



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED COMPLIANCE ORDER**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 2, 2018

Ms. Kelly Nguyen
Director of Gas & Electric
City of Vernon
4305 Santa Fe Ave.
Vernon, CA 90058

CPF 5-2018-0008

Dear Ms. Nguyen:

On April 24 through 27, 2017 and May 22 through 26, 2017, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected the natural gas transmission pipeline system in Vernon, California.

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. **§192.921 How is the baseline assessment to be conducted?**
 - (a) ***Assessment methods.*** An operator must assess the integrity of the line pipe in each covered segment by applying one or more of the following methods depending on the threats to which the covered segment is susceptible. An

operator must select the method or methods best suited to address the threats identified to the covered segment (See § 192.917).

(1) Internal inspection tool or tools capable of detecting corrosion, and any other threats to which the covered segment is susceptible. An operator must follow ASME/ANSI B31.8S (incorporated by reference, see § 192.7), section 6.2 in selecting the appropriate internal inspection tools for the covered segment.

The City of Vernon (Vernon) failed to conduct an examination and evaluation of the in-line inspection (ILI) tool defect indications in order to validate the accuracy of the ILI results, therefore failing to assess the integrity of the line pipe in each covered segment. Vernon conducted an ILI run in 2013 as its baseline assessment. Direct examination of ILI defect indications is required by ASME B31.8S-2004, Section 6.2.6 Examination and Evaluation, which is incorporated by reference into Part 192.¹ During the inspection, statements made by Vernon staff and a consultant confirmed that Vernon did not conduct direct examination and evaluation of identified defect indications called out by the ILI tool, therefore failing to assess the integrity of the covered segments.²

2. §192.947 What records must an operator keep?

An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At minimum, an operator must maintain the following records for review during an inspection.

(a) . . .

(d) Documents to support any decision, analysis and process developed and used to implement and evaluate each element of the baseline assessment plan and integrity management program. Documents include those developed and used in support of any identification, calculation, amendment, modification, justification, deviation and determination made, and any action taken to implement and evaluate any of the program elements;

Vernon failed to document the annual review of the Vernon Transmission Integrity Management Program (IMP).³ In addition, Vernon failed to document a Management of Change process when changing integrity assessment methods from external corrosion direct

¹ ASME B31.8S-2004, Section 6.2.6 notes that the “[r]esults of in-line inspection only provide indications of defects, with some characterization of the defect. Screening of this information is required in order to determine the time frame for examination and evaluation. The time frame is discussed in para. 7. Examination consists of a variety of direct inspection techniques, including visual inspection, inspections using NDE equipment, and taking measurements, in order to characterize the defect in confirmatory excavations where anomalies are detected. Once the defect is characterized, the operator must evaluate the defect in order to determine the appropriate mitigation actions. Mitigation is discussed in para. 7.”

² See PHMSA Violation Report at 6 (noting that ██████████, Vernon’s Natural Gas Superintendent, stated that no ILI defect indications were excavated for evaluation, and ██████████ a Principal Consultant for the operation of Vernon’s natural gas system, was trying to identify a non-excavation method to validate the accurateness of the ILI tool).

³ Vernon’s IMP, Section 13, page 23.

assessment (ECDA) to ILI.⁴ During the inspection, statements made by Vernon staff and a consultant confirmed that Vernon did not keep necessary records pursuant to §192.947(d).⁵

3. **§192.935 What additional preventive and mitigative measures must an operator take?**
- (a) . . .
- (d) ***Pipelines operating below 30% SMYS.*** An operator of a transmission pipeline operating below 30% SMYS located in a high consequence area must follow the requirements in paragraphs (d)(1) and (d)(2) of this section...
- (1) Apply the requirements in paragraphs (b)(1)(i) and (b)(1)(iii) of this section to the pipeline; and
- (2) Either monitor excavations near the pipeline, or conduct patrols as required by § 192.705 of the pipeline at bi-monthly intervals. If an operator finds any indication of unreported construction activity, the operator must conduct a follow up investigation to determine if mechanical damage has occurred.

Vernon did not take necessary preventative and mitigative measures to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in high consequence areas (HCAs). Specifically, Vernon, an operator of a transmission line operating below 30% SMYS located in an HCA, failed to address any of the requirements of §192.935(d)(1) and (d)(2). In fact, Vernon's IMP does not contain a process to address any of the requirements of §192.935(d).

4. **§192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?**
- (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 (incorporated by reference, *see* §192.7), section 2, which are grouped under the following four categories:
- (1) Time dependent threats such as internal corrosion, external corrosion, and stress corrosion cracking;
- (2) Static or resident threats, such as fabrication or construction defects;
- (3) Time independent threats such as third party damage and outside force damage; and
- (4) Human error.
- (b) ***Data gathering and integration.*** To identify and evaluate the potential threats to a covered pipeline segment, an operator must gather and integrate existing

⁴ See 49 C.F.R. § 192.909(a) (requiring operators to document any change to its program and the reasons for the change before implementing the change).

