

INSTRUCTIONS FOR FORM PHMSA F 7100.1 (Rev. 01-2010) INCIDENT REPORT – GAS DISTRIBUTION PIPELINE SYSTEMS

GENERAL INSTRUCTIONS

Each gas distribution system operator shall file Form PHMSA F 7100.1 for an incident that meets the criteria in 49 CFR §191.3 as soon as practicable but not more than 30 days after discovery of the incident. Please submit reports according to §191.7.

Liquefied natural gas (LNG) facility and master meter operators are exempt from filing reports (see §191.11(c)).

Release of gas, for the purpose of maintenance need not be reported if the only reportable criterion is loss of gas of \$50,000 or more as described in 49 CFR §191.3 under "Incident" (1)(ii). Damage from secondary ignition need not be reported unless the damage to facilities subject to Part 191 exceeds \$50,000. Secondary ignition is a gas fire where the origin is unrelated to the gas facilities, such as electrical fires, arson, etc.

If you need copies of the Form PHMSA F 7100.1 and/or instructions they can be found on the Pipeline Safety Community main page, <http://phmsa.dot.gov/pipeline>, by clicking the Forms hyperlink and scrolling down to the section entitled PHMSA/OPS Forms (accidents/incidents/annuals). If you have questions about this report or these instructions, please call (202) 366-8075. Please type or print all entries when submitting forms by mail or Fax.

§191.3 Definitions.

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***Incident* means any of the following events:**

(1) An event that involves a release of gas from a pipeline or of liquefied natural gas or gas from an LNG facility and

(i) A death, or personal injury necessitating in-patient hospitalization; or

(ii) Estimated property damage, including cost of gas lost, of the operator or others, or both, of \$50,000 or more.

(2) An event that results in an emergency shutdown of an LNG facility.

(3) An event that is significant, in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2).

§191.5 Telephonic notice of certain incidents.

(a) At the earliest practicable moment following discovery, each operator shall give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.

(b) Each notice required by paragraph (a) of this section shall be made by telephone to 800-424-8802(in Washington, DC, 267-2675) and shall include the following information:

(1) Names of operator and person making report and their telephone numbers.

(2) The location of the incident.

(3) The time of the incident.

(4) The number of fatalities and personal injuries, if any.

(5) All other significant facts that are known by the operator that are relevant to the cause of the incident or extent of the damages.

§191.9 Distribution system: Incident report.

(a) Except as provided in paragraph (c) of this section, each operator of a distribution pipeline system shall submit Department of Transportation Form RSPA F 7100.1 as soon a practicable but not more than 30 days after detection of an incident required to be reported under §191.5.

(b) When additional relevant information is obtained after the report is submitted under paragraph (a) of this section, the operator shall make supplementary reports as deemed necessary with a clear reference by date and subject to the original report.

(c) The incident report required by this section need not be submitted with respect to master meter systems or LNG facilities.

Telephonic reports are assigned an NRC number, which operators should note. National Response Center call information must be reported in Question 6 of the Form PHMSA F 7100.1.

REPORTING METHODS

Use one of the following methods to submit your report. We prefer online reporting over hardcopy submissions. If you prefer, you can mail or fax your completed reports to DOT/PHMSA.

Note: Submit a copy of your report directly to the State Regulatory Agency in addition to submitting to DOT/PHMSA, if that is the requirement in your state.

1. Online:

- a. Navigate to the **ONLINE DATA ENTRY SYSTEM** at <http://opsweb.phmsa.dot.gov/> and click on the Incident Report – Gas Distribution Systems link
- b. Enter Operator ID and PIN (*the name that appears is the operator name assigned to the operator ID and PIN and is automatically populated by our database and cannot be changed by the operator at the time of filing*).
- c. Click “add” to begin
- d. Click “submit” when finished. NOTE: For supplemental reports use steps 1a and 1b then click on the report ID to make corrections. Click “save” when finished.
- e. A confirmation page will appear for you to print and save for your records

If you submit your report online, PLEASE DO NOT MAIL OR FAX the completed report to DOT as this may result in duplicate entries.

2. Mail to:

DOT/PHMSA Office of Pipeline Safety
Information Resources Manager,
1200 New Jersey Ave., SE
East Building, 2nd Floor, (PHP-10)
Room Number E22-321
Washington, DC 20590

3. Fax to: Information Resources Manager at (202) 366-4566.

RESCINDING A REPORT

An operator who reports an incident and upon subsequent investigation determines that the event did not meet the criteria in 49 CFR 191.3 may request that their report be rescinded. Requests for rescission should be submitted on company letterhead and mailed or faxed to the Information Resources Manager at the address/fax number above. Requests may also be submitted by email to InformationResources@dot.gov. Requests should include the following information:

- a. Operator name,
- b. PHMSA-issued operator ID number,
- c. The number assigned by the National Response Center when telephonic report was made in accordance with 49 CFR 191.5,
- d. Date of the incident,
- e. Location of the incident (city, county, state), and
- f. A brief statement as to why the report should be rescinded.

