

NOTICE: This report is required by 49 CFR Part 191. 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.

Form Approved
 OMB NO: 2137-0522
 Expires: ~~2/22/10/31/2018~~



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

**INCIDENT REPORT –
 NATURAL AND OTHER GAS TRANSMISSION
 AND GATHERING 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 2137-0522. 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 <http://www.phmsa.dot.gov/pipeline/library/forms>.

PART A – KEY REPORT INFORMATION

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

Last Revision Date _____

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 Incident:
 / / / / / / / / / /
 Hour Month Day Year

6. National Response Center Report Number:
 / / / / / / / / / /

5. Location of Incident:
 Latitude: / / / . / / / / / / / /
 Longitude: - / / / / / . / / / / / / / /

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

8. Incident resulted from:
 Unintentional release of gas
 Intentional release of gas
 Reasons other than release of gas

9. Gas released: (select only one, based on predominant volume released)
 Natural Gas
 Propane Gas
 Synthetic Gas
 Hydrogen Gas
 Landfill Gas
 Other Gas ➡ Name: _____

10. Estimated volume of gas released unintentionally: / / / / / / / / / / Thousand Cubic Feet (MCF)

11. Estimated volume of intentional and controlled release/blowdown: / / / / / / / / / / Thousand Cubic Feet (MCF)

12. Estimated volume of accompanying liquid released: / / / / / / / / / / Barrels

PART C – ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:
 Interstate
 Intrastate

2. Part of system involved in Incident: *(select only one)*
 Belowground Storage, Including Associated Equipment and Piping
 Aboveground Storage, Including Associated Equipment and Piping
 Onshore Compressor Station Equipment and Piping
 Onshore Regulator/Metering Station Equipment and Piping
 Onshore Pipeline, Including Valve Sites
 Offshore Platform, Including Platform-mounted Equipment and Piping
 Offshore Pipeline, Including Riser and Riser Bend

3. Item involved in Incident: *(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 Incident
 ⇨ 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 Incident.
 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
 Compressor
 Meter
 Scraper/Pig Trap
 Separator/Separator Filter
 Strainer/Filter
 Dehydrator/Drier/Treater
 Regulator/Control Valve
 Drip/Drip Collection Device
 Pulsation Bottle
 Cooler
 Repair Sleeve or Clamp
 Hot Tap Equipment
 Stopple Fitting
 Flange
 Relief Line
 Auxiliary Piping (e.g. drain lines)
 Tubing
 Instrumentation
 Underground Gas Storage or Cavern
 Pressure Vessel
 Other _____

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

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

No

Yes ⇒

6.a Was it operating at the time of the Incident?

Yes No

6.b Was it fully functional at the time of the Incident?

Yes No

6.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?

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 Incident?

Yes No

7. How was the Incident initially identified for the Operator? (select only one)

SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations)

Static Shut-in Test or Other Pressure or Leak Test

Controller

Air Patrol

Notification from Public

Notification from Third Party that caused the Incident

Local Operating Personnel, including contractors

Ground Patrol by Operator or its contractor

Notification from Emergency Responder

Other _____

7.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 7, specify the following: (select only one)

Operator employee Contractor working for the Operator

8. 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 Incident? (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 Incident

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 Incident, 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 Incident, 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: / / /

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| | |
|---|--|
| PART G – APPARENT CAUSE | <p>Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Incident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Incident in the narrative (PART H).</p> |
| <p>G1 - Corrosion Failure – *only one sub-cause can be picked from shaded left-hand column</p> | |
| <p><input type="checkbox"/> External Corrosion</p> | <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: (select all that apply) <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: (select all that apply) <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 incident? <input type="radio"/> Yes ⇒ Year protection started: ____/____/____/____/____ <input type="radio"/> No</p> <p>4.b Was shielding, tenting, or disbonding of coating evident at the point of the incident? <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.c Has one or more Cathodic Protection Survey been conducted at the point of the incident? <input type="radio"/> Yes, CP Annual Survey ⇒ Most recent year conducted: ____/____/____/____/____ <input type="radio"/> Yes, Close Interval Survey ⇒ Most recent year conducted: ____/____/____/____/____ <input type="radio"/> Yes, Other CP Survey ⇒ Most recent year conducted: ____/____/____/____/____ <input type="radio"/> No</p> <p><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> |
| <p><input type="checkbox"/> Internal Corrosion</p> | <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: (select all that apply) <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: (select all that apply) <input type="radio"/> Field examination <input type="radio"/> Determined by metallurgical analysis <input type="radio"/> Other _____</p> <p>9. Location of corrosion: (select all that apply) <input type="radio"/> Low point in pipe <input type="radio"/> Elbow <input type="radio"/> Drop-out <input type="radio"/> Other _____</p> <p>10. Was the gas/fluid 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 Incident" (from PART C, Question 3) is Pipe or Weld.

