

INSTRUCTIONS FOR FORM PHMSA F 7000-1 (1-2001)
ACCIDENT REPORT - HAZARDOUS LIQUID PIPE SYSTEMS

GENERAL INSTRUCTIONS

Each hazardous liquid pipeline operator shall file Form PHMSA F 7000-1 for an accident that meets the criteria in 49 CFR §195.50 as soon as practicable but not more than 30 days after the accident. Hazardous liquid releases during maintenance or other routine activities need not be reported if the spill was less than 5 barrels, not otherwise reportable under 49 CFR §195.50, and did not result in water pollution as described by 49 CFR §195.52(a)(4). Any spill of 5 gallons or more to water shall be reported. Submit reports to:

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

Consult 49 CFR §195.50 for reporting requirements. If you have questions about this report or these instructions or need copies of Form PHMSA F 7000-1, please write to the Information Resources Manager, or call (202)366-8075. All forms and instructions are on the OPS home page, <http://ops.dot.gov>.

SPECIAL INSTRUCTIONS

1. An entry should be made in each space.
2. Please try to obtain the information necessary to accurately and completely answer each question.
3. If the data is unavailable, enter "unknown"
4. If possible, provide an estimate in lieu of answering a question with "Unknown".
5. For unknown or estimated data entries, the operator should file a supplemental report when additional information becomes available.
6. If the block is not applicable, please enter N/A.

In blocks requiring numbers, all blocks should be filled in using zeroes when appropriate. When decimal points are required, the decimal point should be placed in a separate block.

Examples: (Part D, item 1) Nominal Pipe Size /0/0/2/4/ inches
/1./5/0/ inches

(Part D, item 1) Wall Thickness /.5/0/0/ inches
/1/.2/5/ inches

If OTHER is checked, include an explanation or description on the line next to the item checked.

SPECIFIC INSTRUCTIONS

PART A - GENERAL REPORT INFORMATION

Initial, Supplemental, Final Report Section

Check the appropriate box:

Original Report Supplemental Report Final Report.

If this is the initial report filed for this accident, check the box for "Original Report". 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.

If this is an update or revision to an Original Report but all information requested is still not known, check "Supplemental Report".

If all requested relevant information has been provided, and there will be no further updates to reported property damages or accident cause information, check the box for "Final Report".

If you are filing a supplemental or final report, please check the Supplemental Report or Final Report box. Please complete parts A(1) and A(2). Additionally, complete part A(3) if onshore, or part C(1)d if offshore. You must also complete Part B. When filling in the supplemental, only enter the data that has changed. Please do not enter previously submitted information that hasn't changed, other than the parts specified in this instruction that are needed to provide us with a way to identify your previous filed report.

A 1. The Pipeline and Hazardous Materials Safety Administration (PHMSA) assigns the operator's five-digit identification number. If you do not know the operator identification number, please leave that item blank. The operator address entry in 1.d and 1.e is the office filing the accident report. If the operator does not own the pipeline, enter the Owner's five-digit identification number in 1.b. You may contact us at (202) 366-8075 during our business hours of 7:30 AM to 5:00 PM Eastern time if you need assistance with an identification number for 1.a or 1.b.

SMALL SPILLS (5 GALLONS TO 5 BARRELS)

IMPORTANT: For small spills not otherwise reportable under CFR 195.50 nor resulting in water pollution as described by 49 CFR 195.52, complete only page one. If spill is less than one barrel, enter loss in gallons. Estimate amount spilled and recovered as closely as possible. Do not include amount of water recovered as part of commodity recovered amount. Estimate the total property damage for sections under property damage reporting if exact amounts aren't known. Complete preparer's name and contact information section. Check the box for FINAL REPORT and submit the report.

