



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

ACCIDENT REPORT – HAZARDOUS LIQUID 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 10 hours per response (5 hours for a small release), 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 <http://www.phmsa.dot.gov/pipeline>. Note: Certain low consequence accidents only require the information indicated in the shaded fields.

PART A – KEY REPORT INFORMATION

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

*1. Operator's OPS-issued Operator Identification Number (OPID): / / / / / / /

*2. Name of Operator: _____

*3. Address of Operator:

*3.a _____
(Street Address)

*3.b _____
(City)

*3.c State: / /

*3.d Zip Code: / / / / / - / / / / /

*4. Local time (24-hr clock) and date of the Accident:

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

*5. Location of Accident:

Latitude: / / / . / / / / / /

Longitude: - / / / / . / / / / / /

6. National Response Center Report Number (if applicable):

/ / / / / / /

7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center (if applicable):

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

*8. 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: _____

☐ CO₂ (Carbon Dioxide)

☐ Biofuel / Alternative Fuel (including ethanol blends)

☐ Fuel Grade Ethanol

☐ Ethanol Blend ➡ % Ethanol: / / /

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

☐ Other ➡ Name: _____

*9. Estimated volume of commodity released unintentionally: / / / / / / / / / / Barrels

10. Estimated volume of intentional and/or controlled release/blowdown: / / / / / / / / / / Barrels

*11. Estimated volume of commodity recovered: / / / / / / / / / / Barrels

<p>*12. Were there fatalities? <input type="radio"/> Yes <input type="radio"/> No</p> <p>If Yes, specify the number in each category:</p> <p>*12.a Operator employees <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*12.b Contractor employees working for the Operator <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*12.c Non-Operator emergency responders <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*12.d Workers working on the right-of-way, but NOT associated with this Operator <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*12.e General public <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>12.f Total fatalities (sum of above) <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p>	<p>*13. Were there injuries requiring inpatient hospitalization? <input type="radio"/> Yes <input type="radio"/> No</p> <p>If Yes, specify the number in each category:</p> <p>*13.a Operator employees <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*13.b Contractor employees working for the Operator <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*13.c Non-Operator emergency responders <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*13.d Workers working on the right-of-way, but NOT associated with this Operator <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>*13.e General public <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p> <p>13.f Total injuries (sum of above) <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u></p>
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14. Was the pipeline/facility shut down due to the Accident?
☐ Yes ☐ No ➡ Explain: _____