SPECIAL INSTRUCTIONS

1. Certain data fields must be completed before an Original Report will be accepted. The data fields that must be completed for an Original Report to be accepted are indicated on the form by a double asterisk (**). If filing a hardcopy of this report, the report will not be accepted by PHMSA unless all of these fields have been completed. If filing on-line, your Original Report will not be able to be submitted until the required information has been provided, although your partially completed form can be saved on-line so that you can return at a later time to provide the missing information.

2. An entry should be made in each applicable space or check box, unless otherwise directed by the section instructions.

3. If the data is unavailable, enter “unknown” for text and leave numeric fields and field using check boxes or “radio” buttons blank.

4. If possible, provide an **estimate** in lieu of answering a question with “unknown” or leaving the field blank. Estimates should be based on best-available information and reasonable effort.

5. For unknown or estimated data entries, the operator should file a supplemental report when additional information becomes available to finalize the report.

6. If the question is not applicable, please enter “N/A” for text fields and leave numeric fields and fields using check boxes and “radio” buttons blank.

7. For questions requiring numeric answers, all data fields should be filled in using zeroes when appropriate. When decimal points are required, the **decimal point should be placed in a separate block** in the data field.

Examples:

(Part C, item 3.a) Nominal diameter of pipe (in)	<u> 0 0 0 8 </u> (8 inches)
	<u> 1 . 5 0 </u> (1.5 inches)
(Part C, item 4.b) Wall Thickness	<u> . 5 0 0 </u> inches (0.5 inches)

8. If **OTHER** is checked for any answer to a question, please include an explanation or description on the line provided next to the item checked.

9. Pay close attention to each question for the phrase

a. *(select all that apply)*

b. *(select only one)*

If the phrase does not exist for a given question, then “select only one” is the default instruction. “Select all that apply” means that you should choose all answers that are applicable. “Select only one” means that you should select the single, primary or most applicable answer. **DO NOT SELECT MORE ANSWERS THAN REQUESTED.**

10. **Date format** = mm/dd/yy or for year =/yyyy/.

11. **Time format:** All times are reported as a 24-hour clock:

Time format Examples:

- a. (0000) = midnight = /0/0/0/0/
- b. (0800) = 8:00 a.m. = /0/8/0/0/
- c. (1200) = Noon = /1/2/0/0/
- d. (1715) = 5:15 p.m. = /1/7/1/5/
- e. (2200) = 10:00 p.m. = /2/2/0/0/

SPECIFIC INSTRUCTIONS

PART A – GENERAL REPORT INFORMATION

Report Type: (select all that apply)

Check the appropriate report box or boxes to indicate the type of report being filed. Depending on the descriptions below, the following combinations of boxes may be selected:

- Original Report only
- Original Report plus Final Report
- Supplemental Report only
- Supplemental Report plus Final Report

Original Report

Select this type of report if this is the FIRST report filed for this incident.

If all of the information requested is known and provided at the time the initial report is filed, including final property damages and failure cause information, check the box for “Final Report” as well as the box for “Original Report”, indicating that no further information will be forthcoming.

Supplemental Report

Select this type of report only if you have already filed an “Original Report” AND you are now providing new, updated, and/or corrected information. Multiple supplements are to be submitted in order to provide new, updated, and/or corrected information as it becomes available.

For Supplemental Reports filed by fax or mail, please check the **Supplemental Report** box, complete Part A, Items 1 through 6, and then enter information that has changed or is being added. Please do not enter previously submitted information that has not changed other than Items 1-6, which is needed to provide a way to identify previously filed reports.

For Supplemental Reports filed online, all data previously submitted will automatically populate

in the form. Page through the form to make edits and additions where needed.

Operators are encouraged to file supplemental reports within one year in those instances where the supplemental report is used to update information from investigations that were still ongoing when the prior report was filed.

Final Report

Select this type of report if you are filing an “Original Report” for which no further information will be forthcoming (as described under “Original Report” above) or if you have already filed an “Original Report” AND you are now providing new, updated, and/or corrected information via a “Supplemental Report” AND you are reasonably certain that no further information will be forthcoming. (Note: If an Operator files one of the two types of “Final” Reports and then subsequently finds that new information needs to be provided, it should submit another “Supplemental Report” and select the appropriate box or boxes – “Supplemental + Final” (if appropriate) – for the newly submitted report and include an explanation in the PART H Narrative.)