ALL OTHER REPORTABLE SPILLS

For spills: of 5 or more gallons resulting in water pollution as described in 49 CFR §195.52(A)(4); of 5 or more barrels; or reportable by other criteria as per 49 CFR §195.50, complete as much of the form as possible within the 30 day filing period. If total property damage, cause information or other information is not known within 30 days, submit the original report and provide supplemental updates every 6 months until such time as a final report can be submitted. We plan to remind operators every six months about reports needing updates.

A 2. The time of the accident should be shown by 24-hour clock notation.

Examples:

- 1. (0000) = midnight = /0/0/0/0/
- 2. (0800) = 8:00 a.m. = /0/8/0/0/
- 3. (1200) = Noon = /1/2/0/0/
- 4. (1715) = 5:15 p.m. = /1/7/1/5/
- 5. (2200) = 10:00 p.m. = /2/2/0/0/

A 3. Accident location information should be as complete as possible, including the nearest City, Town, Township, County or Parish, Borough, Section, and Range. Offshore accident identification should be located by State or Outer Continental Shelf (OCS) identification and block identification. In addition to the general location information, provide latitude and longitude, if available, including projection and datum used in collecting the data.

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). 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. Be sure a negative (-) sign precedes your longitude coordinate on your report. If you cannot locate the accident with a GPS or some other means, the U.S. Census Bureau provides a tool for determining them, (<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).

Federal Land other than Outer Continental Shelf means all lands the United States owns, including military reservations, except lands in National Parks and lands held in trust for Native Americans. Accidents 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.

A 5. Estimate costs/losses for the items provided in this section. Do not report costs incurred for facility repair, replacement, or change that is not related to the accident done solely for convenience. An example of doing work solely for convenience is working on facilities unearthed because of the accident. Litigation and other legal expenses related to the accident are not reportable.

PART B - PREPARER AND AUTHORIZED SIGNATURE

Preparer is the name of the person who prepared the responses to the form and who is to be contacted for more information (preferably the person most knowledgeable about the information in the report).

Authorized Signature may be the preparer, an officer, or other person whom the operator has designated to review and sign reports. Please enter the preparer's e-mail address if the preparer has one.

PART C - ORIGIN OF ACCIDENT

C 2. Location of System Involved:

High consequence area means:

1. A commercially navigable waterway, which means a waterway where a substantial likelihood of commercial navigation exists;

2. A high population area, which means an urbanized area as defined and delineated by the Census Bureau that contains 50,000 or more people and has a population density of at least 1,000 people per square mile;

3. Any other populated area, which means a place as defined and delineated by the Census Bureau that contains a concentrated population, such as an incorporated or unincorporated city, town, village, or other designated residential or commercial area;

4. An unusually sensitive area, as defined in 195.6

C 3. Part of System Involved in Accident

If the failure occurred on an item not provided in this section, check the "OTHER" box and specify in the space provided the part of the structure that failed. If failure occurred on **onshore or offshore pipeline**, complete C a through g.

Leak - an unintentional release of product from a pipeline requiring repair to the pipeline. The source of the leak may be holes, cracks (including propagating and non-propagating, longitudinal and circumferential cracks), separation or pull-out, and loose connections.

Rupture - a complete failure of a portion of the pipeline.

Propagation - the extension of the original opening in the pipeline in an area of nominal wall thickness resulting from the internal forces on the pipeline.

Tear - an extension of the original opening in the pipeline resulting from an externally applied force, such as a bulldozer, backhoe, or grader.

Note: for C 3 a - {Type of Leak or Rupture}, *Connection Failure* refers only to accidents where failure occurred on a connection that joined two segments of pipe.

"Year the pipe/component which failed was installed" means the year installed at the accident location.

PART D - MATERIAL SPECIFICATION

Complete section D (1 through 6), if pipe or valve failed.

ITEM 1. Nominal pipe size is the diameter in inches used to describe the pipe size; for example, 2-inch, 4-inch, 8-inch, 12-inch, 30-inch.

ITEM 2. Enter pipe wall thickness in inches. Use decimals as necessary.

