Part 191 and Other Reporting Requirements for Natural Gas Pipelines

PHMSA
This part prescribes requirements for the Reporting of:

- Incidents
- Safety related conditions
- Annual pipeline summary data
- Other reporting requirements
An event that involves a release of gas from a pipeline, gas from an underground natural gas storage facility, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:
i. A death, or personal injury necessitating in-patient hospitalization;

ii. Estimated property damage of $50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;
Incident (§191.3)

iii. Unintentional estimated gas loss of three million cubic feet or more;

1) An event that results in an emergency shutdown of an LNG facility or an underground natural gas storage facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.

2) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.
Examples of Reportable Incidents
November 29, 2016 – Enterprise Products Pipeline Rupture near Kansas City International Airport

- 10-inch Ethane/Propane pipeline operating at approximately 1000 psi. failed due to Stress Corrosion Cracking (SCC).
- Burning product was visible for miles.
February 6, 2008 – The Columbia Gas Hartsville Compressor Station was Struck by Tornadoes

• The Hartsville Station was a 52,000 HP compressor station.
• Survivors said the light in the sky from the burning station illuminated the tornadoes, warning them to take cover.
Incident (§191.3)

February 6, 2008 – The Columbia Gas Hartsville Compressor Station was Struck by Tornadoes

• An F-2 tornado touched down directly over the compressor station.
• Columbia Gas reports three transmission lines were shut down due to this incident.
April 29, 2016 – A Texas Eastern 36-inch Natural Gas Pipeline near Philadelphia Ruptured and Caught Fire.

- Homes were destroyed and people were sent running for safety.
- At least one person sustained injured from the flames.
Incident (§191.3)

Emergency Shutdown of an LNG Facility or an Underground Natural Gas Storage Facility

NOTE: Activation of ESD for reasons other than an actual emergency does not constitute an incident
An event deemed significant in the judgment of the operator, even though it doesn’t meet other criteria for an incident.
The operator should define these significant events:

- Lower thresholds for property loss
- Emergency response
- Media
- Loss of Customers

Intrastate operator’s criteria may be guided by state regulations
What should an operator do when a reportable incident occurs?

The Operator should:

• Activate the Emergency Response Plan
• Call the NRC (National Response Center) at 1-800-424-8802 at the earliest practicable moment following discovery (§191.5)
• Make the NRC call within one hour
Post-Incident Reporting

Complete an incident form as soon as practicable, but within 30 days


• §191.9 (Gas Distribution) or §191.15 (Gas Transmission and UGS)
Post-Incident Reporting

The report should be filed electronically (§191.7)

- PHMSA Form 7100.1 (Gas Distribution), PHMSA Form 7100.2 (Gas Transmission), or PHMSA Form 7100.4 (Underground Natural Gas Storage)

*Additional supplemental reports should be filed, as needed*

Be sure to finalize the report
What if an operator calls the NRC and discovers later that the incident is not a reportable incident?

• Make the call, even if you’re not certain the call is required.
• It’s better to make the call when it may not be necessary than to not make the call and determine later a notification was required.
If it turns out an NRC notification was made, but wasn’t required:

• No 30 day report required
• The NRC report cannot be rescinded
• Consider the NRC notification a courtesy call
If the operator determines the incident wasn’t reportable, after a 30-day report has been filed:

- The operator must send a letter requesting the incident be rescinded.
- Only the operator can request a report be rescinded.
§191.7 If electronic reporting imposes an undue burden and hardship, the operator may submit written request for an alternative reporting method.

• The request must describe the undue burden and hardship

• PHMSA will review the request, and may authorize in writing an alternative reporting method
Federal reporting does not supersede State Reporting Requirements.

• The operator may still be required to file a written report with the state regulatory agency.