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

14.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 _____ / / / / /

15. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?
 Yes ⇒ Most recent year tested: / / / / / Test pressure (psig): / / / / /
 No

16. Has one or more Direct Assessment been conducted on this segment?
 Yes, and an investigative dig was conducted at the point of the Incident ⇒ Most recent year conducted: / / / / /
 Yes, but the point of the Incident was not identified as a dig site ⇒ Most recent year conducted: / / / / /
 No

17. Has one or more non-destructive examination been conducted at the point of the Incident since January 21, 2002?
 Yes No

17.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 Incident generated in conjunction with an extreme weather event? Yes No
 6.a If Yes, specify: (select all that apply) Hurricane Tropical Storm Tornado
 Other _____

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 Incident | | | | | | | | | | | | | | | | | | | |
| <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 Incident" (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 Incident? <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%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;"><input type="radio"/> Magnetic Flux Leakage</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Ultrasonic</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Geometry</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Caliper</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Crack</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Hard Spot</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Combination Tool</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Transverse Field/Triaxial</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</td> </tr> <tr> <td style="padding-left: 20px;"><input type="radio"/> Other</td> <td style="text-align: right; padding-right: 20px;">/ / / / /</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 Incident?</p> <p style="padding-left: 20px;"><input type="radio"/> Yes ⇨ Most recent year tested: / / / / / Test pressure (psig): / / / / /</p> <p style="padding-left: 20px;"><input type="radio"/> No</p> <p>6. Has one or more Direct Assessment been conducted on the pipeline segment?</p> <p style="padding-left: 20px;"><input type="radio"/> Yes, and an investigative dig was conducted at the point of the Incident ⇨ Most recent year conducted: / / / / /</p> <p style="padding-left: 20px;"><input type="radio"/> Yes, but the point of the Incident was not identified as a dig site ⇨ Most recent year conducted: / / / / /</p> <p style="padding-left: 20px;"><input type="radio"/> No</p> <p><i>(This section continued on next page with Question 7.)</i></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 | / / / / / | | | | | | | | | | | | | | | | | | |

| | |
|--|---|
| | <p>7. Has one or more non-destructive examination been conducted at the point of the Incident 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> |

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| G5 - Material Failure of Pipe or Weld | Use this section to report material failures ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is "Pipe" or "Weld." |
| Only one sub-cause can be picked from shaded left-hand column | |

1. The sub-cause selected below is based on the following: *(select all that apply)*

Field Examination Determined by Metallurgical Analysis Other Analysis _____

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

| | |
|--|--|
| <input type="checkbox"/> Construction-, Installation-, or Fabrication-related | 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"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field) | |

| | |
|--|---|
| <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 *(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 Incident? Yes 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 Incident?
 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 Incident Most recent year conducted: ____/____/____/____/____
 Yes, but the point of the incident 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 Incident 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:

| | |
|--|--------------------------|
| <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> <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"/> Pressure Regulator <input type="radio"/> ESD System Failure <input type="radio"/> Other _____ |
| <input type="checkbox"/> Compressor or Compressor-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"/> Pressure Vessel 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 compressor seal) or Packing <input type="radio"/> Other _____ |
| <input type="checkbox"/> Defective or Loose Tubing or Fitting | |
| <input type="checkbox"/> Failure of Equipment Body (except Compressor), Vessel 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 gas/fluid
 - 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"/> Underground Gas Storage, Pressure Vessel, or Cavern Allowed or Caused to Overpressure | 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 an 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 Incident 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 Incident:
- 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 Incident 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 Incident 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 Incident unknown <input type="radio"/> Still under investigation, cause of Incident to be determined* (*Supplemental Report required) |

PART H – NARRATIVE DESCRIPTION OF THE INCIDENT

(Attach additional sheets as necessary)

Lined area for narrative description of the incident.

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 Name

Date

Authorized Signer Telephone Number

Authorized Signer Title

Authorized Signer E-mail Address