If Yes, complete Questions 14.a and 14.b: *(use local time, 24-hr clock)*

14.a Local time and date of shutdown / / / / / / / /

Hour
Month
Day
Year

14.b Local time pipeline/facility restarted / / / / / / / /

Hour
Month
Day
Year

☐ Still shut down*
*(*Supplemental Report required)*

*15. Did the commodity ignite? ☐ Yes ☐ No

*16. Did the commodity explode? ☐ Yes ☐ No

17. Number of general public evacuated: / / / / / / /

18. Time sequence: *(use local time, 24-hour clock)*

18.a Local time Operator identified Accident / / / / / / / /

Hour
Month
Day
Year

18.b Local time Operator resources arrived on site / / / / / / / /

Hour
Month
Day
Year

PART C – ADDITIONAL FACILITY INFORMATION	
<p>*1. Is the pipeline or facility:</p> <p><input type="checkbox"/> Interstate</p> <p><input type="checkbox"/> Intrastate</p>	
<p>*2. Part of system involved in Accident: (select only one)</p> <p><input type="checkbox"/> Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances ➡ <input type="radio"/> Atmospheric or Low Pressure <input type="radio"/> Pressurized</p> <p><input type="checkbox"/> Onshore Terminal/Tank Farm Equipment and Piping</p> <p><input type="checkbox"/> Onshore Equipment and Piping Associated with Belowground Storage</p> <p><input type="checkbox"/> Onshore Pump/Meter Station Equipment and Piping</p> <p><input type="checkbox"/> Onshore Pipeline, Including Valve Sites</p> <p><input type="checkbox"/> Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping</p> <p><input type="checkbox"/> Offshore Pipeline, Including Riser and Riser Bend</p>	
<p>*3. Item involved in Accident: (select only one)</p> <p><input type="checkbox"/> Pipe ➡ Specify: <input type="radio"/> Pipe Body <input type="radio"/> Pipe Seam</p> <p>3.a Nominal diameter of pipe (in): <u> / / / / / / </u></p> <p>3.b Wall thickness (in): <u> / / / / / / </u></p> <p>3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): <u> / / / / / / </u></p> <p>3.d Pipe specification: _____</p> <p>3.e Pipe Seam ➡ Specify: <input type="radio"/> Longitudinal ERW - High Frequency <input type="radio"/> Single SAW <input type="radio"/> Flash Welded <input type="radio"/> Longitudinal ERW - Low Frequency <input type="radio"/> DSAW <input type="radio"/> Continuous Welded <input type="radio"/> Longitudinal ERW – Unknown Frequency <input type="radio"/> Furnace Butt Welded <input type="radio"/> Spiral Welded ERW <input type="radio"/> Spiral Welded SAW <input type="radio"/> Spiral Welded DSAW <input type="radio"/> Lap Welded <input type="radio"/> Seamless <input type="radio"/> Other _____</p> <p>3.f Pipe manufacturer: _____</p> <p>3.g Year of manufacture: <u> / / / / / </u></p> <p>3.h Pipeline coating type at point of Accident ➡ Specify: <input type="radio"/> Fusion Bonded Epoxy <input type="radio"/> Coal Tar <input type="radio"/> Asphalt <input type="radio"/> Polyolefin <input type="radio"/> Extruded Polyethylene <input type="radio"/> Field Applied Epoxy <input type="radio"/> Cold Applied Tape <input type="radio"/> Paint <input type="radio"/> Composite <input type="radio"/> None <input type="radio"/> Other _____</p> <p><input type="checkbox"/> Weld, including heat-affected zone ➡ Specify: <input type="radio"/> Pipe Girth Weld <input type="radio"/> Other Butt Weld <input type="radio"/> Fillet Weld <input type="radio"/> Other _____</p> <p><input type="checkbox"/> Valve <input type="radio"/> Mainline ➡ Specify: <input type="radio"/> Butterfly <input type="radio"/> Check <input type="radio"/> Gate <input type="radio"/> Plug <input type="radio"/> Ball <input type="radio"/> Globe <input type="radio"/> Other _____</p> <p>3.i Mainline valve manufacturer: _____</p> <p>3.j Year of manufacture: <u> / / / / / </u></p> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p><input type="radio"/> Relief Valve</p> <p><input type="radio"/> Auxiliary or Other Valve</p> <p><input type="checkbox"/> Pump</p> <p><input type="checkbox"/> Meter/Prover</p> <p><input type="checkbox"/> Scraper/Pig Trap</p> <p><input type="checkbox"/> Sump/Separator</p> <p><input type="checkbox"/> Repair Sleeve or Clamp</p> <p><input type="checkbox"/> Hot Tap Equipment</p> <p><input type="checkbox"/> Stopple Fitting</p> <p><input type="checkbox"/> Flange</p> <p><input type="checkbox"/> Relief Line</p> <p><input type="checkbox"/> Auxiliary Piping (e.g. drain lines)</p> <p><input type="checkbox"/> Tubing</p> <p><input type="checkbox"/> Instrumentation</p> <p><input type="checkbox"/> Tank/Vessel ➡ Specify: <input type="radio"/> Single Bottom System <input type="radio"/> Double Bottom System <input type="radio"/> Tank Shell <input type="radio"/> Chime <input type="radio"/> Roof/Roof Seal <input type="radio"/> Roof Drain System <input type="radio"/> Mixer <input type="radio"/> Pressure Vessel Head or Wall <input type="radio"/> Appurtenance <input type="radio"/> Other _____</p> <p><input type="checkbox"/> Other _____</p> </div>	
<p>4. Year item involved in Accident was installed: <u> / / / / / </u></p>	