Supplemental reports must be filed as soon as practicable following the Operator’s awareness of new, additional, or updated information. Failure to comply with these requirements can result in enforcement actions, including the assessment of civil penalties not to exceed \$100,000 for each violation for each day that such violation persists up to a maximum of \$1,000,000.

In Part A, answer questions 1 thru 16 by providing the requested information or by checking the appropriate box.

1. Operator’s OPS -Issued five Digit Operator Identification Number (OPID):

The Pipeline and Hazardous Materials Safety Administration (PHMSA) assigns the operator's five-digit identification number. Most OPIDs are 5 digits. Older OPIDs may contain fewer digits. If your OPID contains fewer than 5 digits, insert leading zeros to fill all blanks. Contact us at (202) 366-8075 if you need assistance with an identification number during our business hours of 8:30 AM to 5:00 PM Eastern Time.

2. Name of Operator

This is the company name used when registering for an Operator ID and PIN in the Online Data Entry System. For online entries, the Name of Operator should be automatically filled in based on the Operator Identification Number entered in question 1. If the name that appears does not coincide with the Operator ID, contact PHMSA at the number provided in Question 1.

3. Address of Operator

Enter the address of the operator’s business office to which any correspondence related to the incident report should be sent.

4. Local time (24-hour clock) and date of the Incident.

See page 5 for examples of **Date format** and **Time format** expressed as a 24-hour clock

5. Location of Incident:

- a. Provide the street address of the incident (enter “unknown” if no street address)
- b. Provide the name of the city where the incident occurred.
- c. Provide the name of the county or Parish where the incident occurred.
- d. Enter the state where the incident occurred.
- e. Enter the zip code where the incident occurred.
- f. The latitude and longitude of the accident are to be reported as Decimal Degrees with a minimum of 5 decimal places (e.g. Lat: 38.89664 Long: -77.04327), using the NAD83 or WGS84 datums.

If you have coordinates in degrees/minutes or degrees/minutes/seconds use the formula below to convert to decimal degrees:

$$\text{degrees} + (\text{minutes}/60) + (\text{seconds}/3600) = \text{decimal degrees}$$

e.g. $38^{\circ} 53' 47.904'' = 38 + (53/60) + (47.904/3600) = 38.89664^{\circ}$

All locations in the United States will have a negative longitude coordinate, **which has already been printed on the form.**

If you cannot locate the accident with a GPS or some other means, the U.S. Census Bureau provides a tool for determining latitude and longitude, (<http://tiger.census.gov/cgi-bin/mapbrowse-tbl>). You can use the online tool to identify the geographic location of the incident. The tool displays the latitude and longitude in decimal degrees below the map. Any questions regarding the required format, conversion or how to use the tool noted above can be directed to Amy Nelson (202.493.0591 or amy.nelson@dot.gov).

6. National Response Center (NRC) Report Number

§ 191.5 requires that incidents meeting the criteria outlined in §191.3 be reported directly to the **24-hour National Response Center (NRC): at 1-800-424-8802** at the earliest practicable moment (generally within 2 hours). The NRC assigns numbers to each call. The number of that telephonic report is to be entered in Question 6.

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

Enter the time (local time at site of the accident) and date of the telephonic report of accident. The time should be shown by 24-hour clock notation (see page 5 for examples).

8. Incident resulted from:

Indicate whether the incident resulted from intentional or unintentional release of gas or from reasons other than release of gas.

9. Gas released:

Report the type of gas released.

10. Estimated volume of gas released

Estimate the amount of gas that was released (in thousands of cubic feet) from the beginning of the incident until the time product flow was terminated. Estimates should be based on best-available information.

11. Were there fatalities?

If a person dies at the time of the incident or within 30 days of the initial incident date due to injuries sustained as a result of the incident, report as a fatality. If a person dies subsequent to an injury more than 30 days past the incident date, report as an injury. This aligns with the Department of Transportation's general guidelines for all modes for reporting deaths and injuries.

Contractor employees working for the Operator means people hired to work for or on behalf of the operator of the pipeline.

Non-operator emergency responders means people responding to render professional aid at the incident scene including on-duty fire fighters, rescue workers, EMTs, police officers, etc. Good Samaritans that stop to assist should be reported as "General public."

Workers Working on the Right of Way, but NOT Associated with this Operator means people authorized to work in or near the right-of-way, but not hired by or working on behalf of the operator of the pipeline. This category most often includes employees of other underground facilities operators, or their contractors, working in or near a shared right-of-way. For distribution pipelines not located in a defined right of way, this category should be left blank.