ITEM 3. Specification is the specification to which the pipe or component was manufactured, such as API 5L or ASTM A106. When more than one item has failed, and the origin of the failure is not clear, complete Part C ITEM 2 to explain the additional item(s).

ITEM 4. *Common seam types: (Acronyms used in Part H5, item 19:*

LF ERW: low frequency electro-resistance weld

HF ERW: high frequency electro-resistance weld

DSAW: double-submerged arc weld

SAW: submerged arc weld

ITEM 5. Some valve types are: flange-welded, bell-plug, etc.

PART E - ENVIRONMENT

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

Provide depth of cover in inches where accident involved buried pipe or component.

PART F - CONSEQUENCES

F 1 a. - When a person dies within 30 days of the initial accident date, report as a fatality. When a person dies subsequent to an injury more than 30 days past the accident date, report as an injury. This aligns with the Department of Transportation's general guidelines for all modes for reporting deaths and injuries.

Injuries are those that require in-patient hospitalization, meaning hospital admission and at least one overnight stay.

For F 2 a, because of the difficulty in estimating number of individual animals or species affected, we do not ask quantity, rather, we only provide a check box to indicate if any species were impacted.

If product ignited, but there was no explosion, check box F1c. If an explosion occurred, check box F1d.

For F 1 f, "Elapsed time until the area was made safe" means the amount of time starting from the accident occurrence until the time that the accident is brought under control and does not significantly threaten public safety. This does not necessarily mean that the flow of product has been stopped. If the time of occurrence is unknown, the time when the operator was first notified or made aware of the accident should be used to calculate elapsed time.

PART G - LEAK DETECTION INFORMATION

Enter the requested information about leak detection systems.

PART H - APPARENT CAUSE

There are 25 numbered causes in Part H. The 25 causes are divided into 8 categories in sections H1 through H8. Check the box indicating the general cause of the accident and check the circle indicating the specific cause.

PART H1 -CORROSION

Corrosion includes a leak or failure caused by galvanic, bacterial, chemical, stray current, or other corrosive action. Examples: 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 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 and caused a leak or failure and a new gasket is required, it is classified as a Material Defect. Leaks resulting from materials deteriorating after the expected life of the materials are classified as "Other". Leaks due to deterioration from corrosion, however, are classified as "Corrosion".

Complete H1 parts a - e where applicable.

If the cause was Stress Corrosion Cracking, check the block for Stress Corrosion Cracking under H1 (c).

Subpart a - Pipe Coating

Galvanized pipe with no dielectric coating is considered bare.

Subpart d - Cathodic Protection

"Under cathodic protection" means cathodic protection in accordance with Part 195.242, 195.414, and 195.416. 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.

PART H2 -NATURAL FORCES

ITEMS 3 - 7: Natural Forces.

This includes all outside forces attributable to causes not involving humans. "Earth Movement" refers to failures caused by land shifts such as earthquakes, landslides, or subsidence.

"Heavy rains and floods" refer to all water related failure causes such as washouts, flotation, mudslides, or water scouring. While mudslides involve earth movement, report them here since typically they are an effect of heavy rains or floods.

"Temperature" refers to those causes that are related to temperature effects, or where temperature was the initial cause; for example, thermal stress, frost heave, or frozen component failures.

PART H3 -EXCAVATION DAMAGE

This section covers excavator damage by operator, operator's contractor, utilities, or others.

Complete subparts a - g if any cause was checked in Part H3(9).

ITEMS 8 - 9: Excavation.

Item 8: check this item if the operator or the operator's contractor or agent caused the failure, or if caused by another party working for the operator as a result of excavation.

Item 9: Third Party Damage- check this item if failure cause was from excavation damages resulting from action by a third party, that is, by a party other than the operator or the operator's agent.

