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_RECEIVED_DATE
Report Date _____

REPORT_NUMBER
SUPPLEMENTAL_NUMBER
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
REPORT_TYPE

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

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

A3. Address of Operator:

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

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

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

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

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

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

A4b. Daylight Saving in effect? ○ Yes ○ No DAYLIGHT_SAVINGS_IND

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

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

☐ Crude Oil
COMMODITY_SUBTYPE

☐ Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- ○ Gasoline (non-Ethanol)
- ○ Diesel, Fuel Oil, Kerosene, Jet Fuel
- ○ Mixture of Refined Products (transmix or other mixture)
- ○ Other ⇨ Name: COMMODITY_DETAILS _____

☐ HVL or Other Flammable or Toxic Fluid which is a Gas at Ambient Conditions
- ○ Anhydrous Ammonia
- ○ LPG (Liquefied Petroleum Gas) / NGL (Natural Gas Liquid)
- ○ Other HVL ⇨ Name: COMMODITY_DETAILS _____

☐ CO_2 (Carbon Dioxide)

☐ Biofuel / Alternative Fuel (including ethanol blends)
- ○ Fuel Grade Ethanol
- ○ Biodiesel ⇨ Blend (e.g. B2, B20, B100): BLEND_DETAILS B/___/___/___/
- ○ 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: INTENTIONAL_RELEASE_BBLS /___/___/,/___/___/./___/___/ Barrels
(only reported for HVL and CO_2 Commodities)

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

A10. Were there fatalities? ○ Yes ○ No FATALITY_IND

If Yes, specify the number in each category:

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

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

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

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

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

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

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

If Yes, specify the number in each category:

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

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

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

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

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

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

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 /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

SYSTEM_PART_INVOLVED

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)*

SHUTDOWN_DATETIME

A17a. formerly A14.a Local time and date of shutdown /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

RESTART_DATETIME STILL_SHUTDOWN_IND

A17b. formerly A14.b Local time pipeline/facility restarted /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year ○ Still shut down*

**Supplemental Report required*

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

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

If No, skip A18b. and A18c

PARTY_INITIATED_COMMUNICATION

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

A18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication INITIAL_RESPONDER_COM_DATETIME /__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year

ON_SITE_DATETIME

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

CONFIRMED_DISCOVERY_DATETIME

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

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

/__/__/__/__/ Hour /__/__/ Month /__/__/ Day /__/__/ Year NRC_RPT_DATETIME

NRC_RPT_NUM

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

ADDITIONAL_NRC_REPORT_NUMBERS

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

IGNITE_IND

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

A22a. Local time of ignition / / / / / (Hour) / / (Month) / / (Day) / / (Year) IGNITE_DATETIME

HOW_EXTINGUISHED

A22b. How was the fire extinguished? HOW_EXTINGUISHED_OTHER_DETAIL

○ Operator/Contractor ○ Local/State/Federal Emergency Responder ○ Allowed to burn out ○ Other, specify:_____

CONSUMED_BY_FIRE_IN_BARRELS

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

EXPLODE_IND

A22d. formerly A16. 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:

UPSTREAM_ACTION_TAKEN UPSTREAM_OPRTNL_CNTRL_DETAIL

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:

UPSTREAM_VALVE_CLOSE_DATETIME

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

UPSTREAM_VALVE_TYPE_IND

A23c. formerly E5a Type of upstream valve used to initially isolate release source:

○ Manual ○ Automatic ○ Remotely Controlled

DOWNSTREAM_ACTION_TAKEN DOWNSTREAM_OPRTNL_CNTRL_DETAIL

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:

DOWNSTREAM_VLV_CLOSE_DATETIME

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

DOWNSTREAM_VALVE_TYPE_IND

A23f. formerly E5b 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:

NOTIFY_QUALIFIED_INDIV_IND

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

If Yes, answer A24b.

QUALIFIED_INDIV_NOTIF_DATETIME

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

OIL_SPILL_REMOVAL_ORG_IND

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

If Yes, answer A24d and e:

OSRO_ACTIVATED_DATETIME

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

OSRO_ARRIVED_ON_SITE_DT

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

NUM_PUB_EVACUATED

A25. formerly A17. Number of general public evacuated: / / / /,/ / / /

PART B – ADDITIONAL LOCATION INFORMATION

B1. formerly B7. Pipeline/Facility name: PIPE_FAC_NAME

B2. formerly B8. Segment name/ID: SEGMENT_NAME

If **Onshore**:

ONSHORE_STATE_ABBREVIATION

B3. State: /___/___/

ONSHORE_POSTAL_CODE

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

B5. ONSHORE_CITY_NAME City B6. ONSHORE_COUNTY_NAME County or Parish

DESIGNATED_LOCATION

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

DESIGNATED_NAME

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

FEDERAL

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

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

☐ 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)* INCIDENT_AREA_TYPE

☐ Tank, including attached appurtenances INCIDENT_AREA_SUBTYPE

☐ 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 _____ INCIDENT_AREA_DETAILS

DEPTH_OF_COVER

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 _____ INCIDENT_AREA_DETAILS

☐ Transition Area ⇨ Specify: ○ Soil/air interface ○ Wall sleeve ○ Pipe support or other close contact area ○ Other _____ INCIDENT_AREA_DETAILS