• Reporting to the NRC will NOT automatically send a copy to the state
Completing the Gas Transmission Report:

- Complete all parts of the report accurately, including type of report, original, supplemental, or final.
- An original report will be the first report turned in, a supplemental may be turned in after the original if more information has been discovered since the original report has been submitted.
- List all injuries and fatalities and whether they were employee’s, contractor’s, or the public.
Completing the Gas Transmission Report:

- Use of the federal incident investigation form may be helpful in gathering information for the report.
- The form was updated in 2010 to add questions regarding control room management, and added a number of categories for incident causes.
- Fill out all sections that apply to the incident.
Annual Reporting

Annual reports are due on March 15\textsuperscript{th} for the previous calendar year

- §191.11 – Distribution
- §191.12 – Distribution Systems: Mechanical Fitting Failure Reports
- §191.17 – Transmission, Underground Natural Gas Storage, Gathering, and LNG

LPG System operators with less than 100 customers, LNG, and Master Meter Operators are exempt from the reporting requirements
Transmission Annual Report

A separate form is required for each commodity the operator carries

• Parts A – E are to be completed once for each OPID commodity group annual report, covering ALL of the pipelines and/or facilities
• Parts F – M are to be reported separately for Interstate and for Intrastate facilities, or by state, according to the instructions
• Integrity Management (IM) required reporting (§192.945) is included in the annual report
A separate form is required for each State in which the system operates

“Part B” is system description, including;

• Miles of mains and services,
• Materials,
• Line sizes,
• Number of services,
• Decade of installation
§192.1007(e)

Distribution operators must report:

• (i) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) of this subchapter (or total number of leaks if all leaks are repaired when found), categorized by cause;
• (ii) Number of excavation damages;
• (iii) Number of excavation tickets (receipt of information by the underground facility operator from the notification center);
• (iv) Total number of leaks either eliminated or repaired, categorized by cause;
A “Leak” is an unintentional escape of gas from a pipeline. Test failures are not included.

A Non-Hazardous Release that can be Eliminated by Lubrication, Adjustment, or Tightening is Not a Leak

§192.1001 defines a Hazardous Leak as a leak that represents an existing or probable hazard to persons or property, and requires immediate repair or continuous action
Part C aligns with IM requirements for reporting total leaks eliminated or repaired

- Both total leaks and hazardous leaks

Align with IM

- Corrosion
- Natural Forces
- Excavation
- Other Outside Force Damage

Requirements

- Material and Welds
- Equipment
- Incorrect Operations
- Other
IM reporting requirements found in §192.1007(e) have been added to the form

• Part D Excavation tickets and damage

DIMP - §192.1001 Excavation Damage means any impact that results in the need to repair or replace an underground facility due to a weakening, or the partial or complete destruction, of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection or the housing for the line device or facility.
Distribution Annual Report

Excess Flow Valve Reporting Requirements in §192.383(c):
• Each operator must report the EFV measures detailed in the annual report required by §191.11

Report the estimated number of EFVs in system
• Cumulative number
• Add current year to last years number
• Understand accuracy issues

Report the total number of EFVs installed during past year
Each Mechanical fitting failure as required by §192.1009 must be submitted on Mechanical Fitting Failure Report Form PHMSA F-7100.1-2

- Each mechanical fitting failure that occurs within a calendar year not later than March 15 of the following year, or
- Operator may submit its reports throughout the year

If the state has regulatory authority, also report to the state.
All owners and operators of underground storage facilities used for the storage of natural gas, as defined in 49 CFR part 192, are required to submit annual reports.

Facility operators must have submitted their first annual report on PHMSA Form 7100.4-1 for the 2017 calendar year by March 15, 2018.
Underground Natural Gas Storage Annual Report

Part A includes the Underground Natural Gas Storage Facility’s Operator Information.

PART A – OPERATOR INFORMATION

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
## Underground Natural Gas Storage Annual Report

### Part B – Storage Facility

*Complete Part B once for each independent storage facility*

- **B1. Facility Name (chosen by operator):**
- **B2. Select only one:**
  - ☐ INTERstate
  - ☐ INTRAstate
- **PHMSA USE ONLY**
  - Unit ID: __________

- **B3. Facility Location**
  - Latitude: / / / / . / / / / / / / / /
  - Longitude: - / / / / / . / / / / / / / / /
  - State: _____
  - County: ________________

- **B4. Energy Information Administration Gas Field Code:** _____________

Names of Reservoirs within this facility: *populated from Parts C1*

### Gas Volumes

- **B5. Working gas capacity** (billion standard cubic feet (BCF)), *include two decimal places:* _____________
- **B6. Base (also known as Cushion or Pad) gas** (billion standard cubic feet (BCF)), *include two decimal places:* _____________
- **B7. Total gas capacity** (billion standard cubic feet (BCF)): _____ calc
Part C includes specific information concerning the Reservoirs and Wells.

