

1-C Reports, Safety-related Conditions and Exceedances

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1.0 SCOPE

This chapter describes the requirements for submitting various reports required by 49 CFR Part [191](#). This includes:

- Annual Reports
- Mechanical Fitting Failure Reports
- Safety-related Condition Reports
- Exceedance of *MAOP* reports
- National *Pipeline* Mapping System Reports.
- Other Reports

2.0 REGULATORY REFERENCES

49 CFR Part 191 §§ [191.7](#), [191.11](#), [191.13](#), [191.17](#), [191.22](#), [191.23](#), [191.25](#), [191.29](#)

49 CFR Part 192 [Subpart O](#), §§ [192.18](#), [192.179](#), [192.506](#)(b), [192.607](#)(e)(4), [192.607](#)(e)(5), [192.624](#)(c)(2)(iii), [192.624](#)(c)(6), [192.632](#)(b)(3), [192.634](#), [192.636](#), [192.710](#)(c)(7), [192.712](#)(d)(3)(iv), [192.712](#)(e)(2)(i)(E), [192.745](#), [192.805](#)(i), [192.921](#)(a)(7), [192.933](#)(a)(1), [192.937](#)(c)(7), [192.939](#), [192.951](#)

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3.1 Report Submission Requirements [191.7]

- (a) The following reports submitted to *USDOT PHMSA shall* be submitted electronically according to 49 CFR [191.7](#), on the website at <https://portal.phmsa.dot.gov/pipeline>. Designated reporting personnel shall be provided with login credentials at access website.
- Annual reports
 - Mechanical Fitting Failure reports
- (b) Safety-related Condition and MAOP Exceedance reports shall be submitted by email to InformationResourcesManager@dot.gov or by facsimile at (202) 366-7128. Copies of these reports shall also be submitted concurrently to the state regulatory agencies listed in [Chapter 1-B, section 3.3 Notification Retractions](#).
- (c) National Pipeline Mapping System (NPMS) *must* be submitted to the address identified in the NPMS Operator Standards manual available at www.npms.phmsa.dot.gov or by contacting the PHMSA Geographic Information Systems Manager at (202) 366-4595.
- (d) Copies of all reports submitted to PHMSA shall also be submitted concurrently to the state regulatory agencies listed in [Chapter 1-B, section 3.3 Notification Retractions](#).
- (e) Annual reports shall be reviewed and approved by the Director of Gas Operations prior to submitting to PHMSA and the state regulatory agencies.

3.2 Annual Reports [191.11] [191.13] [191.17]

DENC and DESC shall submit the Distribution System Annual Report form PHMSA F 7100.1-1 and the Transmission Annual Report form PHMSA F 7100.2-1 by March 15 of the following year.

Current PDF versions of these forms and instructions can be found on the USDOT PHMSA website at <https://www.phmsa.dot.gov/forms/pipeline-forms>. These PDF forms *may* be used to assist in collecting and formatting information before submission.

3.3 Safety-related Conditions and Reports

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3.3.1 Recognizing Safety-related Conditions [191.23]

Personnel who perform operations and maintenance tasks on DENC and DESC pipeline facilities must be able to recognize and react to safety-related conditions. For the purposes of this procedure, safety-related conditions are defined as any one of the following:

- (a) General corrosion that has reduced the wall thickness of a transmission pipeline to less than that required for the *maximum allowable operating pressure* (MAOP),
- (b) Localized corrosion pitting on a transmission pipeline to a degree where leakage might result,
- (c) Unintended movement or abnormal loading by environmental causes, such as an earthquake, hurricane, landslide, or flood that impairs the serviceability of a *transmission line* or *distribution line*.
- (d) Any material defect or physical damage that impairs the serviceability of a transmission pipeline,
- (e) Any malfunction or operating error that causes the pressure in a distribution line or LNG facility to rise above its *MAOP* plus the build-up allowed for operation of pressure limiting or control devices (see [Chapter 12-G Pressure Limiting and Regulating Stations, section 3.5\(d\)](#)),
- (f) A leak in a transmission or distribution line that constitutes an *emergency*, or,
- (g) Any safety-related condition involving a transmission or distribution line that could lead to an imminent hazard (see Note 1 below) and causes (either directly or indirectly by remedial action of DENC and DESC), for purposes other than abandonment, either:
 - (1) A reduction in operating pressure of 20 percent or more, or
 - (2) A shutdown of the operation of the pipeline

Note 1: Operators are expected to report conditions that could be classified as "near accident," "severe," or "glaring, hazardous conditions which might, if left to linger, constitute an imminent danger or potentially cause an *incident*" as opposed to conditions of "routine replacement, repair, or other types of maintenance." See Final Rule on *Reporting Unsafe Conditions on Gas and Hazardous Liquid Pipelines and Liquefied Natural Gas Facilities*, [53 Fed. Reg. 24,942](#) (July 1, 1988).