CROSSING

B12. Did the Accident occur in a crossing?: ○ Yes ○ No If B12 is Yes, specify type:

☐ Bridge crossing Specify: ○ Cased ○ Uncased BRIDGE_CROSSING_IND BRIDGE_TYPE

☐ Railroad crossing *(select all that apply)* ○ Cased ○ Uncased ○ Bored/drilled RAILROAD_CROSSING_IND, RAILROAD_TYPE

☐ Road crossing *(select all that apply)* ○ Cased ○ Uncased ○ Bored/drilled ROAD_CROSSING_IND ROAD_TYPE

☐ Water crossing

Specify: ○ Cased ○ Uncased WATER_CROSSING_IND WATER_CROSSING_TYPE

Name of body of water, if commonly known: WATER_NAME _____

WATER_DEPTH

Approx. water depth (ft) at the point of the Accident: /___/,/___/___/___/ OR ○ Unknown

(select only one of the following) ○ Shoreline/Bank/Marsh crossing WATER_SUBTYPE

○ 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

CROSSING_100_FEET

Is this water crossing 100 feet or more in length from high water mark to high water mark? ○ Yes ○ No

If **Offshore**:

OFF_WATER_DEPTH

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

OFF_ACCIDENT_ORIGIN

B14. Origin of Accident: ☐ In State waters

OFFSHORE_STATE_ABBREVIATION OFF_INSTATE_AREA OFF_INSTATE_BLOCK OFFSHORE_COUNTY_NAME

Specify: State:____ Area:_____Block/Tract #: /___/___/___/___/ Nearest County/Parish: _____

OCS_TYPE

☐ On the Outer Continental Shelf (OCS) *(select only one)* ○ OCS – Alaska ○ OCS- Atlantic ○ OCS-Gulf of Mexico ○ OCS – Pacific

OFF_OCS_AREA OFF_OCS_BLOCK

Specify: Area:_____ Block/Tract #: /___/___/___/___/

B15. Area of Accident: *(select only one)* OFF_AREA_ACCIDENT_TYPE

☐ 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

PART C – ADDITIONAL FACILITY INFORMATION

C1. Is the pipeline or facility: PIPE_FACILITY_TYPE
- ☐ Interstate
- ☐ Intrastate

C2. reserved

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

☐ Pipe ⇨ Specify: ITEM_INVOLVED_DETAILS PIPE_TYPE ○ Pipe Body ○ Pipe Seam

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

C3a. Nominal Pipe Size: PIPE_DIAMETER / / /./ / /

C3.b Wall thickness (in): PIPE_WALL_THICKNESS / /./ / /

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

C3d. Pipe specification: PIPE_SPECIFICATION OR ○ Unknown

C3e. Pipe Seam ⇨ Specify: PIPE_SEAM_TYPE ○ ERW - High Frequency ○ Single SAW ○ Flash Welded
○ ERW - Low Frequency ○ DSAW ○ Continuous Welded ○ Longitudinal ERW – Unknown Frequency
○ Furnace Butt Welded ○ Spiral Welded ○ Lap Welded ○ Seamless
○ Other, describe: PIPE_SEAM_DETAILS

C3f. Pipe manufacturer: PIPE_MANUFACTURER OR ○ Unknown

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

⇨ Specify: ○ Fusion Bonded Epoxy (FBE) ○ Coal Tar ○ Asphalt ○ Polyolefin ○ Extruded Polyethylene
○ Epoxy other than FBE ○ Cold Applied Tape ○ Paint ○ Composite ○ None ○ Other, describe: PIPE_COATING_DETAILS

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

☐ Weld, including heat-affected zone ⇨ Specify: WELD_SUBTYPE WELD_DETAILS ○ 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? DIFFERENT_GIRTH_WELD_IND ○ Yes ○ No

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

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

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

C3k. Pipe specification: DIFF_GIRTH_WELD_SPECIFICATION OR ○ Unknown

C3l. Pipe Seam ⇨ Specify: DIFF_GIRTH_WELD_SEAM_TYPE ○ ERW - High Frequency ○ Single SAW ○ Flash Welded
○ ERW - Low Frequency ○ DSAW ○ Continuous Welded ○ ERW – Unknown Frequency
○ Furnace Butt Welded ○ Spiral Welded ○ Lap Welded ○ Seamless
○ Other, describe: DIFF_GIRTH_WELD_SEAM_DETAIL

C3m. Pipe manufacturer: DIFF_GIRTH_WELD_MANUFACTURER OR ○ Unknown

C3n. Pipeline coating type at point of Accident DIFF_GIRTH_WELD_COATING_TYPE

⇨ Specify: ○ Fusion Bonded Epoxy (FBE) ○ Coal Tar ○ Asphalt ○ Polyolefin ○ Extruded Polyethylene
○ Epoxy other than FBE ○ Cold Applied Tape ○ Paint ○ Composite ○ None ○ Other, describe: DIFF_GIRTH_WELD_COATING_DETAIL

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

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

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

○ Relief Valve – including thermal and pressure. Report tank relief valves under the Tank/Vessel, Relief Valve
○ Auxiliary or Other Valve – report auxiliary valves on tanks under Tank/Vessel, Appurtenance

