



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 27, 2007

Mr. Kevin C. Weyer
President
Dow Pipeline Company
1000 County Rd. 340
Angleton, Texas 77515

CPF 4-2007-5036M

Dear Mr. Weyer:

On April 2-5, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Dow Pipeline Company's procedures for Operations and Maintenance in Angleton, Texas.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Dow Pipeline Company's procedures, as described below:

1. **§195.56 Filing safety-related condition reports.**
 - (b) **The report must be headed "Safety-Related Condition Report" and provide the following information:**
 - (1) **Name and principal address of operator.**
 - (2) **Date of report.**
 - (3) **Name, job title, and business telephone number of person submitting the report.**
 - (4) **Name, job title, and business telephone number of person who determined that the condition exists.**
 - (5) **Date condition was discovered and date condition was first determined to exist.**
 - (6) **Location of condition, with reference to the State (and town, city, or county) or offshore site, and as appropriate nearest street address, offshore platform, survey station number, milepost, landmark, or name of pipeline.**
 - (7) **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.**

(8) 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.

Part 195.56(b) requires the Operator to provide specific information as listed when submitting a Safety Related Condition Report. Dow procedure OME E-07 for reporting of Safety Related Condition Reports only references Part 191.25 for reporting SRCR for gas pipelines. It does not reference 195.56 except on the back of the form. Specifically the procedure does not include item (b)(1) as a required item in the procedure or on the form. Dow must expand this procedure to include all required information and modify your form to include all required data.

2. §195.222 Welders: Qualification of welders.

a) Each welder must be qualified in accordance with section 6 of API 1104 (ibr, see § 195.3 or section IX of the ASME Boiler and Pressure Vessel Code, (ibr, see § 195.3) except that a welder qualified under an earlier edition than listed in § 195.3 may weld but may not re-qualify under that earlier edition.

Dow's procedure PIM 5.01 incorrectly referenced Section 5 of API 1104. Dow must update their manual to reference, Section 6 of API 1104.

3. §195.228 Welds and welding inspection: Standards of acceptability.

(b) The acceptability of a weld is determined according to the standards in Section 9 of API 1104. However, if a girth weld is unacceptable under those standards for a reason other than a crack, and if Appendix A to API 1104 (ibr, see § 195.3) applies to the weld, the acceptability of the weld may be determined under that appendix.

Dow's procedure PIM 1.06 incorrectly referenced Section 6 of API 1104. The Dow manual must reference Section 9 of API 1104. PIM 1.00 addresses the requirements for NDT of Gas Pipeline systems only. Dow must address the requirements for NDT of Hazardous Liquid Pipeline systems in their procedure.

4. §195.234 Welds: Nondestructive testing.

(a) A weld may be nondestructively tested by any process that will clearly indicate any defects that may affect the integrity of the weld.

(b) Any nondestructive testing of welds must be performed-
(1) In accordance with a written set of procedures for nondestructive testing; and
(2) With personnel that have been trained in the established procedures and in the use of the equipment employed in the testing.

(c) Procedures for the proper interpretation of each weld inspection must be established to ensure the acceptability of the weld under §195.228.

(d) During construction, at least 10 percent of the girth welds made by each welder during each welding day must be nondestructively tested over the entire circumference of the weld.

(e) All girth welds installed each day in the following locations must be nondestructively tested over their entire circumference, except that when nondestructive testing is impracticable for a girth weld, it need not be tested if the number of girth welds for which testing is impracticable does not exceed 10 percent of the girth welds installed that day:

(1) At any onshore location where a loss of hazardous liquid could reasonably be expected to pollute any stream, river, lake, reservoir, or other body of water, and any offshore area;

(2) Within railroad or public road rights-of-way;

(3) At overhead road crossings and within tunnels;

(4) Within the limits of any incorporated subdivision of a State government; and,

(5) Within populated areas, including, but not limited to, residential subdivisions, shopping centers, schools, designated commercial areas, industrial facilities, public institutions, and places of public assembly.

(f) When installing used pipe, 100 percent of the old girth welds must be nondestructively tested.

(g) At pipeline tie-ins, including tie-ins of replacement sections, 100 percent of the girth welds must be nondestructively tested.

Dow's manual combines both liquid and gas regulations into a single manual. During this process references are made to each part as appropriate. This section of Dow's manual addresses only Part 192 and does not address Part 195 for non-destructive testing (NDT). Dow must expand PIM 1.06 to include NDT for hazardous liquid lines.

PIM 1.00 and PIM 1.06 state that all welds will be NDT tested, but no procedure is addressed. Dow must establish a procedure to address NDT testing methods.

5. §195.302 General requirements.

(a) Except as otherwise provided in this section and in §195.305(b), no operator may operate a pipeline unless it has been pressure tested under this subpart without leakage. In addition, no operator may return to service a segment of pipeline that has been replaced, relocated, or otherwise changed until it has been pressure tested under this subpart without leakage.