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

☐ Carbon Steel

☐ Material other than Carbon Steel ➡ Specify: _____

*6. 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 – MAJOR CONSEQUENCE INFORMATION																	
<p>1. Wildlife impact: <input type="radio"/> Yes <input type="radio"/> No</p> <p>1.a If Yes, specify all that apply:</p> <p><input type="checkbox"/> Fish/aquatic</p> <p><input type="checkbox"/> Birds</p> <p><input type="checkbox"/> Terrestrial</p> <p>*2. Soil contamination: <input type="radio"/> Yes <input type="radio"/> No</p> <p>3. Long term impact assessment performed or planned: <input type="radio"/> Yes <input type="radio"/> No</p> <p>4. Anticipated remediation: <input type="radio"/> Yes <input type="radio"/> No (not needed)</p> <p>4.a If Yes, specify all that apply:</p> <p><input type="checkbox"/> Surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Soil <input type="checkbox"/> Vegetation <input type="checkbox"/> Wildlife</p> <p>*5. Water contamination: <input type="radio"/> Yes ➡ (Complete 5.a – 5.c below) <input type="radio"/> No</p> <p>*5.a Specify all that apply:</p> <p><input type="checkbox"/> Ocean/Seawater</p> <p><input type="checkbox"/> Surface</p> <p><input type="checkbox"/> Groundwater</p> <p><input type="checkbox"/> Drinking water ➡ (Select one or both) <input type="radio"/> Private Well <input type="radio"/> Public Water Intake</p> <p>*5.b Estimated amount released in or reaching water: / / / / / / / / / / Barrels</p> <p>*5.c Name of body of water, if commonly known: _____</p>	<p>*6. 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? <input type="radio"/> Yes <input type="radio"/> No</p> <p>*7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? <input type="radio"/> Yes <input type="radio"/> No</p> <p>7.a If Yes, specify HCA type(s): (select all that apply)</p> <p><input type="checkbox"/> Commercially Navigable Waterway Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program? <input type="radio"/> Yes <input type="radio"/> No</p> <p><input type="checkbox"/> High Population Area Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program? <input type="radio"/> Yes <input type="radio"/> No</p> <p><input type="checkbox"/> Other Populated Area Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program? <input type="radio"/> Yes <input type="radio"/> No</p> <p><input type="checkbox"/> 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? <input type="radio"/> Yes <input type="radio"/> No</p> <p><input type="checkbox"/> 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? <input type="radio"/> Yes <input type="radio"/> No</p>																
<p>*8. Estimated cost to Operator:</p> <table style="width: 100%;"> <tr> <td style="width: 60%;">8.a Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator</td> <td>\$ / / / / / / / / / / /</td> </tr> <tr> <td>8.b Estimated cost of commodity lost</td> <td>\$ / / / / / / / / / / /</td> </tr> <tr> <td>8.c Estimated cost of Operator’s property damage & repairs</td> <td>\$ / / / / / / / / / / /</td> </tr> <tr> <td>8.d Estimated cost of Operator’s emergency response</td> <td>\$ / / / / / / / / / / /</td> </tr> <tr> <td>8.e Estimated cost of Operator’s environmental remediation</td> <td>\$ / / / / / / / / / / /</td> </tr> <tr> <td>8.f Estimated other costs</td> <td>\$ / / / / / / / / / / /</td> </tr> <tr> <td>Describe _____</td> <td></td> </tr> <tr> <td>8.g Estimated total costs (sum of above)</td> <td>\$ / / / / / / / / / / /</td> </tr> </table>		8.a Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator	\$ / / / / / / / / / / /	8.b Estimated cost of commodity lost	\$ / / / / / / / / / / /	8.c Estimated cost of Operator’s property damage & repairs	\$ / / / / / / / / / / /	8.d Estimated cost of Operator’s emergency response	\$ / / / / / / / / / / /	8.e Estimated cost of Operator’s environmental remediation	\$ / / / / / / / / / / /	8.f Estimated other costs	\$ / / / / / / / / / / /	Describe _____		8.g Estimated total costs (sum of above)	\$ / / / / / / / / / / /
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Describe _____																	
8.g Estimated total costs (sum of above)	\$ / / / / / / / / / / /																

- *5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?