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

C3q. Type of pump PUMP_TYPE
- ϒ Positive displacement
- ϒ Centrifugal
- ϒ Gear
- ϒ Other (specify): PUMP_TYPE_DETAILS

C3r. Type of service PUMP_SERVICE_TYPE
- ϒ Mainline
- ϒ Injection
- ϒ Truck rack (if on terminal side of truck rack canopy)
- ϒ Other (specify): PUMP_SERVICE_TYPE_DETAILS

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

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

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_TYPE LEAK_TYPE_OTHER
☐ Leak ⇨ Select Type: O Pinhole O Crack O Connection Failure O Seal or Packing O Other
RUPTURE_ORIENT
☐ Rupture ⇨ Select Orientation: O Circumferential O Longitudinal O Other RUPTURE_DETAILS
RUPTURE_WIDTH RUPTURE_LENGTH
Approx. size: /__/__/__/./__/ in. (widest opening) by /__/__/__/__/./__/in. (length circumferentially or axially)
☐ Overfill or Overflow
☐ Other ⇨ Describe: RELEASE_TYPE_DETAILS

PART D – ADDITIONAL CONSEQUENCE INFORMATION

D1. Wildlife impact: O Yes O 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: O Yes O No SOIL_CONTAMINATION
D3. Long term impact assessment performed or planned: O Yes O No LONG_TERM_ASSESSMENT
D4. Anticipated remediation: O Yes O No (not needed) REMEDIATION_IND
D4a. If Yes, specify all that apply:
SURFACE_WATER_REMED_IND GROUNDWATER_REMED_IND SOIL_REMED_IND VEGETATION_REMED_IND WILDLIFE_REMED_IND
☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife
WATER_CONTAM_IND
D5. Water contamination: O Yes ⇨ *(Complete 5a – 5c below)* O No

D5a. Specify all that apply:
☐ Ocean/Seawater OCEAN_SEAWATER_IND

☐ Surface SURFACE_CONTAM_IND

☐ Groundwater GROUNDWATER_CONTAM_IND

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

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

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

COULD_BE_HCA

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

COMMODITY_REACHED_HCA

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 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:

EST_COST_OPER_PAID

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

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

EST_COST_PROP_DAMAGE

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

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

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

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

E2b. Date MOP established MAOP_ESTABLISHED_DATE

MAOP_REVERSAL_FLOW_IND

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

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

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

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

PRESSURE_RESTRICTION_IND

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

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

EXCEED_RESTRICTION_IND

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

PHMSA_RESTRICTION_IND

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

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

LENGTH_SEGMENT_ISOLATED

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

INTERNAL_INSPECTION_IND

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

- ☐ Yes
- ☐ No ⇨ Which physical features limit tool accommodation? *(select all that apply)*
  - ○ Changes in line pipe diameter DIAMETER_CHANGE_IND
  - ○ Presence of unsuitable mainline valves UNSUITABLE_MAINLINE_IND
  - ○ Tight or mitered pipe bends TIGHT_MITERED_IND
  - ○ Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.) OTHER_RESTRICTIONS_IND
  - ○ Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools) EXTRA_THICK_WALL_IND
  - ○ Other ⇨ Describe: OTHER_INSPECTION_IND INTERNAL_INSPECTION_DETAILS

OPERATION_COMPLICATIONS_IND

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

- ☐ No
- ☐ Yes ⇨ Which operational factors complicate execution? *(select all that apply)*
  - ○ Excessive debris or scale, wax, or other wall build-up EXCESS_DEBRIS_IND
  - ○ Low operating pressure(s) LOW_OP_PRESSURE_IND
  - ○ Low flow or absence of flow LOW_FLOW_IND
  - ○ Incompatible commodity INCOMPAT_COMMOD_IND
  - ○ Other ⇨ Describe: OTHER_COMPLICATIONS_IND INSPECT_COMP_DETAILS

PIPELINE_FUNCTION

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

- ☐ > 20% SMYS Regulated Transmission
- ☐ ≤ 20% SMYS Regulated Transmission
- ☐ > 20% SMYS Regulated Gathering
- ☐ ≤ 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? SCADA_IN_PLACE_IND

☐ No

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

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

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

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

CPM_IN_PLACE_IND

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

☐ No

☐ Yes ⇨ E10a. Was it operating at the time of the Accident? ○ Yes ○ No CPM_OPERATING_IND

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

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

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

E11. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a coL;O0.L/ntributing factor to the Accident? *(select only one)* INVESTIGATION_STATUS

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

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

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

INVESTIGATION_STATUS_DETAILS

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

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

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

INVEST_NO_SCHEDULE_IND_DETAILS

○ Investigation identified no control room issues INVEST_NO_CONTROL_ROOM_IND

○ Investigation identified no controller issues INVEST_NO_CONTROLLER_IND

○ Investigation identified incorrect controller action or controller error INVEST_INCORRECT_ACTION_IND

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

○ Investigation identified incorrect procedures INVEST_INCORRECT_PROCEDURE_IND

○ Investigation identified incorrect control room equipment operation INVEST_INCORRECT_CONTROL_IND

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

○ Investigation identified areas other than those above ⇨ Describe: INVEST_OTHER_IND, INVEST_OTHER_IND_DETAILS

PART F – DRUG & ALCOHOL TESTING INFORMATION

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

- ○ No
- ○ Yes ⇨ F1a. Specify how many were tested: /___/___/ NUM_EMPLOYEES_TESTED
  F1b. Specify how many failed: /___/___/ NUM_EMPLOYEES_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? CONTRACTOR_DRUG_TEST_IND

- ○ No
- ○ Yes ⇨ F2a. Specify how many were tested: /___/___/ NUM_CONTRACTORS_TESTED
  F2b. Specify how many failed: /___/___/ NUM_CONTRACTORS_FAILED

PART G – APPARENT CAUSE

CAUSE CAUSE_DETAILS

Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Accident in the narrative (PART H).