Safety-related condition (SRC) reports are only required if the condition is within 220 yards of a building intended for human occupancy or an outdoor place of assembly (such as ball field, concert area, prison yard, etc.), or if the condition is within a right-of-way of an active railroad, paved road, street, or highway.

Note 2: SRC reporting is distinct from any actions or reporting required by the Integrity Management Regulations found in Part 192 [Subpart O, Gas Transmission Pipeline Integrity Management](#). For any anomalies/conditions identified during Integrity Management Activities, it is important to review whether SRC reporting is required under this procedure and what actions/reporting are required under the IM procedure. For ease of reference, a copy of the relevant sections of the IM procedures is included as Exhibit B; the IM requirements are in addition to and independent of any SRC reporting requirements.

For the purposes of this procedure the following terms are defined:

Discovery – Discovery of a safety-related condition occurs when a DENC and DESC representative becomes aware of a condition that is potentially reportable as a safety-related condition. Discovery does not require certainty that the condition exists or analysis to confirm that the condition

Determination – Determination of a safety-related condition occurs when a DENC and DESC representative confirms that a safety-related condition exists. Such determination generally occurs through analysis or field examination.

Emergency – A serious condition or event that, if not immediately corrected or resolved, could result in an Incident.

Conditions that Impair Serviceability – Conditions that impact the operating capabilities of pipelines to the extent that an operator must lower the operating pressure, reduce the MAOP, replace a pipeline segment or shut down the pipeline meet this definition. Examples:

- (a) Metal loss from damage or corrosion on a transmission pipeline that reduces the wall thickness below the minimum necessary to sustain the MAOP of the pipeline.
- (b) Corrosion or damage of a distribution *main* that reduces the wall thickness to less than 30% of the pipeline's nominal wall thickness.

Incident – For purposes of this procedure, an event that involves the release of natural gas from a pipeline and that results in one or more of the following:

- (a) A death
 - (b) Personal injury necessitating in-patient hospitalization
 - (c) Total estimated property damage of \$50,000 or more, including loss to DENC and DESC and others, or both, but excluding cost of gas lost
 - (d) Unintentional estimated gas loss of three million cubic feet or more.
- (h) Any time the pressure in a *transmission line* exceeds the *MAOP* plus the build-up allowed for operation of pressure-limiting or control device (See Chapter 12-G Pressure Limiting and Regulating Stations, sections [3.1](#), [3.3](#), and [3.5](#)).

For reporting instructions see section [3.4](#), below.

This requirement does not apply to distribution lines or LNG facilities. See [3.3.1\(e\)](#), above.)

3.3.2 Reporting Safety-related Conditions [[191.25](#)]

If a safety-related condition is discovered that potentially may be subject to the reporting requirements of this procedure, personnel are instructed to notify the Manager/supervisor as soon as practicable. Managers/supervisor are responsible for reporting any safety-related conditions in their area to the designated DENC and DESC personnel submitting such reports to PHMSA.

Safety-related condition reports must be filed (received by the Associate Administrator) with Pipeline and Hazardous Materials Safety Administration (PHMSA) in writing within five (5) working days after the day of Determination, but not later than 10 working days after the day of Discovery, unless one of the following exceptions applies:

- (a) The safety-related condition exists on a master meter system or a customer-owned *service line*.
- (b) The safety-related condition is an incident or results in an incident before the deadline for filing the safety-related condition report.
- (c) The safety-related condition is not within the areas identified in [3.3.1 Recognizing Safety-related Conditions](#) above.
- (d) The safety-related condition is corrected by repair or replacement in accordance with applicable safety standards before the deadlines for filing safety-

- (1) General corrosion that has reduced the wall thickness of a transmission line to less than that required for the MAOP; and
- (2) Localized corrosion pitting to a degree where leakage might result, unless the pipeline is effectively coated and cathodically protected.