- ☐
- Yes
- \Rightarrow
- (Complete 5.a – 5.f below)

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

☐ No

☐ Yes ➡

6.a Was it operating at the time of the Accident? ☐ Yes ☐ No

6.b Was it fully functional at the time of the Accident? ☐ Yes ☐ No

6.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? ☐ Yes ☐ No

6.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? ☐ Yes ☐ No

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

☐ No

☐ Yes ➡

7.a Was it operating at the time of the Accident? ☐ Yes ☐ No

7.b Was it fully functional at the time of the Accident? ☐ Yes ☐ No

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

7.d Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? ☐ Yes ☐ No

*8. How was the Accident initially identified for the Operator? (select only one)

☐ CPM leak detection system or 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 _____

*8.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 employee

☐ Contractor working for the Operator

*9. 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

*1. 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 ➡ *1.a Specify how many were tested: / /

*1.b Specify how many failed: / /

*2. 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 ➡ *2.a Specify how many were tested: / /

*2.b Specify how many failed: / /

PART G – APPARENT CAUSE	<i>Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Accident in the narrative (PART H).</i>
G1 - Corrosion Failure – *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> External Corrosion	<p>*1. Results of visual examination: <input type="radio"/> Localized Pitting <input type="radio"/> General Corrosion <input type="radio"/> Other _____</p> <p>*2. Type of corrosion: <i>(select all that apply)</i> <input type="radio"/> Galvanic <input type="radio"/> Atmospheric <input type="radio"/> Stray Current <input type="radio"/> Microbiological <input type="radio"/> Selective Seam <input type="radio"/> Other _____</p> <p>*3. The type(s) of corrosion selected in Question 2 is based on the following: <i>(select all that apply)</i> <input type="radio"/> Field examination <input type="radio"/> Determined by metallurgical analysis <input type="radio"/> Other _____</p> <p>*4. Was the failed item buried under the ground? <input type="radio"/> Yes ⇨ *4.a Was failed item considered to be under cathodic protection at the time of the Accident? <input type="radio"/> Yes ⇨ Year protection started: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> <input type="radio"/> No *4.b Was shielding, tenting, or disbonding of coating evident at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No *4.c Has one or more Cathodic Protection Survey been conducted at the point of the Accident? <input type="radio"/> Yes, CP Annual Survey ⇨ Most recent year conducted: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> <input type="radio"/> Yes, Close Interval Survey ⇨ Most recent year conducted: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> <input type="radio"/> Yes, Other CP Survey ⇨ Most recent year conducted: <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> <input type="radio"/> No <input type="radio"/> No ⇨ 4.d Was the failed item externally coated or painted? <input type="radio"/> Yes <input type="radio"/> No</p> <p>*5. Was there observable damage to the coating or paint in the vicinity of the corrosion? <input type="radio"/> Yes <input type="radio"/> No</p>
<input type="checkbox"/> Internal Corrosion	<p>*6. Results of visual examination: <input type="radio"/> Localized Pitting <input type="radio"/> General Corrosion <input type="radio"/> Not cut open <input type="radio"/> Other _____</p> <p>*7. Cause of corrosion: <i>(select all that apply)</i> <input type="radio"/> Corrosive Commodity <input type="radio"/> Water drop-out/Acid <input type="radio"/> Microbiological <input type="radio"/> Erosion <input type="radio"/> Other _____</p> <p>*8. The cause(s) of corrosion selected in Question 7 is based on the following: <i>(select all that apply)</i> <input type="radio"/> Field examination <input type="radio"/> Determined by metallurgical analysis <input type="radio"/> Other _____</p> <p>*9. Location of corrosion: <i>(select all that apply)</i> <input type="radio"/> Low point in pipe <input type="radio"/> Elbow <input type="radio"/> Other _____</p> <p>*10. Was the commodity treated with corrosion inhibitors or biocides? <input type="radio"/> Yes <input type="radio"/> No</p> <p>11. Was the interior coated or lined with protective coating? <input type="radio"/> Yes <input type="radio"/> No</p> <p>12. Were cleaning/dewatering pigs (or other operations) routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No</p> <p>13. Were corrosion coupons routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No</p>
<p>Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.</p> <p>14. List the year of the most recent inspections:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> 14.a API Std 653 Out-of-Service Inspection <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> 14.b API Std 653 In-Service Inspection <u> </u> / <u> </u> / <u> </u> / <u> </u> / <u> </u> </div> <div style="width: 45%;"> <input type="radio"/> No Out-of-Service Inspection completed <input type="radio"/> No In-Service Inspection completed </div> </div>	

Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.

