

 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration	INCIDENT REPORT TYPE R (Reporting-Regulated) GAS GATHERING 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 2137-0635. Public reporting for this collection of information is estimated to be approximately 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.		

INSTRUCTIONS

Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at <http://www.phmsa.dot.gov/pipeline/library/forms>

PART A – KEY REPORT INFORMATION Report Type: (select all that apply) Original Supplemental Final

- A1. Operator's OPS-issued Operator Identification Number (OPID): _____
- A2. Name of Operator: auto-populated based on OPID
- A3. Address of Operator:
 - A3a. Street Address: auto-populated based on OPID
 - A3b. City: auto-populated based on OPID
 - A3c. State: auto-populated based on OPID
 - A3d. Zip Code: auto-populated based on OPID
- A4. Earliest local time (24-hr clock) and date an incident reporting criteria was met:
 - _____ / _____ / _____ / _____
 - Hour Month Day Year
- A4a. Time Zone for local time (select only one) Alaska Eastern Central Hawaii-Aleutian Mountain Pacific.
- A4b. Daylight Saving in effect? Yes No
- A5. Location of Incident:
 - Latitude: _____ . _____
 - Longitude: - _____ . _____
- A6. Gas released: (select only one, based on predominant volume released)
 - Natural Gas
 - Landfill Gas
 - Other Gas ➞ Name: _____
- A7. Estimated volume of gas released unintentionally: _____ / _____ / _____ / _____ / thousand standard cubic feet (mcf)
- A8. Estimated volume of intentional and controlled release/blowdown : _____ / _____ / _____ / _____ / thousand standard cubic feet (mcf)
- A9. Estimated volume of accompanying liquid released: _____ / _____ / _____ / Barrels

A10. Were there fatalities? Yes No

If Yes, specify the number in each category:

- A10a. Operator employees / / / / /
- A10b. Contractor employees working for the Operator / / / / /
- A10c. Non-Operator emergency responders / / / / /
- A10d. Workers working on the right-of-way, but NOT associated with this Operator / / / / /
- A10e. General public / / / / /
- A10f. Total fatalities (sum of above) *calculated*

A11. Were there injuries requiring inpatient hospitalization? Yes No

If Yes, specify the number in each category:

- A11a. Operator employees / / / / /
- A11b. Contractor employees working for the Operator / / / / /
- A11c. Non-Operator emergency responders / / / / /
- A11d. Workers working on the right-of-way, but NOT associated with this Operator / / / / /
- A11e. General public / / / / /
- A11f. Total injuries (sum of above) *calculated*

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

- 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 Incident Other _____

A12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (*select only one*)

- Operator employee
- Contractor working for the Operator

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

A14. Part of system involved in Incident: (*select only one*)

- 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

A15. Operational Status at time Operator identified failure (*select only one*)

- Post-Construction Commissioning
- Post-Maintenance/Repair
- Routine Start-Up
- Routine Shutdown
- Normal Operation, includes pauses during maintenance
- Idle

A16. If A15 = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the incident?

- Yes No Explain: _____

If Yes, complete Questions A16.a and A16.b: (*use local time, 24-hr clock*)

A16a. Local time and date of shutdown / / / / Hour Month Day Year

A16b. Local time pipeline/facility restarted / / / / Hour Month Day Year Still shut down* **Supplemental Report required*

If A12. = Notification from Emergency Responder skip A17.

A17a. Did the operator communicate with Local, State, or Federal Emergency Responders about the incident? Yes No

If No, skip A17b and c.

A17b. Which party initiated communication about the incident? Operator Local/State/Federal Emergency Responder

A17c. Local time of initial Operator and Local/State/Federal Emergency Responder communication / / / / Hour Month Day Year

A18. Local time operator resources arrived on site / / / / Hour Month Day Year

A19. Reserved

PART B – ADDITIONAL LOCATION INFORMATION

B1. Type R Gas Gathering is always Onshore. *Auto-populated based on A14*
 Yes

B1a. Pipeline/Facility name: _____

B1b. Segment name/ID: _____

B2. State: / / / B3. Zip Code: / / / / / - / / / / /

B4 _____ B5 _____
City County or Parish

B6. Operator designated location: (*select only one*)
 Milepost (*specify in shaded area below*)
 Survey Station No. (*specify in shaded area below*)
 Not Applicable (B7 will not accept data)

B7.