⁵ See PHMSA Violation Report at 13 (noting that ██████████ Vernon's Natural Gas Superintendent, stated that no records of an annual IMP review were available, and ██████████ a Principal Consultant for the operation of Vernon's natural gas system, stated that the decision to change from ECDA to ILI was not documented according to the IMP management of change process).

data and information on the entire pipeline that could be relevant to the covered segment. In performing this data gathering and integration, an operator must follow the requirements in ASME/ANSI B31.8S, section 4. At a minimum, an operator must gather and evaluate the set of data specified in Appendix A to ASME/ANSI B31.8S, and consider both on the covered segment and similar non-covered segments, past incident history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, internal inspection records and all other conditions specific to each pipeline.

(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.

Vernon failed to identify and evaluate all potential threats to each covered pipeline segment. Although Vernon's IMP, Section 4, page 3 & Attachment C of the Vernon IMP discusses threat identification,⁶ and Section 4 identifies external corrosion as the primary threat, it has no process to identify and evaluate potential threats. Section 4 makes no mention of how Vernon gathers and integrates existing data and information on the entire pipeline that could be relevant to the covered segment, and how this data is analyzed to conduct a risk assessment. In fact, no Risk Methodology was found in Vernon's IMP. As a result, Vernon failed to identify potential threats to pipeline integrity and use the threat identification in its integrity program in violation of §192.917.

- 5. §192.915 What knowledge and training must personnel have to carry out an integrity management program?**
- (a) *Supervisory personnel.* The integrity management program must provide that each supervisor whose responsibilities relate to the integrity management program possesses and maintains a thorough knowledge of the integrity management program and of the elements for which the supervisor is responsible. The program must provide that any person who qualifies as a supervisor for the integrity management program has appropriate training or experience in the area for which the person is responsible.**
- (b) *Persons who carry out assessments and evaluate assessment results.* The integrity management program must provide criteria for the qualification of any person--**
- (1) Who conducts an integrity assessment allowed under this subpart; or**
 - (2) Who reviews and analyzes the results from an integrity assessment and**

⁶ Attachment C is a form questionnaire with no supporting analysis or additional information about the threats listed in 192.917 or ASME/ANSI B31.8S-2004. The data gathered on the transmission system consists of this single data questionnaire, which is incomplete and seems to have inaccuracies. For example, pipe manufacture dates are stated to be 1997-1998, yet purchase records indicate pipe was purchased in multiple years spanning 1997-2000 and constructed in discrete segments.

evaluation; or

(3) Who makes decisions on actions to be taken based on these assessments.

(c) Persons responsible for preventive and mitigative measures. The integrity management program must provide criteria for the qualification of any person--

(1) Who implements preventive and mitigative measures to carry out this subpart, including the marking and locating of buried structures; or

(2) Who directly supervises excavation work carried out in conjunction with an integrity assessment.

Vernon Staff, including consultants, have inadequate knowledge and training to carry out an integrity management program. For example, the resume and qualifications reviewed for Vernon's Natural Gas Superintendent indicate that his experience is primarily related to day-to-day operations, maintenance and construction of a natural gas distribution system, and not developing and implementing an integrity management plan for a transmission system.

Further, the resume and qualifications reviewed for Vernon's principal consultant for the operation of the Vernon Natural Gas System indicate that his experience is primarily related to development of rates and tariffs for utilities. The consultant's natural gas consulting experience was primarily gained through his work with the City of Vernon. As a result, both of these individuals, tasked with implementing Vernon's IMP, do not have the knowledge, training, or experience necessary to properly execute this critical safety program.

6. §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 (incorporated by reference, see § 192.7) for more detailed information on the listed element.)

(a) . . .

(1) A quality assurance process as outlined in ASME/ANSI B31.8S, section 12.

Vernon does not perform a quality assurance process as outlined by ASME/ANSI B31.8S, Section 12.⁷ Vernon's IMP, Section 13, page 23 directs the reader to Attachment L, which

⁷ ASME/ANSI B31.8S Section 12.2 Quality Management Control(a) Requirements of a quality control program include documentation, implementation, and maintenance. The following six activities are usually required: (1) identify the processes that will be included in the quality program; (2) determine the sequence and interaction of these processes; (3) determine the criteria and methods needed to ensure that both the operation and control of these processes are effective; (4) provide the resources and information necessary to support the operation and monitoring of these processes; (5) monitor, measure, and analyze these processes; (6) implement actions necessary to achieve planned results and continued improvement of these processes

(b) Specifically, activities that should be included in the quality control program are as follows: (1) determine the documentation required and include it in the quality program. These documents shall be controlled and

contains instructions to perform an annual review of the Vernon Transmission IMP. Despite this, during the PHMSA inspection, Vernon staff seemed unsure what their IMP required and how to conduct the review. With there being little or no documentation on threats, there is also no evidence of a quality assurance process as outlined in ASME/ANSI B31.8S, section 12 being conducted.

