

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: 1/31/2023



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, 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/forms/pipeline-forms>.

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:
(only reported for HVL and CO₂ Commodities) /_/_/_/_/_/_/_/ / Barrels

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

12. Were there fatalities? Yes No
If Yes, specify the number in each category:
12.a Operator employees / / / / / /
12.b Contractor employees
working for the Operator / / / / / /
12.c Non-Operator
emergency responders / / / / / /
12.d Workers working on the
right-of-way, but NOT
associated with this Operator / / / / / /
12.e General public / / / / / /
12.f Total fatalities (sum of above) / / / / / /

13. Were there injuries requiring inpatient hospitalization? Yes No
If Yes, specify the number in each category:
13.a Operator employees / / / / / /
13.b Contractor employees
working for the Operator / / / / / /
13.c Non-Operator
emergency responders / / / / / /
13.d Workers working on the
right-of-way, but NOT
associated with this Operator / / / / / /
13.e General public / / / / / /
13.f Total injuries (sum of above) / / / / / /

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 / / / / / / / / / / / / / / / / / / Still shut down*
Hour Month Day Year (**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 failure / / / / / / / / / / / / / / / / / /
Hour Month Day Year
18.b Local time Operator resources arrived on site / / / / / / / / / / / / / / / / / /
Hour Month Day Year

PART B – ADDITIONAL LOCATION INFORMATION

*1. Was the origin of the Accident onshore?

Yes (*Complete Questions 2-12*) No (*Complete Questions 13-15*)

If Onshore:

2. State: / / /

3. Zip Code: / / / - / / / /

4. _____ City _____ 5. _____ County or Parish

6. Operator-designated location: (*select only one*)

Milepost/Valve Station (*specify in shaded area below*)

Survey Station No. (*specify in shaded area below*)

/ / / / / / / / / / / / / / / / / /

7. Pipeline/Facility name: _____

8. Segment name/ID: _____

9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)? Yes No

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

Totally contained on Operator-controlled property

Originated on Operator-controlled property, but then flowed or migrated off the property

Pipeline right-of-way

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

Tank, including attached appurtenances

Underground ⇨ Specify: Under soil

Under a building Under pavement

Exposed due to excavation

In underground enclosed space (e.g., vault)

Other _____

Depth-of-Cover (in): / / / / / /

Aboveground ⇨ Specify:

Typical aboveground facility piping or appurtenance

Overhead crossing

In or spanning an open ditch

Inside a building Inside other enclosed space

Other _____

Transition Area ⇨ Specify: Soil/air interface Wall

sleeve Pipe support or other close contact area

Other _____

12. Did Accident occur in a crossing?: Yes No

If Yes, specify type below:

Bridge crossing ⇨ Specify: Cased Uncased

Railroad crossing ⇨ (*select all that apply*)

Cased Uncased Bored/drilled

Road crossing ⇨ (*select all that apply*)

Cased Uncased Bored/drilled

Water crossing

⇨ Specify: Cased Uncased

Name of body of water, if commonly known: _____

Approx. water depth (ft) at the point of the Accident:

/ / / / /

(*select only one of the following*)

Shoreline/Bank crossing

Below water, pipe in bored/drilled crossing

Below water, pipe buried below bottom (NOT in bored/drilled crossing)

Below water, pipe on or above bottom

If Offshore:

13. Approximate water depth (ft.) at the point of the Accident:

/ / / / /

14. Origin of Accident:

In State waters

⇨ Specify: State: / / / /

Area: _____

Block/Tract #: / / / / / /

Nearest County/Parish: _____

On the Outer Continental Shelf (OCS)

⇨ Specify: Area: _____

Block #: / / / / / /

15. Area of Accident: (*select only one*)

Shoreline/Bank 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

1. Is the pipeline or facility:

- Interstate
- Intrastate

2. Part of system involved in Accident: *(select only one)*

- Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances ⇨ Atmospheric or Low Pressure
 Pressurized
- 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

