

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 22, 2009

Ms. Cari Petersen, Acting Director
City of Duluth – Department of Public Works and Utilities
411 West 1st Street
211 City Hall
Duluth, Minnesota 55802

CPF 3-2009-1008M

Dear Ms. Petersen:

On September 17-21, 2007, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) and Minnesota Office of Pipeline Safety pursuant to Chapter 601 of 49 United States Code inspected the City of Duluth integrity management (IM) plan and procedures in Duluth, Minnesota.

On the basis of the inspection, PHMSA has identified apparent inadequacies within the City of Duluth's plans or procedures, as described below:

§192.911 What are the elements of an integrity management program?

An operator's initial integrity management program begins with a framework (see §192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual improvements to its program. The initial program framework and subsequent program must, at minimum, contain the following elements. (When indicated, refer to ASME/ANSI B31.8S (ibr, see §192.7) for more detailed information on the listed element.)

1. **§192.911(a) An identification of all high consequence areas, in accordance with §192.905.**

Item 1A: §192.905(a) General. To determine which segments of an operator's transmission pipeline system are covered by this subpart, an operator must identify the high consequence areas. An operator must use method (1) or (2) from the definition in §192.903 to identify a high consequence area. An operator may apply one method to its entire pipeline system, or an operator may apply one method to individual portions of the pipeline system. An operator must describe in its integrity management program which method it is applying to each portion of the operator's pipeline system. The description must include the potential impact radius when utilized to establish a high consequence area. (See appendix E.I. for guidance on identifying high consequence areas.)

The Duluth integrity management program (IMP) does not require that a detailed description of high consequence area (HCA) pipeline segment locations be provided. The pipeline stationing for the HCA start and end locations are not specified in the IMP documentation. It is noted that the IMP describes the HCA as extending from the Great Lakes Regulator Station to 400 feet upstream.

2. **§192.911(b) A baseline assessment plan meeting the requirements of §192.919 and §192.921.**

§ 192.921 How is the baseline assessment to be conducted?

(f) *Newly identified areas.* When an operator identifies a new high consequence area (*see* §192.905), an operator must complete the baseline assessment of the line pipe in the newly identified high consequence area within ten (10) years from the date the area is identified.

(g) *Newly installed pipe.* An operator must complete the baseline assessment of a newly-installed segment of pipe covered by this subpart within ten (10) years from the date the pipe is installed. An operator may conduct a pressure test in accordance with paragraph (a)(2) of this section, to satisfy the requirement for a baseline assessment.

- **Item 2A: §192.921(f)**

The IMP does not require that a baseline assessment be completed within ten (10) years from the date when a new covered segment affecting an HCA is identified.

- **Item 2B: §192.921(g)**

The IMP does not require that a baseline assessment be completed within ten (10) years from the date of installation for newly installed pipe that is covered by Subpart O and impacts an HCA.

3. **§192.911(c) An identification of threats to each covered pipeline segment, which must include data integration and a risk assessment. An operator must use the threat identification and risk assessment to prioritize covered segments for assessment (§192.917) and to evaluate the merits of additional preventive and mitigative measures (§192.935) for each covered segment.**

§192.917(a) *Threat identification.* An operator must identify and evaluate all potential threats to each covered pipeline segment. Potential threats that an operator must consider include, but are not limited to, the threats listed in ASME/ANSI B31.8S (ibr, see §192.7), section 2.....

§192.917(c) *Risk assessment.* An operator must conduct a risk assessment that follows ASME/ANSI B31.8S, section 5, and considers the identified threats for each covered segment. An operator must use the risk assessment to prioritize the covered segments for the baseline and continual reassessments (§§192.919, 192.921, 192.937), and to determine what additional preventive and mitigative measures are needed (§192.935) for the covered segment.

ASME/ANSI B31.8S, section 5.7(i) - *Weighting Factors.* All threats and consequences contained in a relative risk assessment process should not have the same level of influence on the risk estimate. Therefore, a structured set of weighting factors shall be included that indicate the value of each risk assessment component, including both failure probability and consequences. Such factors can be based on operational experience, the opinions of subject matter experts, or industry experience.

- **Item 3A: §192.917(a)**

The IMP Section 10.4.3 states that the threat identification analysis will be conducted in sufficient detail to identify if other interacting threats could adversely affect the stability of residual manufacturing and construction defects. However, it does not address other potentially interacting threats.

- **Item 3B: §192.917(c)**

The IMP risk assessment process is not sufficiently defined to support all of the objectives of ASME B31.8S, Sections 5.3 and 5.4, including:

- assessment of the benefits derived from mitigating action
- determination of the most effective mitigation measures for the identified threats
- assessment of the integrity impact from modified inspection intervals
- assessment of the use of or need for alternative inspection methodologies
- more effective resource allocation
- facilitation of decisions to address risks along a pipeline or within a facility

In addition, the risk assessment does not include a documented process to account for factors that could affect the likelihood of a release and for factors that could affect the consequences of a potential release.