Subpart 9e- "Prior notification" means that the operator had been notified that excavation or construction work was to be done near the

pipeline before the accident occurred. If the operator was notified, but the operator believes the notice was inadequate, improper, or incomplete, check NO and explain in Part G, Narrative Description Of Factors Contributing to the Event, how the notice was inadequate, improper or incomplete.

Subpart 9f- "Was pipeline marked as a result of location request for excavation?": Indicate whether the pipeline was marked. If the pipeline was marked, complete all items i through iv that apply.

PART H4 -OTHER OUTSIDE FORCE DAMAGE

This section covers damages to pipelines or facilities caused by external forces other than excavation damage.

ITEMS 10- 13 Cover other failures caused by damages to pipelines by external forces other than excavation or natural forces. Fire/explosion as primary cause of failure implies that fire/explosion occurred prior to failure and not as a result of failure. If a fire/explosion occurred as a result of the failure not as primary cause of the failure, do not check item 10, but check Part F item 1c or 1d. If the primary failure cause was damage by a vehicle other than a vehicle involved in excavation, check item 11. If a vehicle involved in excavation caused the damage, check the appropriate item under the Excavation Damage section (items 8 and 9).

PART H5 - MATERIAL AND/OR WELD FAILURES

"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.

ITEMS 14 - 16, Material.

This section includes leaks or failures from a defect within the material of the pipe, component or joint due to faulty manufacturing procedures. Leaks or failures resulting from material deterioration and not resulting from an original defect or corrosion are reported under "Other". Complete subparts a-g if any cause was checked in Part H5.

ITEMS 17 - 19, Welds.

Acronyms used in this section:

LF ERW: low frequency electro resistance weld

HF ERW: high frequency electro-resistance weld

DSAW: double-submerged arc weld

SAW: submerged arc weld

"Weld-related material defects" includes leaks or failures from a defect within the material of the pipe, component or longitudinal weld or seam due to faulty welding or weld-related manufacturing procedures.

Sub-Elements a - g

"Construction defect" includes leaks in or failures of originally sound material due to force being applied during field construction that caused a dent, gouge, excessive stress, or some other defect that eventually resulted in failure. Included are leaks in or failures of wrinkle bends, field welds, and damage sustained in transportation to the construction or fabrication site.

PART H6 - EQUIPMENT

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 thread failures, and failures in seal/pump packings. Accidents resulting from incorrect operations or inadequate procedures are also included in this category. Report gasket or o-ring failures under Part H5, item 16, Joints, by checking the appropriate circle for gasket or o-ring.

Item 20- Malfunction of Control/Relief Equipment

Examples of this type of failure cause include: over pressurization resulting from malfunction of control or alarm device; relief valve malfunction: and valves failing to open or close on command; or which opened or closed when not commanded to do so.

Item 21 - Threads stripped, broken pipe coupling

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.

Item 22 - Ruptured or Leaking Seal/Pump Packing

Examples of this type of failure generally include failures of compressor pump packing or other pump seals.

PART H7 - INCORRECT OPERATION

Incorrect operation failures typically result from faulty or inadequate procedures. These types of failures most often occur during maintenance activities. Some examples of this type of failure are unintentional

product ignition during a welding or maintenance activity; other reportable accidents causing a fire, or failures where human error, employee fatigue, and/or lack of experience may have played a role.

PART H8 - OTHER

This section is provided for failure causes that do not fit in any category in Sections H1 through H7. If the failure cause is unknown at time of filing this report, check item 25. If the failure cause is known but doesn't fit in any category in sections H1 through H7, check item 24 and describe the cause. Continue in Part I, narrative description, if more space is needed.

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE ACCIDENT

Concisely describe the accident, including the facts, circumstances, and conditions that may have contributed directly or indirectly to causing the accident. You may explain any estimated data in the narrative. If you checked the OTHER block in Part H8 item 24 or 25, the narrative should describe the accident in detail, including the timeline, sequence of events, and all known or suspected causes. Use this section to clarify or explain unusual conditions.