These procedures should be used as a guide but immediate communication of possible safety-related conditions to Division/Regional Managers and Directors is required using [Form 1-C-1](#). The Director will review and approve the identification of the SRC.

Figure 1-C-1 below visually illustrates the decision-making process for determining when a safety-related condition should be reported.

Figure 1-C-1 - Safety-related Condition Flow Chart ([view PDF file](#))

Location of Condition	Time To Correct	Type of Condition and Pipeline	Effect of Condition on Facility Operation	Report Required
Within 220 yards of a building intended for human occupancy or outdoor place of assemble or within the right-of-way of an active railroad, paved road, or street or highway	Will not be corrected within 5 working days after determination or 10 working days after discovery, whichever comes first	General Corrosion on a Transmission Pipeline	Reduces the wall thickness to less than that required for MAOP	Yes
			Does not reduce the wall thickness to less than that required for MAOP	No
		Localized Corrosion Pitting on a Transmission Pipeline	Leakage might result	Yes
			Leakage unlikely to result	No
		Unintended Movement or Abnormal Loading of a Pipeline (Distribution or Transmission)	Impairs serviceability	Yes
			Does not impair serviceability	No
		Material Defect or Physical Damage on a Transmission Pipeline	Impairs serviceability of the pipeline	Yes
			Does not impair serviceability of the pipeline	No
		MAOP Exceedance on a Pipeline (Distribution or Transmission)	Causes pressure to increase above MAOP plus allowable buildup	Yes
			Does not cause pressure to increase above MAOP plus allowable buildup	No
		Leak in a Pipeline (Distribution or Transmission)	Creates an emergency	Yes ²
			Does not create an emergency	No
		Any Other Conditions on a Pipeline (Distribution or Transmission)	Could lead to an imminent hazard AND causes a) 20% or more pressure reduction in operating pressure or b) shutdown of the pipeline	Yes ²
			Could not lead to an imminent hazard OR does not cause either a 20% reduction in operating pressure or shutdown of the pipeline	No

	Will be corrected within 5 days after determination or 10 working days after discovery, whichever comes first.	on a Transmission Pipeline	Does not reduce the wall thickness to less than that required for MAOP		No	
		Localized Corrosion Pitting on a Transmission Pipeline	Leakage might result	Effectively coated & cathodically protected	No	
				All other coating/cathodic protection conditions	Yes	
					Leakage unlikely to result	
		All Other Conditions	All		No	
All Areas	Regardless of time to correct	Exceedances of pressure in a transmission pipeline above MAOP (plus the build-up allowed for operation of the pressure-limiting or pressure control devices) that does not meet the reporting requirements of a Safety Related Condition are still reportable; those reports are to be made as "Maximum Allowable Operating Pressure Exceedances", and are due within five calendar days of the exceedance			Yes	

¹ An event which is an incident (§191.3) or results in an incident before the deadline for filing the safety-related condition report is not reportable as a safety-related condition. A report is also not required for any safety related condition that exists on a master meter system or a customer-owned service line.

² Operators are expected to report conditions that could be classified as "near accident," "severe," or "glaring, hazardous conditions which might, if left to linger, constitute an imminent danger or potentially cause an incident" as opposed to conditions of "routine replacement, repair, or other types of maintenance." See Final Rule on Reporting Unsafe Conditions on Gas and Hazardous Liquid Pipelines and Liquefied Natural Gas Facilities, 53 Fed. Reg. 24,942 (July 1, 1988)

The report must be approved by Director and headed "Safety-related Condition Report" or "Maximum Allowable Operating Pressure Exceedances", for a Transmission Pipeline Exceedance of MAOP, and provide the following information:

- Name and principal address, and operator identification number (OPID) of operator.
- Date of report.
- Name, job title, and business telephone number of person submitting the report.
- Name, job title, and business telephone number of person who determined that the condition exists.
- Date condition was discovered and date condition was first determined to exist.
- Location of condition, with reference to the State (and town, city, or county), and as appropriate, nearest street address, survey station number, milepost, landmark, and name of pipeline.
- Description of the condition, including circumstances leading to its discovery, any significant effects of the condition on safety, and the name of the commodity transported or stored.
- The corrective action taken (including reduction of pressure or shutdown) before the report is submitted and the planned follow-up or future corrective action, including the anticipated schedule for starting and concluding such action.