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

INTERNAL_EXTERNAL

☐ **External Corrosion**

1. Results of visual examination: VISUAL_EXAM_RESULTS
   - ○ Localized Pitting ○ General Corrosion
   - ○ Other VISUAL_EXAM_DETAILS

2. Type of corrosion: *(select all that apply)*
   GALVANIC_CORROSION_IND, ATMOSPHERE_CORROSION_IND STRAY_CURRENT_CORROSION_IND MICROBIOLOGICAL_CORROSION_IND SELECTIVE_SEAM_CORROSION_IND
   - ○ Galvanic ○ Atmospheric ○ Stray Current ○ Microbiological ○ Selective Seam
   - ○ Other OTHER_CORROSION_IND CORROSION_TYPE_DETAILS

   STRAY_CURRENT_TYPE
   2a. If 2 is Stray Current, specify ○ Alternating Current ○ Direct Current AND
   2b. Describe the stray current source: STRAY_CURRENT_DETAILS

3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)* FIELD_EXAM_BASIS_IND METALLURGICAL_BASIS_IND
   - ○ Field examination ○ Determined by metallurgical analysis
   - ○ Other OTHER_BASIS_IND CORROSION_BASIS_DETAILS

4. Was the failed item buried or submerged? UNDERGROUND_LOCATION
   - ○ Yes ⇨ 4a. Was failed item considered to be under cathodic protection at the time of the Accident? UNDER_CATHODIC_PROTECTION_IND
     - ○ Yes ⇨ Year protection started: /___/___/___/___/ CATHODIC_PRO_START_YEAR
     - ○ No

     4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident? SHIELDING_EVIDENT
     - ○ Yes ○ No

     CATHODIC_SURVEY_TYPE
     4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident? *(select all that apply)*
     CP_ANNUAL_SURVEY_IND ○ Yes, CP Annual Survey ⇨ Most recent year conducted: CP_ANNUAL_SURVEY_YEAR /___/___/___/___/
     CLOSE_INTERVAL_SURVEY_IND ○ Yes, Close Interval Survey ⇨ Most recent year conducted: CLOSE_INTERVAL_SURVEY_YEAR /___/___/___/___/
     OTHER_CP_SURVEY_IND ○ Yes, Other CP Survey ⇨ Most recent year conducted: OTHER_CP_SURVEY_YEAR /___/___/___/___/
     Describe other CP survey OTHER_CP_SURVEY_DETAILS
     - ○ No

   EXTERNALLY_COATED
   - ○ No ⇨ 4d. Was the failed item externally coated or painted? ○ Yes ○ No

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

G2 - Natural Force Damage - *only one **sub-cause** can be picked from shaded left-hand column

NATURAL_FORCE_TYPE

☐ **Earth Movement, NOT due to Heavy Rains/Floods**	EARTH_SUBTYPE 1. Specify: ○ Earthquake ○ Subsidence ○ Landslide ○ Other NF_OTHER_DETAILS
☐ **Heavy Rains/Floods**	HEAVY_RAINS_SUBTYPE 2. Specify: ○ Washout/Scouring ○ Flotation ○ Mudslide ○ Other NF_OTHER_DETAILS
☐ **Lightning**	LIGHTNING_SUBTYPE 3. Specify: ○ Direct hit ○ Secondary impact such as resulting nearby fires
☐ **Temperature**	TEMPERATURE_SUBTYPE 4. Specify: ○ Thermal Stress ○ Frost Heave ○ Frozen Components ○ Other NF_OTHER_DETAILS
☐ **High Winds**	
☐ **Tree/Vegetation Root**	
☐ **Snow/Ice impact or Accumulation**	
☐ **Other Natural Force Damage**	5. Describe: NF_OTHER_DETAILS

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

NF_EXTREME_WEATHER_IND

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

6a. If Yes, specify: (*select all that apply*) NF_HURRICANE_IND NF_TROPICAL_STORM_IND NF_TORNADO_IND
○ Hurricane ○ Tropical Storm ○ Tornado
○ Other NF_OTHER_IND NF_EXTREME_WEATHER_DETAILS

G3 – Excavation Damage - *only one **sub-cause** can be picked from shaded left-hand column

☐ **Excavation Damage by Operator (First Party)** PARTY_TYPE	
☐ **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.

PRIOR_NOTIFICATION_IND

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

ONE_CALL_SYSTEM_IND EXCAVATOR_IND CONTRACTOR_IND LANDOWNER_IND

1a. If Yes, Notification received from: *(select all that apply)* ○ One-Call System ○ Excavator ○ Contractor ○ Landowner

1b. Per the primary Accident Investigator results, did State law exempt the excavator from notifying the one-call center?