Dow's OME M-09 does not address the term "otherwise changed" and how leaks will be dealt with if they occur. Dow must include and define the term "otherwise changed" in the existing procedure and expand on how leaks are dealt with during the process.

6. §195.305 Testing of components.

(a) Each pressure test under §195.302 must test all pipe and attached fittings, including components, unless otherwise permitted by paragraph (b) of this section.

(b) A component, other than pipe, that is the only item being replaced or added to the pipeline system need not be hydrostatically tested under paragraph (a) of this section if the manufacturer certifies that either-

(1) The component was hydrostatically tested at the factory; or

(2) The component was manufactured under a quality control system that ensures each component is at least equal in strength to a prototype that was hydrostatically tested at the factory.

Currently as written, Dow's PIM 1.20 Hydrostatic Test Specifications only references Part 192 regulations. Dow must add reference to and expand this procedure to include requirements listed in Part 195 Testing of components.

7. §195.306 Test medium.

(a) Except as provided in paragraph (b), (c), and (d) of this section, water must be used as the test medium.

Dow must specifically identify the test mediums used for testing of its pipelines. PIM 1.06 addresses filling with water in the procedure but leaves the option of other mediums. PIM 1.00 must identify those other mediums and procedures for their use. The testing requirements are fragmented between these two appendices, with limited referencing.

8. §195.402 Procedural manual for operations, maintenance, and emergencies.

(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(4) Determining which pipeline facilities are located in areas that would require an immediate response by the operator to prevent hazards to the public if the facilities failed or malfunctioned.

195.402(c)(4) deals with determining which facilities require immediate response by the operator. OME E-01 needs to reference "immediate" response where applicable.

(5) Analyzing pipeline accidents to determine their causes.

195.402(c)(5) states operator must analyze accidents to determine cause. Dow's procedures use the term "failures" only, which might omit some incidents which do not include failure. Dow must include terminology to include all causes or provide a definition of failure that includes all incidents.

(13) Periodically reviewing the work done by operator to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.

195.402(c)(13) – OME A-03 Manual Control, has nothing specific to insure all appropriate comments from operator personnel are taken and used to determine effectiveness of the procedures. Dow's procedure must be expanded to include input from all sources of feedback associated with it's procedures.

(f) Safety-related condition reports. The manual required by paragraph (a) of this section must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of §195.55.

195.402(f) requires the operator to ensure O&M personnel are trained to recognize and report potential safety related conditions. Dow must revise its manual to address training of employees to meet the requirement of this regulation.

9. §195.403 Emergency Response Training.

(b) At the intervals not exceeding 15 months, but at least once each calendar year, each operator shall:

Dow's OME E-01 Emergency Procedures only state that training will be conducted annually. Dow must expand procedure to state annually, not to exceed 15 months.

10. §195.404 Maps and Records.

(b) Each operator shall maintain for at least 3 years daily operating records that indicate-

(2) Any emergency or abnormal operation to which the procedures under §195.402 apply.

Dow does not address record retention time for Abnormal Operations within the records retention section of manual. Abnormal operations must be included in the appropriate section of Dow's OME A-06 Record Keeping Schedule.

11. §195.406 Maximum operating pressure.

(a) Except for surge pressures and other variations from normal operations, no operator may operate a pipeline at a pressure that exceeds any of the following:

(1) The internal design pressure of the pipe determined in accordance with §195.106. However, for steel pipe in pipelines being converted under §195.5, if one or more factors of the design formula (§195.106) are unknown, one of the following pressures is to be used as design pressure:

- (i) Eighty percent of the first test pressure that produces yield under section N5.0 of Appendix N of ASME B31.8, reduced by the appropriate factors in §§195.106(a) and (e); or
 - (ii) If the pipe is 323.8 mm (12³/₄ in) or less outside diameter and is not tested to yield under this paragraph, 1379 kPa (200 psig).
 - (2) The design pressure of any other component of the pipeline.
 - (3) Eighty percent of the test pressure for any part of the pipeline which has been pressure tested under Subpart E of this part.
 - (4) Eighty percent of the factory test pressure or of the prototype test pressure for any individually installed component which is exempted from testing under §195.305.
 - (5) For pipelines under §§195.302(b)(1) and (b)(2)(i), that have not been pressure tested under Subpart E of this part, 80 percent of the test pressure or highest operating pressure to which the pipeline was subjected for 4 or more continuous hours that can be demonstrated by recording charts or logs made at the time the test or operations were conducted.
- (b) No operator may permit the pressure in a pipeline during surges or other variations from normal operations to exceed 110 percent of the operating pressure limit established under paragraph (a) of this section. Each operator must provide adequate controls and protective equipment to control the pressure within this limit.