3.3.3 Integrity Management Requirements [[192.951](#)]

[Subpart O](#) prescribes additional requirements for actions which must be taken for conditions discovered in covered segments during integrity inspections.

- An operator must evaluate and classify all anomalous conditions within 180 days of completing the integrity inspection, unless DENC and DESC

(b) Anomalous conditions are classified as follows:

- (1) immediate repair conditions, which require that an operator take prompt action to ensure the integrity of the pipeline;
- (2) one-year conditions, which must be remediated within one year of discovery of the condition; and
- (3) monitored conditions, which do not have to be remediated but must be recorded and monitored during subsequent risk assessments.

(c) Special requirements for immediate repair conditions:

- (1) Discovery of an immediate repair condition, for IM purposes, occurs when DENC and DESC has adequate information about a condition to determine that it presents a potential threat to the integrity of the pipeline. Examples of discovery include:
 - (i) With respect to external corrosion direct assessment (ECDA) processes, verification of an immediate repair condition generally occurs during the direct examination step of the ECDA process;
 - (ii) With respect to inline inspections, receipt of inline inspection data (whether preliminary or final) which has been processed and analyzed by the tool vendor is generally sufficient to support discovery of an immediate repair condition. However, discovery may require further analysis or additional inspection in some cases, e.g., where DENC and DESC deems the quality of the ILI data to be unreliable. This reasoning should be documented.
- (2) Upon discovery of an immediate repair condition, DENC and DESC must promptly reduce operating pressure until the examination and repair, as necessary, are complete. System Integrity will determine the temporary pressure reduction by one of two methods:
 - (i) Using the approved methods in 49 C.F.R. §[192.933](#)(a)(1) to calculate remaining strength of the pipeline, or
 - (ii) By reducing the operating pressure to a level not exceeding 80% of the level at the time the condition was discovered.
- (3) Reductions in operating pressure cannot exceed 365 days. If pressure reductions exceed the 365 day time limit, DENC and DESC must explain to PHMSA and state regulatory agency the reasons for the remediation delay and include the technical justification that the continued pressure reduction will not jeopardize the integrity of the pipeline.
- (4) DENC and DESC must complete an examination of an immediate repair condition within five (5) calendar days. If it cannot do so, DENC and DESC must document its justification for why it cannot meet the schedule and how continued public safety is assured. DENC and DESC must notify PHMSA and state regulatory agency of its inability to examine immediate repair conditions within five (5) days only if the operating pressure cannot be reduced to required levels.
- (5) An immediate repair condition should also be analyzed to determine if it meets the definition of a Safety-related Condition and subsequent reporting and response requirements.

3.3.4 PHMSA Notification Requirements [[192.18](#)]

- (a) In order to use a different integrity assessment method, analytical method, sampling approach, or technique (i.e., "other technology or alternate equivalent technology") that differs from that prescribed in the section (c) below, PHMSA shall be notified 90 days in advance, (unless otherwise specified by code), by email to InformationResourcesManager@dot.gov.
- (b) The other method, approach, compliance timeline, or technique may be used 91 days after submittal of the notification, unless we receive a letter from the Associate Administrator for Pipeline Safety informing the company that PHMSA objects to the proposed use of other technology proposal or that

(c) Code sections for this notification requirement include:

§ [192.179](#), §[192.506](#)(b), §[192.607](#)(e)(4), §[192.607](#)(e)(5), §[192.624](#)(c)(2)(iii), §[192.624](#)(c)(6), §[192.632](#)(b)(3), §[192.634](#), §[192.636](#), §[192.710](#)(c)(7), §[192.712](#)(d)(3)(iv), §[192.712](#)(e)(2)(i)(E), §[192.745](#), §[192.805](#)(i), §[192.921](#)(a)(7), §[192.933](#)(a)(1), §[192.933](#)(a)(2), [192.937](#)(c)(7) or §[192.939](#).

3.4 Transmission Pipeline Exceedance of MAOP [[191.23](#)] [[191.25](#)]

Any time the pressure in a transmission pipeline rises above the maximum allowable operating pressure plus the build-up (exceedance) allowed for operation of pressure-limiting or control devices, this event must be reported within five days of the occurrence (not discovery).