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

- Pipe ⇨ Specify: Pipe Body Pipe Seam

3.a Nominal diameter of pipe (in): / / / / / / / / /

3.b Wall thickness (in): / / / / / / / /

3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / / / / / /

3.d Pipe specification: _____

- 3.e Pipe Seam ⇨ Specify: Longitudinal ERW - High Frequency Single SAW Flash Welded
 Longitudinal ERW - Low Frequency DSAW Continuous Welded
 Longitudinal ERW - Unknown Frequency Furnace Butt Welded
 Spiral Welded ERW Spiral Welded SAW Spiral Welded DSAW
 Lap Welded Seamless Other _____

3.f Pipe manufacturer: _____

3.g Year of manufacture: / / / / /

3.h Pipeline coating type at point of Accident

- ⇨ Specify: Fusion Bonded Epoxy Coal Tar Asphalt Polyolefin
 Extruded Polyethylene Field Applied Epoxy Cold Applied Tape Paint
 Composite None Other _____

- Weld, including heat-affected zone ⇨ Specify: Pipe Girth Weld Other Butt Weld Fillet Weld Other _____

If Pipe Girth Weld is selected, complete items 3.a. through h. above. If the values differ on either side of the girth weld, enter one value in 3.a. through h. and list the different value(s) in Part H - Narrative Description of the Accident.

- Valve Mainline ⇨ Specify: Butterfly Check Gate Plug Ball Globe
 Other _____

3.i Mainline valve manufacturer: _____

3.j Year of manufacture: / / / / /

- Relief Valve
- Auxiliary or Other Valve

- Pump
- Meter/Prover
- Scraper/Pig Trap
- Sump/Separator
- Repair Sleeve or Clamp
- Hot Tap Equipment
- Stopple Fitting
- Flange
- Relief Line
- Auxiliary Piping (e.g. drain lines)
- Tubing
- Instrumentation

- Tank/Vessel ⇨ Specify: Single Bottom System Double Bottom System Tank Shell Chime
 Roof/Roof Seal Roof Drain System Mixer Pressure Vessel Head or Wall
 Appurtenance Other _____

Other _____

4. Year item involved in Accident was installed: / / / / /

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: /_/ /_/ /_/ /_/ /_/. (axial) by /_/ /_/ /_/ /_/ /_/. (circumferential)
 Leak ⇨ Select Type: Pinhole Crack Connection Failure Seal or Packing Other
 Rupture ⇨ Select Orientation: Circumferential Longitudinal Other _____
 Approx. size: /_/ /_/ /_/ /_/ /_/. (widest opening) by /_/ /_/ /_/ /_/ /_/. (length circumferentially or axially)
 Overfill or Overflow
 Other ⇨ Describe: _____

PART D – ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact: Yes No

1.a If Yes, specify all that apply:

- Fish/aquatic
 Birds
 Terrestrial

2. Soil contamination: Yes No

3. Long term impact assessment performed or planned: Yes No

4. Anticipated remediation: Yes No (not needed)

4.a If Yes, specify all that apply:

- Surface water Groundwater Soil Vegetation Wildlife

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

5.a Specify all that apply:

- Ocean/Seawater
 Surface
 Groundwater
 Drinking water ⇨ *(Select one or both)* Private Well Public Water Intake

5.b Estimated amount released in or reaching water: /_/ /_/ /_/ /_/ /_/ /_/ /_/ /_/ / Barrels

5.c Name of body of water, if commonly known: _____

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? Yes No

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

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

- Commercially Navigable Waterway
 Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
 Yes No
- High Population Area
 Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
 Yes No
- Other Populated Area
 Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
 Yes No
- Unusually Sensitive Area (USA) – Drinking Water
 Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
 Yes No
- Unusually Sensitive Area (USA) – Ecological
 Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
 Yes No

8. Estimated Property Damage:

8.a Estimated cost of public and non-Operator private property damage

\$ / / / / / / / / / / / / / / /

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 Total estimated property damage (sum of above)

\$ / / / / / / / / / / / / / / /

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):

/ / / / / / / /

2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):

/ / / / / / / /

3. Describe the pressure on the system or facility relating to the Accident: (select only one)

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

4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), 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)

4.a Did the pressure exceed this established pressure restriction?
4.b Was this pressure restriction mandated by PHMSA or the State?