15. Has one or more internal inspection tool collected data at the point of the Accident?

☐ Yes ☐ No

15.a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

- ☐ Magnetic Flux Leakage Tool / / / / /
- ☐ Ultrasonic / / / / /
- ☐ Geometry / / / / /
- ☐ Caliper / / / / /
- ☐ Crack / / / / /
- ☐ Hard Spot / / / / /
- ☐ Combination Tool / / / / /
- ☐ Transverse Field/Triaxial / / / / /
- ☐ Other _____ / / / / /

16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?

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

☐ No

17. Has one or more Direct Assessment been conducted on this 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

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

☐ Yes ☐ No

18.a. If Yes, for each examination conducted since January 1, 2002, 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 _____ / / / / /

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

<input type="checkbox"/> Earth Movement, NOT due to Heavy Rains/Floods	1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide <input type="radio"/> Other _____
<input type="checkbox"/> Heavy Rains/Floods	2. Specify: <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other _____
<input type="checkbox"/> Lightning	3. Specify: <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires
<input type="checkbox"/> Temperature	4. Specify: <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave <input type="radio"/> Frozen Components <input type="radio"/> Other _____
<input type="checkbox"/> High Winds	
<input type="checkbox"/> 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

*6.a. 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 Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.**

1. Has one or more internal inspection tool collected data at the point of the Accident?
☐ Yes ☐ No

1.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

☐ Magnetic Flux Leakage / / / / /
☐ Ultrasonic / / / / /
☐ Geometry / / / / /
☐ Caliper / / / / /
☐ Crack / / / / /
☐ Hard Spot / / / / /
☐ Combination Tool / / / / /
☐ Transverse Field/Triaxial / / / / /
☐ Other _____ / / / / /

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

3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?

☐ Yes ➔ Most recent year tested: / / / / /
Test pressure (psig): / / / , / / / /
☐ No

4. Has one or more 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

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

☐ Yes ☐ No

5.a If Yes, for each examination conducted since January 1, 2002, 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 _____ / / / / /

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

6. Did the Operator get prior notification of the excavation activity? ☐ Yes ☐ No

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

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

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

*8. 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
- ☐ Data not collected
- ☐ Unknown/Other

*9. Type of excavator: (select only one)

- ☐ Contractor ☐ County ☐ Developer ☐ Farmer ☐ Municipality ☐ Occupant
- ☐ Railroad ☐ State ☐ Utility ☐ Data not collected ☐ Unknown/Other

*10. 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 ☐ Data not collected ☐ Unknown/Other

*11. 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

*12. Was the One-Call Center notified? ☐ Yes ☐ No

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

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

*13. Type of Locator: ☐ Utility Owner ☐ Contract Locator ☐ Data not collected ☐ Unknown/Other

*14. Were facility locate marks visible in the area of excavation? ☐ No ☐ Yes ☐ Data not collected ☐ Unknown/Other

*15. Were facilities marked correctly? ☐ No ☐ Yes ☐ Data not collected ☐ Unknown/Other

*16. Did the damage cause an interruption in service? ☐ No ☐ Yes ☐ Data not collected ☐ Unknown/Other

*16.a If Yes, specify duration of the interruption: / / / / / hours

(This CGA-DIRT section continued on next page with Question 17.)