<table>
<thead>
<tr>
<th>PART C – RESERVOIRS AND WELLS Complete Part C once for each reservoir or geologic storage formation within a facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Name: populated from Part B1</td>
</tr>
<tr>
<td>C1. Reservoir name (chosen by operator): ____________________________</td>
</tr>
<tr>
<td>C2. Year reservoir placed in storage service: ______</td>
</tr>
<tr>
<td>C3. Type (select only one):  □ Salt Cavern  □ Hydrocarbon Reservoir  □ Aquifer Reservoir</td>
</tr>
<tr>
<td>□ Other  Description of type: ____________________________</td>
</tr>
<tr>
<td>C4. Maximum Wellhead Surface Pressure</td>
</tr>
<tr>
<td>C4a. Text identifying the indicator well: ____________________________</td>
</tr>
<tr>
<td>C4b. Maximum surface pressure (pounds per square inch gauge (psig)) at the indicator well: _____</td>
</tr>
<tr>
<td>Reservoir or Geologic Storage Formation Depth</td>
</tr>
<tr>
<td>C5. Approximate Maximum Depth (feet): __________</td>
</tr>
<tr>
<td>C6. Approximate Minimum Depth (feet): __________</td>
</tr>
</tbody>
</table>

Wells |
| C7. Number of Injection and/or Withdraw Wells: __________ |

Underground Natural Gas Storage Annual Report
Part D includes the Contact Information for the person submitting the report.

**PART D – CONTACT INFORMATION**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>D1.</td>
<td>Name of person submitting report: ____________________________</td>
</tr>
<tr>
<td>D2.</td>
<td>Title of person in D1: ____________________________</td>
</tr>
<tr>
<td>D3.</td>
<td>Work e-mail address of person in D1: <em>auto-populated based on Portal login</em></td>
</tr>
<tr>
<td>D4.</td>
<td>Work phone number of person in D1: ____________________________</td>
</tr>
<tr>
<td>D5.</td>
<td>Name of person to contact with questions about this report: ____________________________</td>
</tr>
<tr>
<td>D6.</td>
<td>Title of person in D5: ____________________________</td>
</tr>
<tr>
<td>D7.</td>
<td>Email address of person in D5: ____________________________</td>
</tr>
<tr>
<td>D8.</td>
<td>Phone number of person in D5: ____________________________</td>
</tr>
</tbody>
</table>
Safety-Related Conditions §191.23

Each operator shall report the existence of any of the following safety related conditions:
Safety-Related Conditions §191.23

Any condition that causes a 20% or more reduction in operating pressure or shutdown of operation.

• Applies to ALL pipelines
Unintended movement or abnormal loading by environmental causes which could affect the serviceability or the structural integrity of the pipeline.

- Applies to ALL pipelines
Safety-Related Conditions §191.23

A leak that constitutes an emergency.

- Applies to ALL pipelines
Safety-Related Conditions §191.23

Any malfunction or operating error that causes the pressure to exceed MAOP plus buildup.

• Applies to ALL pipelines
General Corrosion

Localized Corrosion Pitting

• To a degree where Leakage Might Result
• Where Wall Loss due to Corrosion Requires the MAOP to be Reduced

Applies to pipelines operating at 20% or more SMYS.
Safety-Related Conditions §191.23

Any material defect or physical damage that impairs serviceability.

- Applies to pipelines operating at 20% or more SMYS
Any crack or other material defect that impairs the structural integrity or reliability of an LNG Facility.
Inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank.
Safety-Related Conditions §191.23

Reports are required for conditions within the Right-of-Way of:

• An active railroad, paved road, street,
• Or highway, or within 220 yards of a building suitable for human occupancy
Safety-Related Conditions §191.23

Reports are required for conditions within the Right-of-Way of:

• General corrosion
• Localized pitting on bare pipelines
Underground Natural Gas Storage Safety-Related Condition Reporting:

• Effective January 18, 2017, Underground Natural Gas Storage facility operators are required to submit Safety-Related Conditions Reports.
Safety-Related Conditions §191.23

Reportable Safety-Related Conditions for Underground Natural Gas Storage:

• Defects impacting maximum pressure
• Corrosion
• Unintended movement or abnormal loading by environmental causes
• Crack or other material defect that impairs structural integrity or reliability
• Material defect or physical damage that impairs serviceability
Safety-Related Conditions §191.23