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

- No
Yes -> (Complete 5.a - 5.e below)

5.a Type of upstream valve used to initially isolate release source:

5.b Type of downstream valve used to initially isolate release source:

5.c Length of segment initially isolated between valves (ft):

5.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
Presence of unsuitable mainline valves
Tight or mitered pipe bends
Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)
Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
Other -> Describe:

5.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
Low operating pressure(s)
Low flow or absence of flow
Incompatible commodity
Other -> Describe:

5.f Function of pipeline system: (select only one)

- > 20% SMYS Regulated Trunkline/Transmission
<= 20% SMYS Regulated Trunkline/Transmission
> 20% SMYS Regulated Gathering
<= 20% SMYS Regulated Gathering

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

Local Operating Personnel, including contractors

Air Patrol

Ground Patrol by Operator or its contractor

Notification from Public

Notification from Emergency Responder

Notification from Third Party that caused the Accident

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

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

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

External Corrosion

1. Results of visual examination:
- Localized Pitting General Corrosion
- Other _____
2. Type of corrosion: *(select all that apply)*
- Galvanic Atmospheric Stray Current Microbiological Selective Seam
- Other _____
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*
- Field examination Determined by metallurgical analysis
- Other _____
4. Was the failed item buried under the ground?
- Yes ⇒ 4.a Was failed item considered to be under cathodic protection at the time of the Accident?
- Yes ⇒ Year protection started: / / / / /
- No
- 4.b Was shielding, tenting, or disbonding of coating evident at the point of the Accident?
- Yes No
- 4.c Has one or more Cathodic Protection Survey been conducted at the point of the Accident?
- Yes, CP Annual Survey ⇒ Most recent year conducted: / / / / /
- Yes, Close Interval Survey ⇒ Most recent year conducted: / / / / /
- Yes, Other CP Survey ⇒ Most recent year conducted: / / / / /
- No
- No ⇒ 4.d Was the failed item externally coated or painted? Yes No
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?
- Yes No

<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>
--	---

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.

14. List the year of the most recent inspections:
- | | | |
|--|-----------|--|
| 14.a API Std 653 Out-of-Service Inspection | / / / / / | <input type="radio"/> No Out-of-Service Inspection completed |
| 14.b API Std 653 In-Service Inspection | / / / / / | <input type="radio"/> No In-Service Inspection completed |

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:
- | | |
|--|-----------|
| <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 _____ | / / / / / |
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:
- | | |
|--|-----------|
| <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 _____ | / / / / / |

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

<input type="checkbox"/> Excavation Damage by Operator (First Party)	
<input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party)	
<input type="checkbox"/> Excavation Damage by Third Party	

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.

- Has one or more internal inspection tool collected data at the point of the Accident?
 Yes No
 - If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

<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 _____	_____
- Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? Yes No
- 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
- 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

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	<p>1. Vehicle/Equipment operated by: (<i>select only one</i>)</p> <p><input type="radio"/> Operator <input type="radio"/> Operator's Contractor <input type="radio"/> Third Party</p>
<input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring	<p>2. Select one or more of the following IF an extreme weather event was a factor:</p> <p><input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado</p> <p><input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other _____</p>
<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> <p><input type="radio"/> Magnetic Flux Leakage <u> / / / / / / </u></p> <p><input type="radio"/> Ultrasonic <u> / / / / / / </u></p> <p><input type="radio"/> Geometry <u> / / / / / / </u></p> <p><input type="radio"/> Caliper <u> / / / / / / </u></p> <p><input type="radio"/> Crack <u> / / / / / / </u></p> <p><input type="radio"/> Hard Spot <u> / / / / / / </u></p> <p><input type="radio"/> Combination Tool <u> / / / / / / </u></p> <p><input type="radio"/> Transverse Field/Triaxial <u> / / / / / / </u></p> <p><input type="radio"/> Other _____ <u> / / / / / / </u></p> <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: <u> / / / / / / </u> Test pressure (psig): <u> / / /, / / / / / </u></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: <u> / / / / / / </u></p> <p><input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ⇒ Most recent year conducted: <u> / / / / / / </u></p> <p><input type="radio"/> No</p> <p><i>(This section continued on next page with Question 7.)</i></p>