12. Were there injuries requiring inpatient hospitalization?

Injuries requiring inpatient hospitalization means injuries sustained as a result of the incident and requiring hospital admission *and* at least one overnight stay.

13. Was the pipeline/facility shut down due to the incident?

Report any shutdowns that occur because of damage incurred during the incident or to make repairs necessitated by the incident. Instances in which an incident was caused by a release that did not involve damage to the pipeline (e.g., incorrect operations) and in which no need for repairs resulted need not be reported as being shutdown, even though the pipeline may have been shutdown as a precautionary measure to inspect for damages.

If No is selected, explain the reason that no shutdown was needed in the blank provided.

If Yes is selected, complete questions 13.a and 13.b.

14. Did the Gas Ignite?

Ignite means the gas caught fire.

15. Did the Gas Explode?

Explode means the ignition of the gas with a sudden and violent release of energy.

16. Number of General Public Evacuated:

The number of people evacuated should be estimated based on operator knowledge, or police, fire or other emergency responder reports, if available. If there was no evacuation involving the general public, report "0". If estimate is not possible for some reason, leave blank but include an explanation of why it was not possible in the Part H Narrative.

17. Time sequence (use local time, 24-hour clock)

Enter the time the operator became aware of the incident, the time operator personnel or contract resources arrived on site, and the time normal operations resumed (i.e., when immediate response activities ended, not including subsequent replacement/repairs that could be deferred until after the immediate response).

PART B – ADDITIONAL LOCATION INFORMATION

1. Was the incident on Federal Land?

Federal Lands means all lands the United States owns, including military reservations, except lands in National Parks and lands held in trust for Native Americans. Incidents at Federal buildings, such as Federal Court Houses, Custom Houses, and other Federal office buildings and warehouses, are not to be reported as being on Federal Lands.

2. Location of incident

Operator-controlled property would normally apply to an operator's facility, which may or may not have controlled access, but which is oftentimes fenced or otherwise marked with discernible boundaries. This "operator-controlled property" does not refer to the pipeline right-of-way/easement, which is a separate choice for this question.

3. Area of incident

This refers to the location on the pipeline at which gas was released, resulting in the incident. It does not refer to adjacent locations in which released gas may have accumulated and ignited, resulting in adverse consequences.

Underground means pipe, components or other facilities installed below the natural ground level, road bed, or below the underwater natural bottom.

Under pavement includes under streets, sidewalks, paved roads, driveways and parking lots.

Exposed due to Excavation means that a normally buried pipeline had been exposed by any party (operator, operator's contractor, or third party) preparatory to or as a result of excavation. The cause of the release, however, is not necessarily excavation damage (but may be). This category could include a corrosion leak not previously evidenced by stained vegetation, but found during excavation, or a release caused by a non-excavation vehicle where contact happened to occur while the pipeline was exposed for an excavation. Natural forces might also damage a pipeline that happened to be temporarily exposed. In each case, the cause should be appropriately reported in section G of this form.

Aboveground means pipe, components or other facilities that are above the natural grade.

Typical aboveground facility piping includes any pipe or components installed aboveground such as those at regulating stations or valve sites.

Transition area means the junction of differing material or media between pipes, components, or facilities such as those installed at a belowground-aboveground junction (soil/air interface), another environmental interface, or in close contact to supporting elements such as those at water crossings, pump stations and break out tank farms.

4. Did the incident occur in a crossing?

Use **Bridge Crossing** if the pipeline is suspended above a body of water or roadways, railroad right-of-way, etc. either on a separately designed pipeline bridge or as a part of or connected to a road, railroad, or passenger bridge.

Use **Railroad Crossing** if the pipeline is buried beneath rail bed, whether paralleling or crossing the track.

Use **Road Crossing** if the pipeline crosses a road (e.g., at an intersection). **Road Crossing** does not refer to situations in which pipelines are buried under roadways and parallel the direction of the road.

Use **Water Crossing** if the pipeline is in the water, beneath the water, in contact with the natural ground of the lake bed, etc., or buried beneath the bed of a lake, reservoir, stream or creek, whether the crossing happens to be flowing water at the time of the incident or not.. The name of the body of water should be provided if it is commonly known and understood among the local population. (The purpose of this information is to allow persons familiar with the area in which the incident occurred to identify the location and understand it in its local context. Research to identify names that are not commonly used is not necessary since such names would not fulfill the intended purpose. If a body of water does not have a name that is commonly used and understood in the local area, this field should be left blank).

For **Approximate Water Depth (ft)** of the lake, reservoir, etc., estimate the typical water depth at the location and time of the incident, allowing for seasonal, weather-related and other factors which may affect the water depth from time to time.