The report must be headed "Maximum Allowable Operating Pressure Exceedances" and provide the same information described in [3.3.2 Reporting Safety-related Conditions](#), above.

Immediate communication of possible MAOP Exceedance situations to Division Managers and Directors is required using [Form 1-C-1](#).

If an exceedance is discovered that potentially may be subject to the reporting requirements of this procedure, gas control shall be updated and are instructed to notify all Directors and Integrity Management as soon as practicable. Managers/supervisors are responsible for reporting exceedances in their area to the designated DESC personnel submitting such reports to PHMSA.

3.5 National Pipeline Mapping System Reports [[191.29](#)]

DENC and DESC must provide the following geospatial data to PHMSA for each gas transmission pipeline or LNG facility:

- (1) Geospatial data, attributes, metadata and transmittal letter appropriate for use in the National Pipeline Mapping System. Acceptable formats and additional information are specified in the NPMS Operator Standards Manual available at www.npms.phmsa.dot.gov or by contacting the PHMSA Geographic Information Systems Manager at 202-366-4595.
- (2) Company name and address.
- (3) The name and contact information of a DENC and DESC company employee, to be displayed on a public Web site, who will serve as a contact for questions from the general public about the DENC and DESC 's NPMS data.

The information required in this section must be submitted each year, on or before March 15, representing assets as of December 31 of the previous year. If no changes have occurred since the previous year's submission, DENC and DESC must comply with the guidance provided in the NPMS Operator Standards manual available at www.npms.phmsa.dot.gov or contact the PHMSA Geographic Information Systems Manager at 202-366-4595.

3.6 Other Reports

[3.6.1 Reporting of Significant Events \[\[191.22\]\(#\)\]](#)

[3.6.2 State Specific Reports](#)

3.6.1 Reporting of Significant Events [[191.22](#)]

(a) Operators are also required to notify PHMSA not later than 60 days before the following significant events occur:

- (1) Construction or other project costs of \$10 million or more

- (3) Construction of a new LNG plant or facility

The notification required by 3.7.1(a) should include:

- (1) Material purchasing and manufacturing;
- (2) Right-of-way acquisition;
- (3) Construction equipment move-in activities;
- (4) Onsite or offsite fabrications; or
- (5) Right-of-way clearing, grading, and ditching.

(b) Operators are also required to notify PHMSA not later than 60 days after the following events occur:

- (1) Change in the name of the operator or the entity responsible for a safety program,
- (2) LNG facility, pipeline or pipeline facility
- (3) Acquisition or divestiture of 50 or more miles of pipeline
- (4) Acquisition or divestiture of an LNG plant or facility

3.6.2 State Specific Reports

State Specific: South Carolina

[South Carolina Chapter 103, Article 4, 103-412 Data To Be Filed With The Commission](#)

DESC shall notify the *SC ORS* of any construction projects meeting either of the criteria below:

- a. Projects resulting in a cost of \$500,000 or more, whether steel, plastic, or other materials are installed or;
- b. Projects involving 25,000 feet of piping or more, whether steel, plastic, or other material(s) are utilized.

4.0 TRAINING/QUALIFICATIONS

Management should ensure Operations and maintenance personnel are familiar with recognizing the various conditions and reporting procedures.

5.0 DOCUMENTATION/FORMS

- [Figure 1-C-1 - Safety-related Condition Flow Chart](#) (PDF file)

State Specific: South Carolina

- [Safety Related Condition Report/Gas Transmission MAOP Exceedance \(DESC Form 1-C-1\)](#) (PDF file)

6.0 RELATED DOCUMENTS

See <https://www.phmsa.dot.gov/forms/pipeline-forms> for current versions of the following documents:

- Gas Distribution Annual Form F 7100 1-1
- Gas Distribution Annual Instructions 7100 1-1
- Mechanical Fitting Failure Report Form F 7100.1-2
- Mechanical Fitting Failure Instructions F 7100.1-2
- Gas Transmission and Gathering Annual Form 7100 2-1
- Gas Transmission and Gathering Annual Instructions F 7100 2-1

See also:

- [Advisory Bulletin \(ADB-2012-11\)](#) *Reporting of Exceedances of Maximum Allowable Operating Pressure*
- National Pipeline Mapping System Standards at www.npms.phmsa.dot.gov

7.0 APPENDICES

None at this time.

(UNCONTROLLED IF PRINTED)