4. **§192.911(e) Provisions meeting the requirements of §192.933 for remediating conditions found during an integrity assessment.**

§192.933(b) *Discovery of condition.* Discovery of a condition occurs when an operator has adequate information about a condition to determine that the condition presents a potential threat to the integrity of the pipeline. A condition that presents a potential threat includes, but is not limited to, those conditions that require remediation or monitoring listed under paragraphs (d)(1) through (d)(3) of this section. An operator must promptly, but no later than 180 days after conducting an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator demonstrates that the 180-day period is impracticable.

§192.933(d) *Special requirements for scheduling remediation.*

(2) *One-year conditions.* Except for conditions listed in paragraph (d)(1) and (d)(3) of this section, an operator must remediate any of the following within one year of discovery of the condition:

(i) A smooth dent located between the 8 o'clock and 4 o'clock positions (upper 2/3 of the pipe) with a depth greater than 6% of the pipeline diameter (greater than 0.50 inches in depth for a pipeline diameter less than Nominal Pipe Size (NPS) 12).

(ii) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or at a longitudinal seam weld.

• **Item 4A: §192.933(b)**

The IMP remediation process does not require that the date of discovery be documented.

• **Item 4B: §192.933(d)**

The IMP Section 12.2.2, definition for one-year anomalous conditions, is not consistent with the IM Rule definition. Duluth proposed a corrected definition during the course of the inspection.

5. **§192.911(f) A process for continual evaluation and assessment meeting the requirements of §192.937.**

Item 5A: §192.937(b) *Evaluation.* An operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in §192.917. For plastic transmission pipelines, the periodic evaluation is based on the threat analysis specified in §192.917(d). For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§192.917), and decisions about remediation (§192.933) and additional preventive and mitigative actions

(§192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.

The IMP Section 13 requires that periodic evaluation and assessments identify and assess threats and risks and determine reassessment method(s) and intervals. This section of the IMP requires that these evaluations be conducted as often as needed but should be performed annually. However, the process describing how these evaluations are to be conducted and documented to ensure the evaluations are thorough, complete, and adequate is not included in the IMP procedures.

6. §192.911(h) Provisions meeting the requirements of §192.935 for adding preventive and mitigative measures to protect the high consequence area.

Item 6A: §192.935(a) General requirements. An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment. (See §192.917) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S (ibr, see §192.7), section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety.....

The IMP does not have a systematic documented decision-making process, involving input from relevant parts of the organization, developed and implemented to decide which preventive and mitigative measures are to be implemented. In addition, the Duluth preventive and mitigative measures decision-making process does not consider both the likelihood and consequences of pipeline failures.

7. §192.911(k) A management of change process as outlined in ASME/ANSI B31.8S, section 11.

Item 7A: § 192.909 How can an operator change its integrity management program?

(a) General. An operator must document any change to its program and the reasons for the change before implementing the change.

Duluth's IMP is in a framework status that only outlines the basic requirements of the management of change process. A formal procedure has not been developed that defines responsibilities, review requirements, approval requirements, reason for changes, communication of changes, documentation requirements, significance of changes, etc.

8. **§192.911(l) A quality assurance process as outlined in ASME/ANSI B31.8S, section 12.**

ASME/ANSI B31.8S Section 12.2 (b) - Specifically, activities that should be included in the quality control program are as follows:

(2) The responsibilities and authorities under this program shall be clearly and formally defined.

(3) Results of the integrity management program and the quality control program shall be reviewed at predetermined intervals, making recommendations for improvement.

§192.7 What documents are incorporated by reference partly or wholly in this part?

(a) Any documents or portions thereof incorporated by reference in this part are included in this part as though set out in full. When only a portion of a document is referenced, the remainder is not incorporated in this part.

- **Item 8A: §192.7**

The IMP does not require implementation of the non-mandatory requirements (e.g., "should" statements) from industry standards or other documents invoked by Subpart O (e.g., ASME B31.8S-2004 and NACE RP0502-2002), or in the event that they are not implemented, an equivalent alternative method for accomplishing the same objective be justified and implemented; or a documented justification be included in the plan that demonstrates the technical basis for not implementing recommendations from standards or other documents invoked by Subpart O.

- **Item 8B: §192.911(l)**

The IMP does not define the responsibilities and authorities of personnel who implement elements of the integrity management program as required by ASME/ANSI B31.8S Section 12.2 (b)(2). The IMP Section 5.1 provides a listing of positions having responsibility without defining their roles, responsibilities and authorities.

The IMP Section 18.9 requires that the Management Team periodically review and revise the IMP for adequacy, completeness and regulatory compliance. The IMP Section 19 also specifies a requirement for periodic reviews. However, the required review elements, objectives, responsibilities, documentation requirements, and a defined timeframe for conducting reviews have not been defined as required by ASME/ANSI B31.8S Section 12.2 (b)(3).

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 3-2009-1008M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Ivan A. Huntoon
Director, Central Region
Pipeline and Hazardous Materials Safety Administration

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