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B8. Was Incident on Federal land, other than the Outer Continental Shelf (OCS)? Yes No

B9. Location of Incident: (*select only one*) Operator-controlled property Pipeline right-of-way

B10. Area of Incident (as found): (*select only one*)

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

B10a. Depth-of-Cover (in): / / / / /

B10.b. Were other underground facilities found within 12 inches of the failure location? Yes No

- 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 _____

B11. Did Incident occur in a crossing? Yes No If Yes, specify type:

- Bridge crossing Specify: Cased Uncased
- Railroad crossing (*select all that apply*) Cased Uncased Bored/drilled
- Road crossing (*select all that apply*) Cased Uncased Bored/drilled
- Water crossing

Specify: Cased Uncased

Name of body of water, if commonly known: _____

Approx. water depth (ft) at the point of the Incident: / / / / / OR Unknown
(*select only one of the following*)

- Shoreline/Bank/Marsh 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

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

PART C – ADDITIONAL FACILITY INFORMATION

C1. Is the pipeline or facility: *(select only one)*

- Interstate
- Intrastate

C2. Material involved in Incident: *(select only one)*

- Carbon Steel
- Plastic
- Composite Metallic Reinforced
- Composite Non-Metallic Reinforced
- Other ⇨ *Specify: _____

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

- Pipe ⇨ Specify: Pipe Body Pipe Seam C3a. Nominal Pipe Size: / / / / / / / / /

If Pipe Body: Was this a Puddle/Spot Weld? Yes No

If C2. is Carbon Steel

C3b. Wall thickness (in): / ./ / / / /

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

C3d. Pipe specification: _____ OR Unknown

C3e. Pipe Seam ⇨ Specify: Longitudinal ERW - High Frequency Single SAW Flash Welded DSAW

Longitudinal ERW - Low Frequency Continuous Welded Furnace Butt Welded

Longitudinal ERW – Unknown Frequency

Spiral Welded Lap Welded Seamless Other _____

C3f. Pipe manufacturer: _____ OR Unknown

C3g. Pipeline coating type at point of Incident

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

C3h. Coating field applied? Yes No Unknown

If C2. is Plastic

C3i. If Plastic ⇨ Specify type: Polyvinyl Chloride (PVC) Polyethylene (PE) Cross-linked Polyethylene (PEX)

Polybutylene (PB) Polypropylene (PP) Acrylonitrile Butadiene Styrene (ABS)

Polyamide (PA) Cellulose Acetate Butyrate (CAB)

Unknown Other: mandatory text field_

C3j. If Plastic ⇨ Specify Standard Dimension Ratio (SDR): / / / / / / or wall thickness: / ./ / / / / or Unknown

C3k. If Polyethylene (PE) is selected as the type of plastic in C3j, specify PE Pipe Material Designation Code (i.e., 2406, 3408, etc.)
 PE / / / / / / or Unknown

Weld/Fusion, including heat-affected zone ⇨

Specify: Pipe Girth Weld Pipe Plastic Fusion Other Butt Weld Fillet Weld

If Pipe Girth Weld is selected, complete items C3.a through h above.

Are any of the C3b through h values different on either side of the girth weld? Yes No

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

C3l. Wall thickness (in): / ./ / / / /

C3m. SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / ./ / / / /

C3n. Pipe specification: _____ OR Unknown

C3o. 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 Lap Welded

Seamless Other, describe: _____

C3p. Pipe manufacturer: _____ OR Unknown

C3q. Pipeline coating type at point of Accident

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

C3r. Coating field applied? Yes No Unknown

If Plastic Pipe Fusion is selected, complete items C3.a and c3.i through k above.

Valve, excluding Regulator/Control Valves

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

C3s. Mainline valve manufacturer: _____ OR Unknown

Relief Valve

Auxiliary or Other Valve

Compressor, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Meter, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Scraper/Pig Trap, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Odorization System, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Filter/Strainer/Separator, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Dehydrator/Drier/Treater/Scrubber, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Regulator/Control Valve, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Pulsation Bottle or Drip/Drip Collection Device

Cooler or Heater, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Repair Sleeve or Clamp

Hot Tap Equipment

Tap Fitting (stopple, thread-o-ring, weld-o-let, etc.)

Flange Assembly, including Gaskets

ESD System, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.