Reportable Safety-Related Conditions for Underground Natural Gas Storage:

• Malfunction or operating error that causes pressure excursion
• A leak that constitutes an emergency
• Safety-related condition that could lead to an imminent hazard and causes a 20% or more reduction in operating pressure or shutdown
Safety-Related Conditions §191.23

Not a Safety-Related Conditions for Underground Natural Gas Storage If:

• Is or results in an incident* before the filing deadline
• Not near building intended for human occupancy or outdoor place of assembly
• Corrected before the filing deadline

*Refer to 49 CFR §191.3 for the definition of an incident
Filing a Safety-Related Condition Report §191.25

File within 5 working days of determination
No more than 10 working days after discovery of the condition
There is no specific form
• Information Requirements are in §191.25

Email to: InformationResourcesManager@dot.gov
Or Fax to (202) 366-7128
Safety-Related Condition Reporting Exceptions

1. Exists on a Master Meter System or a Customer-Owned Service Line.
2. Is a reportable incident.
3. Exists on a pipeline that is more than 220 yards from any building intended for human occupancy.
4. Is corrected before the deadline for filing.
Section 23 – For gas transmission pipelines, if the MAOP exceeds the build-up allowed for operation of pressure-limiting or control devices, the owner or operator shall report the exceedance to the Secretary and appropriate State authorities on or before the 5th day following the date on which the exceedance occurs.
§191.22 National Registry of Pipeline Operators

Effective January 1, 2012 OPID Request. Each operator of a gas pipeline, gas pipeline facility, must obtain from PHMSA an Operator Identification Number (OPID).

This requirement applies to all new and existing operators, including operators who have already been assigned one or more OPID. Operator who already has OPID must, by January 1, 2012, validate the information associated with each OPID number, and correct the information as necessary, but no later than June 30, 2012.

Operator must use their assigned OPID for all reporting requirements.
§191.22 National Registry of Pipeline Operators

Effective January 18, 2017 each operator of an underground natural gas storage facility must obtain from PHMSA an Operator Identification Number (OPID).

Underground natural gas storage facility operator must use their assigned OPID for all reporting requirements.
§191.22 National Registry of Pipeline Operators

Changes through the National Registry of Pipeline and LNG 60 days prior to any of the following events:

• Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs $10 million or more. If 60 day notice is not feasible because of an emergency, an operator must notify PHMSA as soon as practicable;
• Construction of 10 or more miles of a new pipeline; or
• Construction of a new LNG plant or LNG facility
Report Within 60 Days After –

- A change in the primary entity responsible (i.e., with an assigned OPID) for managing or administering a safety program required by this part covering pipeline facilities operated under multiple OPIDs.
- A change in the name of the operator;
Report Within 60 Days After –

- A change in the entity (e.g., company, municipality) responsible for an existing pipeline, pipeline segment, pipeline facility, or LNG facility;
- The acquisition or divestiture of 50 or more miles of a pipeline or pipeline system subject to Part 192 of this subchapter; or
- The acquisition or divestiture of an existing LNG plant or LNG facility subject to Part 193 of this subchapter.
Each operator of a gas transmission pipeline or liquefied natural gas facility must provide the following geospatial data to PHMSA, effective October 1, 2015

- Geospatial data, attributes, metadata and transmittal letter appropriate for use in the National Pipeline Mapping System.
- The name of and address for the operator.
- The name and contact information of a pipeline company employee, to be displayed on a public Web site, who will serve as a contact for questions from the general public about the operator’s NPMS data.
National Pipeline Mapping System §191.29

§191.29(b) NPMS must be updated annually by March 15 or send an e-mail stating no changes.
Additional Reporting Requirements

§192.727(g) - After October 10, 2000

The last operator must file a report is required for each abandoned pipeline facility.

- Offshore
- Onshore that crosses over, under, or through a commercially navigable waterway

Report to include location, size, date, method of abandonment, and certification abandoned in accordance with all applicable laws.
Summary for Reporting Requirements

Operators should have:

• Written procedures
• Forms and information available
• Review process and work
Additional Information

PHMSA Forms and Reporting Instructions
http://www.phmsa.dot.gov/pipeline/library/forms

PHMSA Pipeline Safety Regulations
http://www.phmsa.dot.gov/pipeline/tq/regs

PHMSA National Pipeline Mapping System
http://www.npms.phmsa.dot.gov