PART C – ADDITIONAL FACILITY INFORMATION

1. Indicate the type of pipeline system:

Designate the type of distribution pipeline system on which the incident occurred.

2. Part of system involved in Incident

This should be the part of the system principally involved in the incident, from which gas was released resulting in reportable consequences. If the failure occurred on an item not provided in this section, check the OTHER box and specify in the space provided the item that failed.

3. When “Main” or “Service” is selected as the “Part of system involved in incident,” (from PART C, Question 2), provide the following:

Nominal diameter of pipe is also called **Nominal pipe size**. It is the diameter in whole number inches (except for pipe less than 4”) used to describe the pipe size; for example, 8-5/8 pipe has a nominal pipe size of 8”. Decimals are unnecessary for this measure (except for pipe less than 4”).

Pipe Specification is the specification to which the pipe or component was manufactured, such as API 5L or ASTM A106.

4. Material involved in incident:

Identify the type of material involved and provide additional information as indicated.

5. Type of release involved:

Mechanical puncture means a puncture of the pipeline, typically by a piece of equipment such as would occur if the pipeline were pierced by directional drilling or a backhoe bucket tooth. Not all excavation-related damage will be a “mechanical puncture.” (Precise measurement of size – e.g., micrometer – is not needed. Measurements can be provided in inches and one decimal.)

Leak means a failure resulting in an unintentional release of gas which is often small in size, usually resulting a low volume release, although large volume leaks can and do occur on occasion. Leaked gas may accumulate in nearby structures where subsequent ignition can result in consequences.

Rupture means a loss of containment event that immediately impairs the operation of the pipeline. Pipeline ruptures have the potential to be severely detrimental to safety and the environment. The terms “circumferential” and “longitudinal” refer to the general direction or orientation of the rupture relative the pipe’s axis. They do not exclusively refer to a failure involving a circumferential weld such as a girth weld, or to a failure involving a longitudinal

weld such as a pipe seam. (Precise measurement of size – e.g., micrometer – is not needed. Measurements can be provided in inches and decimals.)

PART D – ADDITIONAL CONSEQUENCE INFORMATION

2. Estimated Cost to Operator:

All relevant costs must be included in the initial written incident report as well as supplemental reports. This includes (but is not limited to) costs due to property damage to the operator's facilities and to the property of others, gas lost, facility repair and replacement, gas distribution service restoration and relighting, leak locating, and environmental cleanup and damage. Do not report costs incurred for facility repair, replacement, or change that are not related to the incident done solely for convenience. An example of doing work solely for convenience is working on leaking facilities unearthed because of the incident. Litigation and other legal expenses related to the incident are not reportable.

Operators should report costs based on the best estimate available at the time a report is submitted. It is likely that an estimate of final repair costs may not be available when the initial report must be submitted (30 days, per § 191.9). The best available estimate of these costs should be included in the initial report. For convenience, this estimate can be revised, if needed, when supplemental reports are filed for other reasons, however, when no other changes are forthcoming, supplemental reports should be filed as new cost information becomes available. If supplemental reports are not submitted for other reasons, a supplemental report should be filed for the purpose of correcting the estimated cost if these costs differ from those already reported by 20 percent or \$20,000, whichever is greater.

Costs incurred by the operator prior to gas being shut off should be included as part of operator emergency response. Costs incurred thereafter should be included with repair costs.

Public and non-operator private property damage estimates generally include physical damage to the property of others, the cost of investigation and remediation of a site not owned or operated by the Company, laboratory costs, third party expenses such as engineers or scientists, and other reasonable costs, excluding litigation and other legal expenses related to the incident.

Paid/reimbursed means that the entity experiencing the property damage was compensated by the operator or operator's representative for the damage or the cost to repair the damage.

When estimating the **Cost of Repairs** to company facilities, the standard shall be the cost necessary to safely restore property to its predefined level of service. These costs may include the cost of repair sleeves or clamps, re-routing of piping, reinstallation of a service line, or the removal from service of an appurtenance or pipeline component. When more comprehensive repairs or improvements are justified but not required for continued operation, the cost of such repairs or replacement is not attributable to the incident. Costs associated with improvements to the pipeline to mitigate the risk of future failures are not included.

Operator's property damage estimates generally include physical damage to the property of Operator or Owner Company such as the estimated installed value of the damaged pipe, coating, component, materials or equipment due to the incident, excluding litigation and other legal expenses related to the incident.

Estimated cost of **Operator's emergency response** includes emergency response operations necessary to return the incident site to a safe state, actions to minimize the volume of gas released, and to identify the extent of accident impacts. They include materials, supplies, labor, and benefits. Costs related to stakeholder outreach, media response, etc. should not be included.