	<p>7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002? <input type="radio"/> Yes <input type="radio"/> No</p> <p>7.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:</p> <p><input type="radio"/> Radiography <u> / / / / / </u></p> <p><input type="radio"/> Guided Wave Ultrasonic <u> / / / / / </u></p> <p><input type="radio"/> Handheld Ultrasonic Tool <u> / / / / / </u></p> <p><input type="radio"/> Wet Magnetic Particle Test <u> / / / / / </u></p> <p><input type="radio"/> Dry Magnetic Particle Test <u> / / / / / </u></p> <p><input type="radio"/> Other _____ <u> / / / / / </u></p>
<input type="checkbox"/> Intentional Damage	<p>8. Specify:</p> <p><input type="radio"/> Vandalism <input type="radio"/> Terrorism</p> <p><input type="radio"/> Theft of transported commodity <input type="radio"/> Theft of equipment</p> <p><input type="radio"/> Other _____</p>
<input type="checkbox"/> Other Outside Force Damage	<p>9. Describe: _____</p>

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	

<p>1. The sub-cause selected below is based on the following: <i>(select all that apply)</i></p> <p><input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis _____</p> <p><input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation <i>(Supplemental Report required)</i></p>	
<input type="checkbox"/> Construction-, Installation-, or Fabrication-related	<p>2. List contributing factors: <i>(select all that apply)</i></p> <p><input type="checkbox"/> Fatigue- or Vibration-related:</p> <p><input type="radio"/> Mechanically-induced prior to installation (such as during transport of pipe)</p> <p><input type="radio"/> Mechanical Vibration</p> <p><input type="radio"/> Pressure-related</p> <p><input type="radio"/> Thermal</p> <p><input type="radio"/> Other _____</p> <p><input type="checkbox"/> Mechanical Stress</p> <p><input type="checkbox"/> Other _____</p>
<input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field)	
<input type="checkbox"/> Environmental Cracking-related	
<p>3. Specify: <input type="radio"/> Stress Corrosion Cracking <input type="radio"/> Sulfide Stress Cracking</p> <p><input type="radio"/> Hydrogen Stress Cracking <input type="radio"/> Other _____</p>	

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

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

Lamination Buckle Wrinkle Misalignment Burnt Steel

Other _____

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

5.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 _____ / / / / /

6. 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

7. 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

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

Yes 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:

Radiography / / / / /

Guided Wave Ultrasonic / / / / /

Handheld Ultrasonic Tool / / / / /

Wet Magnetic Particle Test / / / / /

Dry Magnetic Particle Test / / / / /

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> <input type="radio"/> Control Valve <input type="radio"/> Instrumentation <input type="radio"/> SCADA <input type="radio"/> Communications <input type="radio"/> Block Valve <input type="radio"/> Check Valve <input type="radio"/> Relief Valve <input type="radio"/> Power Failure <input type="radio"/> Stopple/Control Fitting <input type="radio"/> ESD System Failure <input type="radio"/> Other _____
<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* <i>(*Supplemental Report required)</i>

PART H – NARRATIVE DESCRIPTION OF THE ACCIDENT

(Attach additional sheets as necessary)

PART I – PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name (type or print)

Preparer's Telephone Number

Preparer's Title (type or print)

Preparer's E-mail Address

Preparer's Facsimile Number

Authorized Signer's Name

Date

Authorized Signer Telephone Number

Authorized Signer's Title

Authorized Signer's E-mail Address