Dow's OME O-18 MAOP/MOP Calculation and Requirements procedure must be expanded to differentiate between MAOP (Part 192) and MOP (Part 195). Since Dow uses a combined manual, liquid and gas must be addressed separately. Also, Dow must develop a procedure to include the design criteria found in 195.406(a)(3) and (a)(4) for MOP within their manual.

12. §195.408 Communications.

- (a) Each operator must have a communication system to provide for the transmission of information needed for the safe operation of its pipeline system.
- (b) The communication system required by paragraph (a) of this section must, as a minimum, include means for:
 - (1) Monitoring operational data as required by §195.402(c)(9);
 - (2) Receiving notices from operator personnel, the public, and public authorities of abnormal or emergency conditions and sending this information to appropriate personnel or government agencies for corrective action;
 - (3) Conducting two-way vocal communication between a control center and the scene of abnormal operations and emergencies; and,
 - (4) Providing communication with fire, police, and other public officials during emergency conditions, including a natural disaster.

Dow's OME O-13 must be amended to make a statement of what communication methods are used and address what may be done to back this system up.

13. §195.410 Line markers.

(a) Except as provided in paragraph (b) of this section, each operator shall place and maintain line markers over each buried pipeline in accordance with the following:

(2) The marker must state at least the following on a background of sharply contrasting color:

(i) The word "Warning," "Caution," or "Danger" followed by the words "Petroleum (or the name of the hazardous liquid transported) Pipeline", or "Carbon Dioxide Pipeline," all of which, except for markers in heavily developed urban areas, must be in letters at least 1 inch (25 millimeters) high with an approximate stroke of 1/4 inch (6.4 millimeters).

Dow's OME M-05 Pipeline Marker procedure adequately addresses the use of line markers but does not address minimum size requirements for lettering. Dow must revise this procedure to address minimum size requirements.

14. §195.424 Pipe movement.

(a) No operator may move any line pipe, unless the pressure in the line section involved is reduced to not more than 50 percent of the maximum operating pressure (MOP).

(b) No operator may move any pipeline containing highly volatile liquids where materials in the line section involved are joined by welding unless-

(1) Movement when the pipeline does not contain highly volatile liquids is impractical;

(2) The procedures of the operator under §195.402 contain precautions to protect the public against the hazard in moving pipelines containing highly volatile liquids, including the use of warnings, where necessary, to evacuate the area close to the pipeline; and

(3) The pressure in that line section is reduced to the lower of the following:

(i) Fifty percent or less of the maximum operating pressure; or

(ii) The lowest practical level that will maintain the highly volatile liquid in a liquid state with continuous flow, but not less than 50 p.s.i. (345 kPa) gage above the vapor pressure of the commodity.

Dow's OME M-13 Pipe Movement Procedure addresses MAOP instead of MOP while addressing the movement of a pipeline in operation. The procedure must be revised to address MOP as it relates to the movement of an in-service hazardous liquid pipeline. Also, the procedure must include procedural language adequately reflecting the requirements of lowering pressure in the line section during this operation.

15. §195.428 Overpressure safety devices and overfill protection systems

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

Dow's OME M-10 does not address the requirement for determining the capacity of overpressure protection devices. The procedure must be revised to address the requirements for determining the capacity of overpressure protection devices.

16. §195.442 Damage Prevention Program

(a) Except as provided in paragraph (d) of this section, each operator of a buried pipeline must carry out, in accordance with this section, a written program to prevent damage to that pipeline from excavation activities. For the purpose of this section, the term "excavation activities" includes excavation, blasting, boring, tunneling, backfilling, the removal of aboveground structures by either explosive, or mechanical means, and other earthmoving operations.

(c) The damage prevention program required by paragraph (a) of this section must, at a minimum:

(6) Provide as follows for inspection of pipelines that an operator has reason to believe could be damaged by excavation activities:

(ii) In the case of blasting, any inspection must include leakage surveys.

Dow's OME O-07 Excavation Damage Prevention Procedure scope includes seismic blasting near their pipelines but fails to address the requirement of performing leakage surveys for possible damage in areas of blasting near pipelines. This procedure must be revised to address performing leakage surveys for possible damage in areas of blasting near pipelines.

17. §195.569 Do I have to examine exposed portions of buried pipelines?

Whenever you have knowledge that any portion of a buried pipeline is exposed, you must examine the exposed portion for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If you find external corrosion requiring corrective action under Sec. 195.585, you must investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion.

Dow's OME M-15 must specify that if active external corrosion is found requiring corrective action, the pipe must be investigated circumferentially and longitudinally beyond the exposed portion to determine whether additional corrosion requiring remedial action exist in the vicinity of the exposed portion.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

In correspondence concerning this matter, please refer to **CPF 4-2007-5036M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



R. M. Seeley
Director, Southwest Region
Pipeline and Hazardous
Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*