Other costs should not include estimated cost categories separately listed above.

Costs should be reported in only one category and should not be double-counted. Costs can be split between two or more categories when they overlap more than one reporting category.

3. Estimated number of customers out of service:

Count number of individual services in each category that were affected, not number of persons served.

PART E – ADDITIONAL OPERATING INFORMATION

2. Normal operating pressure at point and time of the incident (psig)

If the normal operating pressure of a distribution system varies throughout the year (e.g., seasonally), report the normal operating pressure at the time the incident occurred.

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

This does not mean a system exclusively for leak detection.

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

Was the SCADA system in operation at the time of the accident?

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

Was the SCADA system capable of performing all of its functions, whether or not it was actually in operation at the time of the accident? If no, describe functions that were not operational in the Narrative Part H

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

Check yes if SCADA-based information was used to confirm the incident even if the initial report or identification may have come from other sources. Use of SCADA data for subsequent estimation of amount of gas lost, etc. is not considered use to confirm the incident.

Check No if data from SCADA was not used to assist with identification of the incident.

6. How was the Incident initially identified for the Operator?

Controller per the definition in API RP 1168 means a qualified individual whose function within a shift is to remotely monitor and/or control the operations of entire or multiple sections of pipeline systems via a SCADA system from a pipeline control room, and who has operational authority and accountability for the daily remote operational functions of pipeline systems.

Local Operating Personnel including contractors means employees or contractors working on behalf of the operator outside the control room.

7. 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?

Check only one of the boxes to indicate whether an investigation was/is being conducted (Yes) or was not conducted (No). If an investigation has been completed, select all the factors that apply in describing the results of the investigation.

Cause means an action or lack of action that directly resulted in the pipeline incident.

Contributing factor means an action or lack of action that when added to the existing pipeline circumstances heightened the likelihood of the release or added to the impact of the release.

Controller Error means that the controller failed to identify a circumstance indicative of a release event, such as an abnormal operating condition, alarm, pressure drop, change in flow rate, or other similar event.

Incorrect Controller action means that the controller errantly operated the means for controlling an event. Examples include opening or closing the wrong valve, or hitting the wrong switch or button.

PART F – DRUG & ALCOHOL TESTING INFORMATION

Requirements for post-accident drug and alcohol tests are in 49 CFR 199.105 and 225 respectively. If the accident circumstances were such that tests were not required by these sections, and if no tests were conducted, check no. If tests were administered, report separately the number of operator employees and contractors working for the operator who were tested and who failed.

PART G – APPARENT CAUSE

In PART G – Apparent Cause

Complete only one of the eight sections listed under G1 thru G8

After identifying the main cause category as designated by G1 thru G8, select the one, single sub-cause that best describes the proximate cause of the accident. Answer the corresponding questions that accompany your selected sub-cause.

G1 – Corrosion Failure

Corrosion includes a leak or failure caused by galvanic, atmospheric, stray current, microbiological, or other corrosive action, and, for the purposes of this reporting, includes selective seam corrosion. A corrosion leak is not limited to a hole in the pipe. If the bonnet or packing gland on a valve or flange on piping deteriorates or becomes loose and leaks due to corrosion and failure of bolts, it is classified as Corrosion. (If the bonnet, packing, or other gasket has deteriorated before the end of its expected life but not due to corrosive action, it is classified as a Material Defect.)

External Corrosion

Under cathodic protection means cathodic protection in accordance with Sections 192.455, 192.457, and 192.463. Recognizing that older pipelines may have had cathodic protection added over a number of years, provide an estimate if exact year cathodic protection started is unknown.

G2 – Natural Force Damage

This category includes all outside forces attributable to causes NOT involving humans.

Earth Movement NOT due to Heavy Rains/Floods refers to incidents caused by land shifts such as earthquakes, landslides, or subsidence, but not mudslides which are presumed to be initiated by heavy rains or floods.

Heavy Rains/Floods refer to all water related incident. While mudslides involve earth movement, report them here since typically they are an effect of heavy rains or floods.

Lightning includes both damage and/or fire caused by a direct lightning strike and damage and/or fire as a secondary effect from a lightning strike in the area. An example of such a secondary effect would be a forest fire started by lightning that results in damage to a pipeline system asset which results in an incident.

Temperature refers to those causes that are related to ambient temperature effects, either heat or cold, where temperature was the initial cause.

Thermal stress refers to mechanical stress induced in a pipe or component when some or all of its parts are not free to expand or contract in response to changes in temperature.