Drain Lines

Tubing, including Fittings

C3t. Tubing material (select only one):

Stainless steel

Carbon steel

Copper

Other

C3u. Type of tubing (select only one):

Rigid

Flexible

Instrumentation, including Programmable Logic Controllers and Controls

Other _____

C4. Year item involved in Incident was installed: / / / / / / OR Unknown

C5. Year item involved in Incident was manufactured: / / / / / / OR Unknown

C6. Type of release 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)

Other ⇨ *Describe: _____

PART D – ADDITIONAL CONSEQUENCE INFORMATION

D1. Class Location of Incident: *(select only one)*

- Class 1 Location
- Class 2 Location

D2. Estimated Property Damage:

D2a. Estimated cost of public and non-Operator private property damage \$ / / / ,/ / / ,/ / / /
D2b. Estimated cost of Operator's property damage & repairs \$ / / / ,/ / / ,/ / / /
D2c. Estimated cost of emergency response \$ / / / ,/ / / ,/ / / /
D2d. Estimated other costs \$ / / / ,/ / / ,/ / / /

Describe: _____

D2e. Total estimated property damage (sum of above) \$ *calculated*

Cost of Gas Released

Cost of Gas in \$ per thousand standard cubic feet (mcf): _____

D2f. Estimated cost of gas released unintentionally \$ *calculated*
D2g. Estimated cost of gas released during intentional and controlled blowdown \$ *calculated*
D2h. Total estimated cost of gas released (sum of 7.f & 7.g above) \$ *calculated*
D2i. Estimated Total Cost (sum of D7e and D7h) \$ *calculated*

Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D3.***

D3. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization: _____

If a person is included in D3, do not include them in D4.

D4. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident: _____

Buildings Affected

D5. Number of residential buildings affected (evacuated or required repair or gas service interrupted): _____

D6. Number of business buildings affected (evacuated or required repair or gas service interrupted): _____

D7. Wildlife impact: Yes No

D7a. If Yes, specify all that apply:

- Fish/aquatic
- Birds
- Terrestrial

PART E – ADDITIONAL OPERATING INFORMATION

- E1. Estimated pressure at the point and time of the Incident (psig): _____
- E1a. Estimated gas flow in pipe segment at the point and time of the incident (MSCF/D): _____
- E2. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig) : _____ or Not Determined
- E3-E5 Reserved

If A14. is "Onshore Pipeline, Including Valve Sites", answer E6 through E8.

- E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft): _____

E7 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: _____

E8 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: _____

E9 Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Incident?

- No
- Yes ⇨
- E9.a Was it operating at the time of the Incident? Yes No
- E9.b Was it fully functional at the time of the Incident? Yes No
- E9.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the initial indication of the Incident? Yes No
- E9.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Incident? Yes No

E10 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 – RESERVED

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. Enter secondary, contributing, or root causes of the Incident in Part K – Contributing Factors.

PART G – APPARENT CAUSE

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

External Corrosion

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

Internal Corrosion

6. Results of visual examination:
 Localized Pitting General Corrosion Not cut open
 Other _____
7. Cause of corrosion: *(select all that apply)*
 Corrosive Commodity Water drop-out/Acid
 Microbiological Erosion
 Other _____
8. The cause(s) of corrosion selected in Question 7 is based on the following: *(select all that apply)*
 Field examination Determined by metallurgical analysis
 Other _____
9. Location of corrosion: *(select all that apply)*
 Low point in pipe Elbow Drop-out Dead-Leg
 Other _____
10. Was the gas/fluid treated with corrosion inhibitors or biocides?
 Yes No
11. Was the interior coated or lined with protective coating?
 Yes No
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?
 Not applicable - Not mainline pipe Yes No
13. Were corrosion coupons routinely utilized?
 Not applicable - Not mainline pipe Yes No

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

- Earth Movement, NOT due to Heavy Rains/Floods**
 - 1. Specify: Earthquake Subsidence Landslide
 Other _____
- Heavy Rains/Floods**
 - 2. Specify: Washout/Scouring Flotation Mudslide
 Other _____
- Lightning**
 - 3. Specify: Direct hit Secondary impact such as resulting nearby fires
- Temperature**
 - 4. Specify: Thermal Stress Frost Heave
 Frozen Components Other

- High Winds**
- Trees/Vegetation Roots**
- Snow/Ice impact or Accumulation**
- Other Natural Force Damage**
 - 5. Describe: _____

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

6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event? Yes No
- 6a. If Yes, specify: *(select all that apply)* Hurricane Tropical Storm Tornado
 Other _____