○ Yes ○ No ○ Unknown STATE_LAW_EXEMPT_IND

If yes, answer 1c through 1e. STATE_LAW_EXEMPT_TYPE

1c. select one of the following:

- ○ Excavator is exempt
- ○ Activity is exempt and did not exceed the limits of the exemption
- ○ Activity is exempt and exceeded the limits of the exemption
- ○ Other mandatory text field: STATE_LAW_EXEMPT_DETAIL

1d. Exempting authority: STATE_LAW_EXEMPT_AUTHORITY

1e. Exempting criteria: STATE_LAW_EXEMPT_CRITERIA

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

NOTIFY_CGA_DIRT

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

3. Right-of-Way where event occurred: *(select all that apply)*

PUBLIC_ROW_IND PUBLIC_SUBTYPE

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

PRIVATE_ROW_IND PRIVATE_SUBTYPE

☐ Private ⇨ Specify: ○ Private Landowner ○ Private Business ○ Private Easement

☐ Pipeline Property/Easement PIPELINE_EASEMENT_ROW_IND

☐ Power/Transmission Line POWER_TRANSMISSION_ROW_IND

☐ Railroad RAILROAD_ROW_IND

☐ Dedicated Public Utility Easement PUBLIC_UTIL_EASEMENT_ROW_IND

☐ Federal Land FEDERAL_LAND_ROW_IND

☐ Unknown/Other UNKNOWN_ROW_IND

JOINT_TRENCH_IND

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

CROSS_BORE_IND

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

6. Measured Depth from Grade DEPTH_OF_GRADE

○ Embedded in Concrete/Asphalt Pavement ○ <18" /46 cm ○ 18" – 36" /46 cm – 91 cm ○ > 36" / 91 cm

○ Measured depth From Grade_____in/cm DEPTH_OF_GRADE_DETAIL

7. Type of excavator: *(select only one)* EXCAVATOR_TYPE

○ Contractor ○ County ○ Developer ○ Farmer ○ Municipality ○ Occupant

○ Railroad ○ State ○ Utility ○ Unknown/Other

EXCAVATOR_EQUIPMENT

8. Type of excavation equipment: *(select only one)*

○ Auger ○ Backhoe/Trackhoe ○ Boring ○ Drilling ○ Directional Drilling

○ Explosives ○ Farm Equipment ○ Grader/Scraper ○ Hand Tools ○ Milling Equipment

○ Probing Device ○ Trencher ○ Vacuum Equipment ○ Bulldozer ○ Unknown/Other

WORK_PERFORMED

9. Type of work performed: *(select only one)*

○ Agriculture ○ Cable TV ○ Curb/Sidewalk ○ Building Construction ○ Building Demolition

○ Drainage ○ Driveway ○ Electric ○ Engineering/Surveying ○ Fencing

○ Grading ○ Irrigation ○ Landscaping ○ Liquid Pipeline ○ Milling

○ Natural Gas ○ Pole ○ Public Transit Authority ○ Railroad Maintenance ○ Road Work

○ Sewer (Sanitary/Storm) ○ Site Development ○ Steam ○ Storm Drain/Culvert ○ Street Light

○ Telecommunications ○ Traffic Signal ○ Traffic Sign ○ Water ○ Waterway Improvement

○ Data not collected ○ Unknown/Other

ONE_CALL_NOTIFIED_IND ONE_CALL_TICKET_NUM

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

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

ONE_CALL_CENTER_NAME

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

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

WHITE_LINED_IND

LOCATOR_TYPE

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

VISIBLE_MARKS

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

SERVICE_INTERRUPTION

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

SERVICE_INTERRUPTION_HOURS

11a. If Yes, specify duration of the interruption: /___/___/___/___/ hours

ROOT_CAUSE_CATEGORY

14. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well)*:

ROOT_CAUSE_TYPE

Notification Issue

☐ No notification made to the One-Call Center/811

☐ Excavator dug outside area described on ticket
☐ Excavator dug prior to valid start date/time
☐ Excavator dug after valid ticket expired
☐ Excavator provided incorrect notification information

Excavation Issue

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

Locating Issue

Facility not marked due to:
☐ Abandoned facility
☐ Incorrect facility records/maps
☐ Locator error
☐ No response from operator/contract locator
☐ Incomplete marks at damage location
☐ Tracer wire issue
☐ Unlocatable Facility

Facility marked inaccurately due to:
☐ Abandoned facility
☐ Incorrect facility records/maps
☐ Locator error
☐ Tracer wire issue

Miscellaneous Root Causes

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

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

OUTSIDE_FORCE_TYPE

☐ **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**	VEHICLE_SUBTYPE 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**	OSF_HURRICANE_IND OSF_TROPICAL_STORM_IND OSF_TORNADO_IND 2. Select one or more of the following IF an extreme weather event was a factor: ○ Hurricane ○ Tropical Storm ○ Tornado ○ Heavy Rains/Flood ○ Other OSF_OTHER_WEATHER_IND OSF_HEAVY_RAINS_IND OSF_OTHER_WEATHER_DETAILS
☐ **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: INTENTIONAL_SUBTYPE O Vandalism O Terrorism O Theft of transported commodity O Theft of equipment O Other INTENTIONAL_DETAILS
☐ **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? O Yes O No O 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? O Yes O No O Unknown

