	2. Describe: _____

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

3. Was this Accident related to: *(select all that apply)*
   - ○ Inadequate procedure
   - ○ No procedure established
   - ○ Failure to follow procedure
   - ○ Other: _____
4. What category type was the activity that caused the Accident:
   - ○ Construction
   - ○ Commissioning
   - ○ Decommissioning
   - ○ Right-of-Way activities
   - ○ Routine maintenance
   - ○ Other maintenance
   - ○ Normal operating conditions
   - ○ Non-routine operating conditions (abnormal operations or emergencies)
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)?
   - ○ 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

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G8 – Other Accident Cause - *only one **sub-cause** can be picked from shaded left-hand column	
☐ **Miscellaneous**	1. Describe: _____
☐ **Unknown**	2. Specify: ○ Investigation complete, cause of Accident unknown. Mandatory comment field: _____ ○ Still under investigation, cause of Accident to be determined* *(*Supplemental Report required)*

PART J – COMPLETED INTEGRITY INSPECTIONS

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)

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 Flux Leakage

Most recent run Year: _____

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

Most recent run Attuned to Detect (select only one): ○ Metal Loss ○ Hard Spots ○ Girth Weld Anomalies
○ Other Describe: _____

If Metal Loss, specify (select only one): ○ High Resolution ○ Standard Resolution
○ Other Describe: _____

Previous run Year: _____

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
○ Other Describe: _____

If Metal Loss, specify (select only one): ○ High Resolution ○ Standard Resolution
○ Other Describe: _____

○ Circumferential/Transverse Wave Magnetic Flux Leakage

Most recent run Year: _____

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

Most recent run Resolution (select only one): ○ High Resolution ○ Standard Resolution
○ Other Describe: _____

Previous run Year: _____

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

Previous run Resolution (select only one): ○ High Resolution ○ Standard Resolution
○ Other Describe: _____

○ Ultrasonic

Most recent run Year: _____

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

Most recent run Attuned to (select only one) ○ Wall Measurement ○ Crack
○ Other Describe: _____

If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one):
○ Standard Resolution ○ Other Describe: _____

Previous run Year: _____

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

Most recent run Attuned to (select only one) ○ Wall Measurement ○ Crack
○ Other Describe: _____

If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one):
○ Standard Resolution ○ Other Describe: _____

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○ Geometry/Deformation

Most recent run Year: _____

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

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

○ Other Describe: _____

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

Previous run Year: _____

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

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

○ Other Describe: _____

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

○ Electromagnetic Acoustic Transducer (EMAT)

Most recent run Year: _____

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

Previous run Year: _____

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

○ Cathodic Protection Current Measurement (CPCM)

Most recent run Year: _____

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

Previous run Year: _____

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

○ Other, specify tool: _____

Most recent run Year: _____

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

Previous run Year: _____

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)

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)

○ Yes ⇨ Most recent year tested: /___/___/___/___/ Test pressure (psig): /___/___/___/___/___/

○ No

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: /___/___/___/___/

○ Yes, but the point of the Accident was not identified as a dig site ⇨ Most recent year conducted: /___/___/___/___/

○ No

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

External Corrosion Direct Assessment (ECDA) /___/___/___/___/

Other, specify type:_____ /___/___/___/___/

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

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

○ Radiography /___/___/___/___/

○ Guided Wave Ultrasonic /___/___/___/___/

○ Handheld Ultrasonic Tool /___/___/___/___/

○ Wet Magnetic Particle Test /___/___/___/___/

○ Dry Magnetic Particle Test /___/___/___/___/

○ Other, specify type _____ /___/___/___/___/

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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
- ☐ External Corrosion, Atmospheric
- ☐ External Corrosion, Stray Current Induced
- ☐ External Corrosion, Microbiologically Induced
- ☐ External Corrosion, Selective Seam

Internal Corrosion
- ☐ Internal Corrosion, Corrosive Commodity
- ☐ Internal Corrosion, Water drop-out/Acid
- ☐ Internal Corrosion, Microbiological
- ☐ Internal Corrosion, Erosion

Natural Forces
- ☐ Earth Movement, NOT due to Heavy Rains/Floods
- ☐ Heavy Rains/Floods
- ☐ Lightning
- ☐ Temperature
- ☐ High Winds
- ☐ Tree/Vegetation Root

Excavation Damage
- ☐ Excavation Damage by Operator (First Party)
- ☐ Excavation Damage by Operator's Contractor (Second Party)
- ☐ Excavation Damage by Third Party
- ☐ Previous Damage due to Excavation Activity

Other Outside Force
- ☐ Nearby Industrial, Man-made, or Other Fire/Explosion
- ☐ Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation
- ☐ Damage by Boats, Barges, Drilling Rigs, or Other Adrift Maritime Equipment
- ☐ Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation
- ☐ Electrical Arcing from Other Equipment or Facility
- ☐ Previous Mechanical Damage NOT Related to Excavation
  - ☐ Intentional Damage

Pipe/Weld Failure
- ☐ Design-related
- ☐ Construction-related
- ☐ Installation-related
- ☐ Fabrication-related
- ☐ Original Manufacturing-related
- ☐ Environmental Cracking-related, Stress Corrosion Cracking
- ☐ Environmental Cracking-related, Sulfide Stress Cracking
- ☐ Environmental Cracking-related, Hydrogen Stress Cracking
- ☐ Environmental Cracking-related, Hard Spot

Equipment Failure
- ☐ Malfunction of Control/Relief Equipment
- ☐ Pump or Pump-related Equipment
- ☐ Threaded Connection/Coupling Failure
- ☐ Non-threaded Connection Failure
- ☐ Defective or Loose Tubing or Fitting
- ☐ Failure of Equipment Body (except Compressor), Vessel Plate, or other Material

Incorrect Operation
- ☐ Damage by Operator or Operator's Contractor NOT Excavation and NOT Vehicle/Equipment Damage
- ☐ Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow
- ☐ Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure
- ☐ Pipeline or Equipment Overpressured
- ☐ Equipment Not Installed Properly
- ☐ Wrong Equipment Specified or Installed
- ☐ Inadequate Procedure
- ☐ No procedure established
- ☐ Failure to follow procedures

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PART H – NARRATIVE DESCRIPTION OF THE ACCIDENT

PART I – PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name (type or print)

Preparer's Telephone Number

Preparer's Title (type or print)

Preparer's E-mail Address

Preparer's Facsimile Number

Local Contact Name: optional
Local Contact Email: optional
Local Contact Phone: optional

Authorized Signer's Name

Date

Authorized Signer Telephone Number

Authorized Signer's Title

Authorized Signer's E-mail Address

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