*17. 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):

☐ One-Call Notification Practices Not Sufficient: (select only one)

- ☐ No notification made to the One-Call Center
- ☐ Notification to One-Call Center made, but not sufficient
- ☐ Wrong information provided

☐ Locating Practices Not Sufficient: (select only one)

- ☐ Facility could not be found/located
- ☐ Facility marking or location not sufficient
- ☐ Facility was not located or marked
- ☐ Incorrect facility records/maps

☐ Excavation Practices Not Sufficient: (select only one)

- ☐ Excavation practices not sufficient (other)
- ☐ Failure to maintain clearance
- ☐ Failure to maintain the marks
- ☐ Failure to support exposed facilities
- ☐ Failure to use hand tools where required
- ☐ Failure to verify location by test-hole (pot-holing)
- ☐ Improper backfilling

☐ One-Call Notification Center Error

☐ Abandoned Facility

☐ Deteriorated Facility

☐ Previous Damage

☐ Data Not Collected

☐ Other / None of the Above (explain)

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

<input type="checkbox"/> Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Accident																			
<input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation	1. Vehicle/Equipment operated by: (<i>select only one</i>) <input type="radio"/> Operator <input type="radio"/> Operator's Contractor <input type="radio"/> Third Party																		
<input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring	2. Select one or more of the following IF an extreme weather event was a factor: <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other _____																		
<input type="checkbox"/> Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation																			
<input type="checkbox"/> Electrical Arcing from Other Equipment or Facility																			
<input type="checkbox"/> Previous Mechanical Damage NOT Related to Excavation	<p>Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.</p> <p>3. Has one or more internal inspection tool collected data at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:</p> <table style="width: 100%;"> <tr><td><input type="radio"/> Magnetic Flux Leakage</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Ultrasonic</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Geometry</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Caliper</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Crack</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Hard Spot</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Combination Tool</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Transverse Field/Triaxial</td><td>____/____/____/____/____</td></tr> <tr><td><input type="radio"/> Other _____</td><td>____/____/____/____/____</td></tr> </table> <p>4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? <input type="radio"/> Yes <input type="radio"/> No</p> <p>5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?</p> <p><input type="radio"/> Yes ➔ Most recent year tested: ____/____/____/____/____ Test pressure (psig): ____/____/____/____/____/____</p> <p><input type="radio"/> No</p> <p>6. Has one or more Direct Assessment been conducted on the pipeline segment?</p> <p><input type="radio"/> Yes, and an investigative dig was conducted at the point of the Accident ➔ Most recent year conducted: ____/____/____/____/____</p> <p><input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ➔ Most recent year conducted: ____/____/____/____/____</p> <p><input type="radio"/> No</p> <p>(This section continued on next page with Question 7.)</p>	<input type="radio"/> Magnetic Flux Leakage	____/____/____/____/____	<input type="radio"/> Ultrasonic	____/____/____/____/____	<input type="radio"/> Geometry	____/____/____/____/____	<input type="radio"/> Caliper	____/____/____/____/____	<input type="radio"/> Crack	____/____/____/____/____	<input type="radio"/> Hard Spot	____/____/____/____/____	<input type="radio"/> Combination Tool	____/____/____/____/____	<input type="radio"/> Transverse Field/Triaxial	____/____/____/____/____	<input type="radio"/> Other _____	____/____/____/____/____
<input type="radio"/> Magnetic Flux Leakage	____/____/____/____/____																		
<input type="radio"/> Ultrasonic	____/____/____/____/____																		
<input type="radio"/> Geometry	____/____/____/____/____																		
<input type="radio"/> Caliper	____/____/____/____/____																		
<input type="radio"/> Crack	____/____/____/____/____																		
<input type="radio"/> Hard Spot	____/____/____/____/____																		
<input type="radio"/> Combination Tool	____/____/____/____/____																		
<input type="radio"/> Transverse Field/Triaxial	____/____/____/____/____																		
<input type="radio"/> Other _____	____/____/____/____/____																		