ESTIMATED_SPEED ESTIMATED_SPEED_UNKNOWN_IND
7. Estimated speed of the vehicle at the time of impact (miles per hour)?_____or O Unknown

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

VEHICLE_TRAVEL_FROM
9. Where did the vehicle travel from to hit the pipeline facility? (select only one)
O Roadway O Driveway O Parking Lot O Loading Dock O Off-Road

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

PROTECTIONS_INSTALLED_IND
11. At the time of the accident, were protections installed to protect the damaged pipeline facility from vehicular damage? O Yes O 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: *(select all that apply)*
   FIELD_EXAM_IND METALLURGICAL_IND
   ☐ Field Examination ☐ Determined by Metallurgical Analysis ☐ Other Analysis OTHER_ANALYSIS_IND OTHER_ANALYSIS_DETAILS
   STILL_UNDER_INVEST_IND
   ☐ Sub-cause is Tentative or Suspected; Still Under Investigation *(Supplemental Report required)*

FAILURE_TYPE

☐ **Design-, Construction-, Installation-, or Fabrication-related**

☐ **Original Manufacturing-related (NOT girth weld or other welds formed in the field)**

☐ **Environmental Cracking-related**

2. List contributing factors: *(select all that apply)* FAILURE_SUBTYPE
   ☐ Fatigue- or Vibration-related: FATIGUE_VIBR_RELATED
      ○ Mechanically induced prior to installation (such as during transport of pipe)
      ○ Mechanical Vibration
      ○ Pressure-related
      ○ Thermal
      ○ Other FATIGUE_VIBR_RELATED_OTHER
   ☐ Mechanical Stress MECHANICAL_STRESS
   ☐ Other OTHER_FACTOR OTHER_FACTOR_DETAILS

STRESS_SUBTYPE

3. Specify: ○ Stress Corrosion Cracking ○ Sulfide Stress Cracking
   ○ Hydrogen Stress Cracking ○ Hard Spot
   ○ Other STRESS_DETAILS

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

ADDITIONAL_CRACK_IND ADDITIONAL_DENT_IND, ADDITIONAL_GOUGE_IND, ADDITIONAL_PIPE_BEND_IND, ADDITIONAL_ARC_BURN_IND,

4. Additional factors: *(select all that apply)* ○ Dent ○ Gouge ○ Pipe Bend ○ Arc Burn ○ Crack ○ Lack of Fusion

ADDITIONAL_LACK_FUSION_IND ADDITIONAL_LAMINATION_IND ADDITIONAL_BUCKLE_IND ADDITIONAL_WRINKLE_IND

○ Lamination ○ Buckle ○ Wrinkle ○ Misalignment ○ Burnt Steel

PWF_ADDL_MISALIGNMENT_IND ADDITIONAL_BURNT_STEEL_IND

○ Other PWF_ADDITIONAL_OTHER_IND

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

EQ_FAILURE_TYPE

☐ **Malfunction of Control/Relief Equipment**	1. Specify: *(select all that apply)* 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 _____ OTHER_CONTROL_RELIEF_DETAILS INSTRUMENTATION_IND ○ Instrumentation BLOCK_VALVE_IND ○ Block Valve POWER_FAILURE_IND ○ Power Failure SCADA_IND ○ SCADA CHECK_VALVE_IND ○ Check Valve STOPPLE_CONTROL_FITTING_IND ○ Stopple/Control Fitting
☐ **Pump or Pump-related Equipment**	OTHER_PUMP_IND 2. Specify: ○ Seal/Packing Failure ○ Body Failure ○ Crack in Body ○ Appurtenance Failure ○ Other _____ OTHER_PUMP_DETAILS
☐ **Threaded Connection/Coupling Failure**	OTHER_STRIPPED_IND 3. Specify: ○ Pipe Nipple ○ Valve Threads ○ Mechanical Coupling ○ Threaded Pipe Collar ○ Threaded Fitting ○ Other _____ OTHER_STRIPPED_DETAILS
☐ **Non-threaded Connection Failure**	OTHER_NON_THREADED_IND 4. Specify: ○ O-Ring ○ Gasket ○ Seal (NOT pump seal) or Packing ○ Other _____ OTHER_NON_THREADED_DETAILS
☐ **Defective or Loose Tubing or Fitting**	
☐ **Failure of Equipment Body (except Pump), Tank Plate, or other Material**	
☐ **Other Equipment Failure**	5. Describe: _____ FAILURE_DETAILS

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

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

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

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

OPERATION_TYPE

☐ **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**	OVERFLOW_OTHER_IND 1. Specify: ○ Valve misalignment ○ Incorrect reference data/calculation ○ Miscommunication ○ Inadequate monitoring ○ Other OVERFLOW_OTHER_DETAILS
☐ **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: OPERATION_DETAILS

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

3. Was this Accident related to: *(select all that apply)*
   - ○ Inadequate procedure RELATED_INADEQUATE_PROC_IND
   - ○ No procedure established RELATED_NO_PROC_IND
   - ○ Failure to follow procedure RELATED_FAILURE_FOLLOW_IND
   - ○ Other: RELATED_OTHER_IND OPERATION_RELATED_DETAILS