7. **§192.945 What methods must an operator use to measure program effectiveness?**
(a) General. An operator must include in its integrity management program methods to measure whether the program is effective in assessing and evaluating the integrity of each covered pipeline segment and in protecting the high consequence areas. These measures must include the four overall performance measures specified in ASME/ANSI B31.8S (incorporated by reference, see § 192.7 of this part), section 9.4, and the specific measures for each identified threat specified in ASME/ANSI B31.8S, Appendix A. An operator must submit the four overall performance measures as part of the annual report required by § 191.17 of this subchapter.

Vernon's IMP does not measure program effectiveness. As an operator of a single, short pipeline, Vernon needs to establish meaningful metrics to determine program effectiveness. Instead, Vernon uses a prescriptive IMP exclusively utilizing the metrics listed in Part 192. However, since this pipeline has not experienced any incidents of the threats identified in Part 192, these traditional metrics do not adequately capture whether Vernon's program is effective in assessing and evaluating the integrity of each covered segment. By working with other similarly sized operators and pipeline industry groups, Vernon should be able to develop meaningful metrics for its pipeline.

maintained at appropriate locations for the duration of the program. Examples of documented activities include risk assessments, the integrity management plan, integrity management reports, and data documents. (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. (4) the personnel involved in the integrity management program shall be competent, aware of the program and all of its activities, and be qualified to execute the activities within the program. Documentation of such competence, awareness, and qualification, and the processes for their achievement, shall be part of the quality control plan. (5) the operator shall determine how to monitor the integrity management program to show that it is being implemented according to plan and document these steps. These control points, criteria, and/or performance metrics shall be defined. (6) periodic internal audits of the integrity management program and its quality plan are recommended. An independent third-party review of the entire program may also be useful. (7) corrective actions to improve the integrity management program or quality plan shall be documented and the effectiveness of their implementation monitored.

(c) When an operator chooses to use outside resources to conduct any process (for example, pigging) that affects the quality of the integrity management program, the operator shall ensure control of such processes and document them within the quality program.

Proposed Compliance Order

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$209,002 per violation per day the violation persists up to a maximum of \$2,090,022 for a related series of violations. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed \$200,000 per violation per day, with a maximum penalty not to exceed \$2,000,000 for a related series of violations.

We have reviewed the circumstances and supporting documents involved in this case, and have decided not to propose a civil penalty assessment at this time.

With respect to Items 1–4, pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to The City of Vernon. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Items

With respect to Items 5-7 we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these items. Failure to do so may result in additional enforcement action.

Response to this Notice

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).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. 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 you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 5-2018-0008** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim West". The signature is fluid and cursive, with the first name "Kim" and last name "West" clearly distinguishable.

Kim West
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

cc: PHP-60 Compliance Registry
PHP-500 J. Dunphy (#156114)

PROPOSED COMPLIANCE ORDER

Pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to The City of Vernon a Compliance Order incorporating the following remedial requirements to ensure the compliance of The City of Vernon (Vernon) with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to the Vernon Integrity Management Program (IMP) not containing a process to validate the accurateness of the ILI tool results through examination and evaluation, Vernon must develop and implement a written process requiring examination and evaluation of ILI defect indications in accordance with ASME B31.8S-2004 (IBR).
2. In regard to Item Number 2 of the Notice pertaining to Vernon's failure to document the annual review of the Vernon Transmission IMP and a Management of Change (MOC) process when changing integrity assessment methods from ECDA to In-Line-Inspection, Vernon must complete an IMP review for 2018. Vernon must document according to their MOC process the reasons for changing integrity assessment methods from ECDA to In-Line-Inspection.
3. In regard to Item Number 3 of the Notice pertaining to Vernon's failure to develop a process to address the requirements of §192.935(d), Vernon must develop and implement a written process addressing the requirements of §192.935(d).
4. In regard to Item Number 4 of the Notice pertaining to Vernon's failure to have an IMP process for identifying and evaluating threats, Vernon must develop and implement a process in accordance with ASME B31.8S-2004 for identifying and evaluating system threats, collecting pipeline and system data and a risk ranking methodology.
5. Vernon shall complete the remedial requirements described in 1-4 above within 180 days after receipt of a Final Order. Vernon shall submit documentation to the Director that the remedial requirements in Items 1-4 have been completed within 210 days of the Final Order.
6. It is requested (not mandated) that The City of Vernon maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Kim West, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.