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

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

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

1. Did the operator get prior notification of the excavation activity? Yes No
 - 1a. If Yes, Notification received from: *(select all that apply)* One-Call System Excavator Contractor Landowner
 - 1b. Per the primary Incident Investigator results, did State law exempt the excavator from notifying the one-call center?
 Yes No Unknown
 - If yes, answer 1c. through 1e.
 - 1c. select one of the following:
 Excavator is exempt
 Activity is exempt and did not exceed the limits of the exemption
 Activity is exempt and exceeded the limits of the exemption
 Other mandatory text field: _____
 - 1d. Exempting authority _____
 - 1e. Exempting criteria _____
2. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)? Yes No
3. Right-of-Way where event occurred: *(select all that apply)*
 - Public ⇨ Specify: City Street State Highway County Road Interstate Highway Other
 - Private ⇨ Specify: Private Landowner Private Business Private Easement
 - Pipeline Property/Easement Power/Transmission Line Railroad
 - Dedicated Public Utility Easement Federal Land Unknown/Other
4. Was the facility part of a Joint Trench? Yes No
5. Did this event involve a Cross Bore? Yes No
6. Measured Depth from Grade *(select only one)*
 - Embedded in Concrete/Asphalt Pavement <18 inches 18 – 36 inches > 36 inches
 - Measured depth from grade _____ inches
7. Type of excavator: *(select only one)*
 - Contractor County Developer Farmer Municipality Occupant
 - Railroad State Utility Unknown/Other
8. Type of excavation equipment: *(select only one)*
 - Auger Backhoe/Trackhoe Boring Drilling Directional Drilling
 - Explosives Farm Equipment Grader/Scraper Hand Tools Milling Equipment
 - Probing Device Trencher Vacuum Equipment Bulldozer Unknown/Other
9. Type of work performed: *(select only one)*
 - Agriculture Cable TV Curb/Sidewalk Building Construction Building Demolition
 - Drainage Driveway Electric Engineering/Surveying Fencing
 - Grading Irrigation Landscaping Liquid Pipeline Milling
 - Natural Gas Pole Public Transit Authority Railroad Maintenance Road Work
 - Sewer (Sanitary/Storm) Site Development Steam Storm Drain/Culvert Street Light
 - Telecommunications Traffic Signal Traffic Sign Water Waterway Improvement
 - Data not collected Unknown/Other
10. Was the One-Call Center notified? Yes No If No, skip to question 11
 - 10a. If Yes, specify ticket number: _____
 - 10b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified: _____
 - 10c. Was work area white lined? No Yes Unknown
11. Type of Locator: Facility Owner Contract Locator Unknown/Other
12. Were facility locate marks visible in the area of excavation? No Yes Unknown
13. Did the damage cause an interruption in service? No Yes Unknown/Other
 - 13a. If Yes, specify duration of the interruption: ____/____/____/____/ hours

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

Notification Issue

- No notification made to the One-Call Center/811
- Excavator dug outside area described on ticket
- Excavator dug prior to valid start date/time
- Excavator dug after valid ticket expired
- Excavator provided incorrect notification information

Excavation Issue

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

Locating Issue

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

Miscellaneous Root Causes

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

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

Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident

Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation

Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring

Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation

Electrical Arcing from Other Equipment or Facility

Previous Mechanical Damage NOT Related to Excavation

Intentional Damage

Other Outside Force Damage

1. Vehicle/Equipment operated by: *(select only one)*

Operator Operator's Contractor Third Party

If this sub-section is picked, please complete questions 5-11 below

2. Select one or more of the following IF an extreme weather event was a factor:

Hurricane Tropical Storm Tornado
 Heavy Rains/Flood Other

3. Specify:

Vandalism Terrorism
 Theft of transported commodity Theft of equipment
 Other _____

4. Describe: _____

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

5. Was the driver of the vehicle or equipment issued one or more citations related to the incident? Yes No Unknown

If 5 is Yes, what was the nature of the citations (select all that apply)

5a. Excessive Speed

5b. Reckless Driving

5c. Driving Under the Influence

5e. Other, describe: _____

6. Was the driver under control of the vehicle at the time of the collision? Yes No Unknown

7. Estimated speed of the vehicle at the time of impact (miles per hour)? _____ or Unknown

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

9. Where did the vehicle travel from to hit the pipeline facility? (select only one)

Roadway Driveway Parking Lot Loading Dock Off-Road

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

11. At the time of the Incident, were protections installed to protect the damaged pipeline facility from vehicular damage? Yes No

If 11. is Yes, specify type of protection (select all that apply):

11a. Bollards/Guard Posts

11b. Barricades – include Jersey barriers and fences in instructions

11c. Guard Rails

11d. Other, describe: _____

G5 - Material Failure of Pipe or Weld, Only one **sub-cause** can be picked from shaded left-hand column

Use this section to report material failures ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is "Pipe" or "Weld."