Frozen components would include incidents where components are inoperable because of freezing and those due to cracking of a piece of equipment due to expansion of water during a freeze cycle.

High Winds includes damage caused by wind induced forces. Select this category if the damage is due to the force of the wind itself. Damage caused by impact from objects blown by wind would be reported as section G4 “Other Outside Force Damage”.

G3 – Excavation Damage

This section covers damage inflicted by the operator, operator’s contractor, or entities unrelated to the operator during excavation that results in an immediate release of gas. Damage from outside forces OTHER than excavation that results in an immediate release, use G2 “Natural Force Damage” or G4 “Other Outside Force” as appropriate. For a strike or other damage to a pipeline or facility that results in a later release, report the incident in Section G4 as “Rupture or Failure Due to Previous Mechanical Damage.”

Excavation Damage by Operator (First Party)

Check this item if the incident was caused as a result of excavation by a direct employee of the operator.

Excavation Damage by Operator’s Contractor (Second Party)

Check this item if the incident was caused as a result of excavation by the operator’s contractor or agent or other party working for the operator.

Excavation Damage by Third Party

Check this item if the incident was caused by excavation damage resulting from actions by personnel or other third parties not working for or acting on behalf of the operator or its agent.

Previous Damage due to Excavation Activity

2. Has one or more pressure test been conducted since original construction at the point of the incident?

Information from the initial post-construction hydrostatic test need not be reported.

4. – 14. Complete these questions for any excavation damage sub-cause. Instructions for answering these questions can be found at CGA’s web site, <https://www.damagereporting.org/dr/control/userGuide.do>.

G4 – Other Outside Force Damage

This section covers incidents caused by outside force damage, other than excavation damage or natural forces. Check the most appropriate one sub-cause in this section that applies and answer any questions.

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

applies to situations where the fire occurred before and caused the release. An example of such a failure would be an explosion/fire at a neighboring facility or structure that results in a release at the location of the incident. (Note that an incident report is required only if damage to facilities subject to Part 192 exceeded \$50,000). This section should not be used if the release occurred first and then the gas ignited. If the fire is known to have been started as a result of a lightning strike, the incident's cause should be classified under Section G2, "Natural Force Damage." Arson events directed at harming the pipeline or the operator should be reported as "Intentional Damage" in this section. Forest fires that are caused by human activity and result in a release should be reported in this section.

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

Excavation. An example would be damage to a meter set caused by vehicle impact. Other motorized vehicles/equipment includes tractors, backhoes, bulldozers and other tracked vehicles, and heavy equipment that can move. Include under this sub-cause incidents caused by vehicles operated by the pipeline operator, the pipeline operator's contractor, or a third party and specify the vehicle/equipment operator's affiliation as appropriate. Pipeline incidents resulting from vehicular traffic loading or other contact should also be reported in this category. If the activity involved digging, drilling, boring, grading, cultivation or similar activities, report in Section G3 "Excavation Damage".

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

This sub-cause includes impacts by maritime equipment or vessels that have lost their moorings and are carried into the pipeline by the current. This sub-cause also includes maritime equipment or vessels set adrift as a result of severe weather events and carried into the pipeline by current or high winds. In such cases, also indicate the type of severe weather event. Do not report in this sub-cause incidents which are caused by impact of maritime equipment or vessels while they are engaged in their normal or routine activities; such incidents should be reported as "Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation" so long as those activities are not excavation activities. If those activities are excavation activities such as dredging or bank stabilization or renewal, the accident should be reported in Section G3, "Excavation Damage".

Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation. This sub-cause includes incidents due to shrimping, purseining, oil drilling, or oilfield workover rigs, including anchor strikes, and other routine or normal maritime-related activities UNLESS the movement of the maritime asset was due to a severe weather event (this type of damage should be reported under Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring) or the incident was caused by excavation activity such as **dredging** of waterways or bodies of water (this type of incident should be reported under Section G3, "Excavation Damage.").

Previous Mechanical Damage NOT Related to Excavation. This sub-cause covers incidents where damage occurred at some time prior to the release and would include prior excavation damage, prior outside force damage of an unknown nature, prior natural force damage, and prior damage from other outside forces. Incidents resulting from damage sustained during

construction, installation, or fabrication of the pipe or a weld should be reported under Section G5, “Material Failure of Pipe or Weld.”

Intentional Damage

Vandalism means willful or malicious destruction of the operator’s pipeline facility or equipment. This category would include pranks, systematic damage inflicted to harass the operator, motor vehicle damage that was inflicted intentionally, and a variety of other intentional acts.

Terrorism, per 28 C.F.R. § 0.85 General functions, includes the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. Operators selecting this item are encouraged to also notify the FBI.