4. What category type was the activity that caused the Accident: CATEGORY_TYPE
   - ○ Construction
   - ○ Commissioning
   - ○ Decommissioning
   - ○ Right-of-Way activities
   - ○ Routine maintenance
   - ○ Other maintenance
   - ○ Normal operating conditions
   - ○ Non-routine operating conditions (abnormal operations or emergencies)

OPERATOR_QUALIFICATION_IND

5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? ○ Yes ○ No

   5a. If Yes, were the individuals performing the task(s) qualified for the task(s)? QUALIFIED_INDIVIDUALS
   - ○ Yes, they were qualified for the task(s)
   - ○ No, but they were performing the task(s) under the direction and observation of a qualified individual
   - ○ No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual

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

☐ **Miscellaneous**	1. Describe: MISC_DETAILS
☐ **Unknown**	UNKNOWN_SUBTYPE 2. Specify: ○ Investigation complete, cause of Accident unknown. Mandatory comment field: INCIDENT_UNKNOWN_COMMENTS ○ 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?

O Yes O 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

O Axial Magnetic Flux Leakage

Most recent run Year: AXIAL_RECENT_YEAR

AXIAL_RCNT_PROPUL_METHOD

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

AXIAL_RCNT_ATTUNED_DETECT

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

O Other Describe: AXIAL_RCNT_ATND_DTCT_DTLS

AXIAL_RCNT_ATND_DTCT_METAL

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

O 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): O Free Swimming O Tethered

AXIAL_PREV_ATTUNED_DETECT

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

O Other Describe: AXIAL_PREV_ATND_DTCT_DTLS

AXIAL_PREV_ATND_DTCT_METAL

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

O Other Describe: AXIAL_PREV_ATT_DT_METAL_DTLS

CIR_TRN_WAVE_MGN_FLX_LKG_IND

O 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): O Free Swimming O Tethered

CIRC_WV_RCNT_RESOLUTION

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

O 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): O Free Swimming O Tethered

CIRC_WV_PREV_RESOLUTION

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

O Other Describe: CIRC_WV_PREV_RESOLUTION_DTLS

ULTRASONIC_IND

O Ultrasonic

Most recent run Year: ULTRASONIC_RECENT_YEAR

ULTRASONIC_RCNT_PROPUL_METHOD

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

ULTRASONIC_RCNT_ATTUNED

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

O Other Describe: ULTRA_RCNT_ATTUNEDD_DTLS

UTRA_RCNT_ATT_METL_RESOLUTION

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

O Standard Resolution O Other Describe: UTRA_RCNT_ATT_METL_RES_DTLS

Previous run Year: ULTR_PREVIOUS_YEAR

ULTRA_PREV_PROPUL_METHOD

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

ULTRA_PREV_ATTUNED

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

O Other Describe: ULTRA_PREV_ATTUNED_DTLS

UTRA_PREV_ATT_METL_RESOLUTION

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

O Standard Resolution O Other Describe: UTRA_PREV_ATT_METL_RES_DTLS

GEOMETRY_DEFORMATION_IND

O Geometry/Deformation

Most recent run Year: GEOMETRY_RECENT_YEAR

GEOMETRY_RCNT_PROPUL_METHOD

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

GEOMETRY_RCNT_RESOLUTION

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

O Other Describe: GEOMETRY_RCNT_RESOLUTION_DTLS

GEOMETRT_RCNT_MEASUR_CUPS

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

Previous run Year: GEOMETRY_PREVIOUS_YEAR

GEOMETRY_PREV_PROPUL_METHOD

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

GEOMETRY_PREV_RESOLUTION

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

O Other Describe: GEOMETRY_PREV_RESOLUTION_DTLS

GEOMETRT_PREV_MEASUR_CUPS

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

EMAT_IND
○ Electromagnetic Acoustic Transducer (EMAT)
Most recent run Year: EMAT_RECENT_YEAR EMAT_RCNT_PROPUL_METHOD
Most recent run Propulsion Method (select only one): ○ Free Swimming ○ Tethered
Previous run Year: EMAT_PREVIOUS_YEAR EMAT_PREV_PROPUL_METHOD
Previous run Propulsion Method (select only one): ○ Free Swimming ○ Tethered

CPCM_IND
○ Cathodic Protection Current Measurement (CPCM)
Most recent run Year: CPCM_RECENT_YEAR CPCM_RCNT_PROPUL_METHOD
Most recent run Propulsion Method (select only one): ○ Free Swimming ○ Tethered
Previous run Year: CPCM_PREVIOUS_YEAR CPCM_PREV_PROPUL_METHOD
Previous run Propulsion Method (select only one): ○ Free Swimming ○ Tethered

OTHER_TOOL_TECH_IND
○ Other, specify tool: OTHER_TOOL
Most recent run Year: OTHER_RECENT_YEAR OTHER_RCNT_PROPUL_METHOD
Most recent run Propulsion Method (select only one): ○ Free Swimming ○ Tethered
Previous run Year: OTHER_PREVIOUS_YEAR OTHER_PREV_PROPUL_METHOD
Previous run Propulsion Method (select only one): ○ Free Swimming ○ Tethered

Answer J1.b only when the cause is:
Previous Damage due to Excavation Activity (subCause in Part G3); or
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4)