G5 - Material Failure of Pipe or Weld	Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld." *Only one sub-cause can be picked from shaded left-hand column
1. The sub-cause selected below is based on the following: <i>(select all that apply)</i> <input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis _____ <input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation <i>(Supplemental Report required)</i>	
<input type="checkbox"/> Construction-, Installation-, or Fabrication-related <input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field)	2. List contributing factors: <i>(select all that apply)</i> <input type="checkbox"/> Fatigue- or Vibration-related: <input type="radio"/> Mechanically-induced prior to installation (such as during transport of pipe) <input type="radio"/> Mechanical Vibration <input type="radio"/> Pressure-related <input type="radio"/> Thermal <input type="radio"/> Other _____ <input type="checkbox"/> Mechanical Stress <input type="checkbox"/> Other _____
<input type="checkbox"/> Environmental Cracking-related	3. Specify: <input type="radio"/> Stress Corrosion Cracking <input type="radio"/> Sulfide Stress Cracking <input type="radio"/> Hydrogen Stress Cracking <input type="radio"/> Other _____
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected. *4. Additional factors: <i>(select all that apply)</i> <input type="radio"/> Dent <input type="radio"/> Gouge <input type="radio"/> Pipe Bend <input type="radio"/> Arc Burn <input type="radio"/> Crack <input type="radio"/> Lack of Fusion <input type="radio"/> Lamination <input type="radio"/> Buckle <input type="radio"/> Wrinkle <input type="radio"/> Misalignment <input type="radio"/> Burnt Steel <input type="radio"/> Other _____ *5. Has one or more internal inspection tool collected data at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No *5.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: <input type="radio"/> Magnetic Flux Leakage Tool / / / / / <input type="radio"/> Ultrasonic / / / / / <input type="radio"/> Geometry / / / / / <input type="radio"/> Caliper / / / / / <input type="radio"/> Crack / / / / / <input type="radio"/> Hard Spot / / / / / <input type="radio"/> Combination Tool / / / / / <input type="radio"/> Transverse Field/Triaxial / / / / / <input type="radio"/> Other _____ / / / / / *6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident? <input type="radio"/> Yes ➡ Most recent year tested: / / / / / Test pressure (psig): / / / / / <input type="radio"/> No *7. Has one or more Direct Assessment been conducted on the pipeline segment? <input type="radio"/> Yes, and an investigative dig was conducted at the point of the Accident ➡ Most recent year conducted: / / / / / <input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ➡ Most recent year conducted: / / / / / <input type="radio"/> No *8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002? <input type="radio"/> Yes <input type="radio"/> No *8.a If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: <input type="radio"/> Radiography / / / / / <input type="radio"/> Guided Wave Ultrasonic / / / / / <input type="radio"/> Handheld Ultrasonic Tool / / / / / <input type="radio"/> Wet Magnetic Particle Test / / / / / <input type="radio"/> Dry Magnetic Particle Test / / / / / <input type="radio"/> Other _____ / / / / /	

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

<input type="checkbox"/> Malfunction of Control/Relief Equipment	1. Specify: <i>(select all that apply)</i> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="radio"/> Control Valve <input type="radio"/> Communications <input type="radio"/> Relief Valve <input type="radio"/> ESD System Failure <input type="radio"/> Other _____ </div> <div style="width: 33%;"> <input type="radio"/> Instrumentation <input type="radio"/> Block Valve <input type="radio"/> Power Failure </div> <div style="width: 33%;"> <input type="radio"/> SCADA <input type="radio"/> Check Valve <input type="radio"/> Stopple/Control Fitting </div> </div>
<input type="checkbox"/> Pump or Pump-related Equipment	2. Specify: <input type="radio"/> Seal/Packing Failure <input type="radio"/> Body Failure <input type="radio"/> Crack in Body <input type="radio"/> Appurtenance Failure <input type="radio"/> Other _____
<input type="checkbox"/> Threaded Connection/Coupling Failure	3. Specify: <input type="radio"/> Pipe Nipple <input type="radio"/> Valve Threads <input type="radio"/> Mechanical Coupling <input type="radio"/> Threaded Pipe Collar <input type="radio"/> Threaded Fitting <input type="radio"/> Other _____
<input type="checkbox"/> Non-threaded Connection Failure	4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT pump seal) or Packing <input type="radio"/> Other _____
<input type="checkbox"/> Defective or Loose Tubing or Fitting	
<input type="checkbox"/> Failure of Equipment Body (except Pump), Tank Plate, or other Material	
<input type="checkbox"/> Other Equipment Failure	*5. Describe: _____ _____

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
- ☐ 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
- ☐ Other _____

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

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

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

*5.a 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

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

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