Theft means damage by any individual or entity, by any mechanism, specifically to steal, or attempt to steal, the transported gas or pipeline equipment.

Other

Describe in the space provided and, if necessary, provide additional explanation in Part H.

G5 – Pipe, Weld, or Joint Failure

This section includes leaks, ruptures or other failures from a defect within the material of the pipe, component or joint due to faulty manufacturing procedures, defects resulting from poor construction/installation practices, and in-service stresses such as vibration, fatigue and environmental cracking.

Mechanical Fitting, Question 7, Manufacturer Compression Fitting, Question 14, Manufacturer

Operators should take care in identifying the manufacturer. Some types of fittings are commonly referred to as “Dresser fittings” (for example) even though the particular fitting may have been manufactured by a different company. Operators should report here the company that actually manufactured the involved fitting.

Fitting means a device, usually metal, for joining lengths of pipe into various piping systems. It includes couplings, ells, tees, crosses, reducers, unions, caps and plugs.

Material defect means an inherent flaw in the material or weld that occurred in the manufacture or at a point prior to construction, fabrication or installation.

Design defect means an aspect inherent in a component to which a subsequent failure has been attributed that is not associated with errors in installation, i.e., is not a construction defect.” This could include, for example, errors in engineering design.

Records of test pressure from past pressure tests may not be available. In such cases, the operator should estimate the test pressure using best available information.

G6 – Equipment Failure

This section includes malfunctions of control and relief equipment (typically the result of failed and leaking valves), failures of threaded components and broken pipe couplings, including O-Ring failures, Gasket failures, thread failures, and failures in packing.

Malfunction of Control/Relief Equipment

Examples of this type of failure include failures on compressors, meters, or regulator stations where the failure resulted from a crack in a component or threads of a component such as nipples, flanges, valve connections, line pipe collars, etc. Include a description of the nature of the failure and apparent cause in the narrative (PART H).

Examples of this type of failure cause also include: overpressurization resulting from malfunction of control or alarm device; relief valve malfunction: and valves failing to open or close on command; or valves which opened or closed when not commanded to do so. If overpressurization or some other aspect of this incident was caused by incorrect operation, the incident should be reported under Section G7, “Incorrect Operation.”

G7 – Incorrect Operation

These types of incidents most often occur during operating, maintenance or repair activities. Some examples of this type of failure are improper valve selection or operation, inadvertent overpressurization, or improper selection or installation of equipment. The unintentional ignition of the transported gas during a welding or maintenance activity would also be included in this sub-cause. These types of incidents often involve training or judgment errors.

G8 – Other Incident Cause

This section is provided for incident causes that do not fit in any of the main cause categories in Sections G1 through G7.

If the incident cause is known but doesn't fit in any category in sections G1 through G7, check the **Miscellaneous** box and enter a description of the incident and continue in Part H, Narrative Description of the Incident, if more space is needed.

Leaks resulting from materials deteriorating after the expected life of the materials are classified as “Other Cause”. Describe under Miscellaneous.

If the incident cause is unknown at time of filing this report, check the **Unknown** box in this section and select one reason from the accompanying two choices. If the investigation is not completed and the cause of the incident is thus still to be determined, file a supplemental report once the investigation is completed to report the apparent cause.

PART H – NARRATIVE DESCRIPTION OF THE INCIDENT

(Attach additional sheets as necessary)

Concisely describe the incident, including the facts, circumstances, and conditions that may have contributed directly or indirectly to causing the incident. Include secondary and contributing causes when possible, or any other factors associated with the cause that are deemed pertinent. Use this section to clarify or explain unusual conditions, to provide sketches or drawings, and to explain any estimated data. Operators submitting reports on-line will be afforded the opportunity to attach/upload files containing sketches, drawings, or additional data.

If you checked the Miscellaneous box in Section G8, the narrative should describe the incident in detail, including all known or suspected causes and possible contributing factors.

Operators should use the narrative to describe any secondary causes that they consider important but which could not be reported in section G since only the primary cause is reported there.

PART I – PREPARER AND AUTHORIZED SIGNATURE

The Preparer is the person who compiled the data and prepared the responses to the report and who is to be contacted for more information (preferably the person most knowledgeable about the information in the report or who knows how to contact the person most knowledgeable). Please enter the Preparer's e-mail address if the Preparer has one, and the phone and fax numbers used by the Preparer.

An Authorized Signature must be obtained from an officer, manager, or other person whom the operator has designated to review and approve (and sign and date) the report. This individual is responsible for assuring the accuracy and completeness of the reported data. In addition to their title, a phone number and email address are to be provided for the individual signing as the Authorized Signature.