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

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

HYDRTST_MOST_RCNT_YEAR HYDRTST_MOST_RCNT_PRESSURE
○ Yes ⇨ Most recent year tested: / / / / / Test pressure (psig): / / / / / /
○ No

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

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: / / / / /
DIRECT_ASMNT_PNT_NOT_IDNTF_YR
○ No

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, ASMNT_ECDA_RCNT_IND
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:

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

PART K – CONTRIBUTING FACTORS

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

External Corrosion
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
INTRNL_COR_EROSION_IND
☐ Internal Corrosion, Erosion

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

Natural Forces

- ☐ Earth Movement, NOT due to Heavy Rains/Floods NF_EARTH_MOVEMENT_IND
- ☐ Heavy Rains/Floods NF_HEAVY_RAINS_IND
- ☐ Lightning NF_LIGHTNING_IND
- ☐ Temperature NF_TEMPERATURE_IND
- ☐ High Winds NF_HIGH_WINDS_IND
- ☐ Tree/Vegetation Root NF_VEGITATION_ROOT_IND

Excavation Damage EXCVTN_DMG_OPERATOR_IND

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

Other Outside Force OSF_NEARBY_INDUSTRIAL_IND

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

Equipment Failure

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

Incorrect Operation IO_DAMAGE_BY_OPERATOR_IND

- ☐ Damage by Operator or Operator's Contractor NOT Excavationand NOT Vehicle/Equipment Damage IO_TANK_VESSEL_IND
- ☐ Tank, Vessel, or Sump/Separator Allowed or Caused to Overfillor Overflow IO_VALVE_POSITION_IND
- ☐ Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure IO_EQUIPMENT_OVERPRESSURE_IND
- ☐ Pipeline or Equipment Overpressured IO_NOT_INSTALLED_PROPERLY_IND
- ☐ Equipment Not Installed Properly IO_WRONG_EQUIPMENT_IND
- ☐ Wrong Equipment Specified or Installed
- ☐ Inadequate Procedure IO_INADEQUATE_PROCEDURE_IND
- ☐ No procedure established IO_NO_PROCEDURE_IND
- ☐ Failure to follow procedures IO_FOLLOW_PROCEDURE_IND

PART H – NARRATIVE DESCRIPTION OF THE ACCIDENT

NARRATIVE

PART I – PREPARER AND AUTHORIZED SIGNATURE

PREPARER_NAME
Preparer's Name (type or print)

PREPARER_TELEPHONE
Preparer's Telephone Number

PREPARER_TITLE
Preparer's Title (type or print)

PREPARER_EMAIL
Preparer's E-mail Address

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

AUTHORIZER_NAME
Authorized Signer's Name

PREPARED_DATE Date

AUTHORIZER_TELEPHONE
Authorized Signer Telephone Number

AUTHORIZER_TITLE
Authorized Signer's Title

AUTHORIZER_EMAIL
Authorized Signer's E-mail Address

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

Field Name	Field Name Description
DATAFILE_AS_OF	*Data as of date*
SIGNIFICANT	*Identify if record meets the significant criteria or not: If there was fatality, injury, or total property damage $50K or more in 1984 dollars, then SIGNIFICANT='YES', else SIGNIFICANT='NO'.*
IYEAR	*Year accident occurred, derived from accident date*
NET_LOSS_BBLS	*UNINTENTIONAL_RELEASE_BBLS – RECOVERED_BBLS*
EST_COST_OPER_PAID_CURRENT	*Converted Property Damage to Current Year dollars*
EST_COST_GAS_RELEASED_CURRENT	*Converted Property Damage to Current Year dollars*
EST_COST_PROP_DAMAGE_CURRENT	*Converted Property Damage to Current Year dollars*
EST_COST_EMERGENCY_CURRENT	*Converted Property Damage to Current Year dollars*
EST_COST_ENVIRONMENTAL_CURRENT	*Converted Property Damage to Current Year dollars*
EST_COST_OTHER_CURRENT	*Converted Property Damage to Current Year dollars*
TOTAL_COST_IN84	*Converted Property Damage to Year 1984 dollars*
TOTAL_COST_CURRENT	*Converted Property Damage to Current Year dollars*
MAP_CAUSE	*Cause by PHMSA for 20 year accident trending*
MAP_SUBCAUSE	*SubCause by PHMSA for 20 year accident trending*
SPILL_TYPE_CATEGORY	*Spill type category by PHMSA for accident trending; If there was fatality, injury, fire, explosion, water contamination, total property damage > $50K, or unintentional loss >= 5bbls, then SPILL_TYPE_CATEGORY='LARGE', else SPILL_TYPE_CATEGORY='SMALL'.*
SERIOUS	*Identify if record meets the SERIOUS criteria or not: If there was fatality or injury then SERIOUS = 'YES' else SERIOUS = 'NO'.*
IPE	*Impacting People or the Environment (IPE) - when commodity (A8) is crude oil, refined petroleum products, of biofuel, if either criterion 1 or 2 below is met, the accident counts as IPE : 1. Regardless of Location of Accident (B10): Fatality (A10) greater than zero; or Injury requiring in-patient hospitalization (A11) greater than zero; or Ignition (A22) = Yes; or Explosion (A22d) = Yes; or Evacuation (A25) greater than zero; or Wildlife impact (D1) = Yes; or Water contamination (D5a) = Ocean/Seawater,*

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