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

Field Examination Determined by Metallurgical Analysis Other Analysis _____

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

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

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

2. List contributing factors: *(select all that apply)*

Fatigue- or Vibration-related:

Mechanically-induced prior to installation (such as during transport of pipe)

Mechanical Vibration

Pressure-related

Thermal

Other _____

Mechanical Stress

Other _____

Environmental Cracking-related

3. Specify: Stress Corrosion Cracking Sulfide Stress Cracking

Hydrogen Stress Cracking Hard Spot

Other _____

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

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

Lamination Buckle Wrinkle Misalignment Burnt Steel

Other _____

5. Post-construction pressure test value (psig) / / / / / OR Unknown

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

Malfunction of Control/Relief Equipment

1. Specify: *(select all that apply)*

- Control Valve Instrumentation SCADA
- Communications Block Valve Check Valve
- Relief Valve Power Failure Stopple/Control Fitting
- Pressure Regulator ESD System Failure
- Other _____

Compressor or Compressor-related Equipment

2. Specify: Seal/Packing Failure Body Failure
 Crack in Body Appurtenance Failure
 Pressure Vessel Failure
 Other _____

Threaded Connection/Coupling Failure

3. Specify: Pipe Nipple Valve Threads Mechanical Coupling
 Threaded Pipe Collar Threaded Fitting
 Other _____

Non-threaded Connection Failure

4. Specify: O-Ring Gasket
 Seal (NOT compressor seal) or Packing
 Other _____

Defective or Loose Tubing or Fitting

Failure of Equipment Body (except Compressor), Vessel Plate, or other Material

Other Equipment Failure

5. Describe: _____

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

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

- Excessive vibration
- Overpressurization
- No support or loss of support
- Manufacturing defect
- Loss of electricity
- Improper installation
- Improper maintenance
- 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 contributed to the release
- Alarm/status failure
- Misalignment
- Thermal stress
- Erosion/abnormal wear
- Other _____

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

Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage

Valve Left or Placed in Wrong Position, but NOT Resulting in an Overpressure

Pipeline or Equipment Overpressured

Equipment Not Installed Properly

Wrong Equipment Specified or Installed

Other Incorrect Operation

1. Describe:

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

2. Was this Incident related to: *(select all that apply)*

- Inadequate procedure
- No procedure established
- Failure to follow procedure
- Other: _____

3. 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)

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

Miscellaneous

1. Describe:

Unknown

2. Specify

Investigation complete, cause of Incident unknown
Mandatory comment field: _____

Still under investigation, cause of Incident to be determined*

*(*Supplemental Report required)*

PART J – RESERVED

PART K – CONTRIBUTING FACTORS

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

External Corrosion

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

Internal Corrosion

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

Natural Forces

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

Excavation Damage

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

Other Outside Force

- Nearby Industrial, Man-made, or Other Fire/Explosion
- Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation
- Damage by Boats, Barges, Drilling Rigs, or Other Adrift Maritime Equipment
- Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation
- Electrical Arcing from Other Equipment or Facility
- Previous Mechanical Damage NOT Related to Excavation
- Intentional Damage
- Other underground facilities buried within 12 inches of the failure location

Pipe/Weld Failure

- Design-related
- Construction-related
- Installation-related
- Fabrication-related
- Original Manufacturing-related
- Environmental Cracking-related, Stress Corrosion Cracking
- Environmental Cracking-related, Sulfide Stress Cracking
- Environmental Cracking-related, Hydrogen Stress Cracking
- Environmental Cracking-related, Hard Spot

Equipment Failure

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

Incorrect Operation

- Damage by Operator or Operator's Contractor NOT Excavation and NOT Vehicle/Equipment Damage
- Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure
- Pipeline or Equipment Overpressured
- Equipment Not Installed Properly
- Wrong Equipment Specified or Installed
- Inadequate Procedure
- No procedure established
- Failure to follow procedures

PART H – NARRATIVE DESCRIPTION OF THE INCIDENT

(Attach additional sheets as necessary)

PART I – PREPARER AND AUTHORIZED PERSON

Preparer's Name (type or print)

Preparer's Title (type or print)

Preparer's E-mail Address

Local Contact Name: optional

Local Contact Email: optional

Local Contact Phone: optional

Authorized Signer-Name

Authorized Signer's Title

Preparer's Telephone Number

Preparer's Facsimile Number

Authorized Signer Telephone Number

Authorized Signer's E-mail Address
