



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

November 29, 2007

Mr. Wes Christensen  
Vice President – NGL Operations  
ONEOK NGL Pipeline, L.P.  
2001 South Highway 81  
Medford, OK 73759-3700

**CPF 4-2007-5046M**

Dear Mr. Christensen:

On August 27-31, 2007, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected ONEOK NGL Pipeline, L.P.'s (ONEOK) procedures for your Integrity Management Program (IMP) in Medford, OK.

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

1. **§195.452 Pipeline integrity management in high consequence areas.**
  - (f) **An operator must include, at minimum, each of the following elements in its written integrity management program:**
    - (1) **A process for identifying which pipeline segments could affect a high consequence area (HCA).**

- **Item 1A:**  
ONEOK must modify the process for identifying which pipeline segments could affect a high consequence area to require that sufficient justification is provided for the decision to exclude ecological HCAs from the 1 psi blast overpressure buffer distances in the IMP, or the 1 psi blast overpressure buffer distances must be applied to ecological HCAs. Overpressure buffer distances can be larger than those based on Lower Flammability Limits and thermal radiation calculations, and all buffers must be applied to all HCA types unless adequate justifications are included in the IMP.
- **Item 1B:**  
ONEOK must modify the process to include consideration of segment-specific information such as local topography and other possible features in the application of the HVL overpressure effect and not solely apply it to general “wooded” areas. This is a relevant consideration as buffer distances for materials such as ethane are significant (on the order of 1200 meters for lines in the 14” diameter range), and historical experience summarized in the DNV report, referenced during the inspection, indicates non-wooded areas have experienced scenarios similar to wooded areas.

2. **§195.452 (f) (see above):**

**(4) Criteria for remedial actions to address integrity issues raised by the assessment methods and information analysis (see paragraph (h) of this section);**

**(h) What actions must an operator take to address integrity issues?**

**(1) General requirements. An operator must take prompt action to address all anomalous conditions that the operator discovers through the integrity assessment or information analysis. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity. An operator must be able to demonstrate that the remediation of the condition will ensure that the condition is unlikely to pose a threat to the long-term integrity of the pipeline. A reduction in operating pressure cannot exceed 365 days without an operator taking further remedial action to ensure the safety of the pipeline. An operator must comply with §195.422 when making a repair.**

ONEOK’s repair and remediation process must be amended to clearly document the methodology used to take into account in-line inspection (ILI) tool tolerances provided by the ILI vendor in categorizing anomalies and making decisions on repair and remediation. The comprehensive process to integrate assessment data with available integrity information at the time remediation decisions are made must contain sufficient detail to ensure consistent application.

3. §195.452 (f) (see above):

(3) An analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure (see paragraph (g) of this section);

(g) What is an information analysis? In periodically evaluating the integrity of each pipeline segment (paragraph (j) of this section), an operator must analyze all available information about the integrity of the entire pipeline and the consequences of a failure. This information includes:

(1) Information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline segment;

(2) Data gathered through the integrity assessment required under this section;

(3) Data gathered in conjunction with other inspections, tests, surveillance and patrols required by this Part, including, corrosion control monitoring and cathodic protection surveys; and

(4) Information about how a failure would affect the high consequence area, such as location of the water intake.

- **Item 1A:**

ONEOK must modify the process to provide specific detail for the consideration of integrity threats not included in the RIM risk model (e.g.; SCC; AC-induced corrosion; equipment/ construction-related failures) either in the RIM or other external processes.

- **Item 1B:**

ONEOK must modify the process to incorporate leak history in the risk model in a more comprehensive manner with regards to the root cause of the leak being applied to segments with the same threat and the length of time that the threat is considered. Limiting the use of leak history to specific HCA-affecting segments and limiting that consideration to a two-year period underestimates the likelihood of failure of similar segments where the threat may also be present for extended intervals.

- **Item 1C:**

ONEOK must modify the process for incorporation of field-based pipeline change information into risk analysis processes (e.g., RIM risk model) in sufficient specificity to ensure consistent application.

- **Item 1D:**

ONEOK must modify the process for the comprehensive approach to the risk based integrity management of facilities that was discussed during the inspection in sufficient specificity to ensure consistent application. ONEOK must enhance its documentation of its definitions of facilities to support the identification of facilities that can affect an HCA; the implementation of a comprehensive facility risk analysis process; and the identification of appropriate P&M measures (that may include inspections and assessments).

4. **§195.452 (f) (see above):**

**(6) Identification of preventive and mitigative measures to protect the high consequence area (see paragraph (i) of this section);**

**(i) What preventive and mitigative measures must an operator take to protect the high consequence area?**

**(1) General requirements. An operator must take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on response procedures, conducting drills with local emergency responders and adopting other management controls.**

ONEOK must modify the process for the overall integrated IMP process to identify and evaluate P&M measures that focuses on minimizing the risk to HCAs (e.g., the damage prevention program should be part of this consideration) to provide sufficient detail and specificity to ensure consistent application. Detailed processes for the respective areas of the evaluation of P&M measures (e.g.; application of risk analysis; defined decision basis) are important to ensure that consistent criteria for decisions on which measures to implement are applied across all assets.

5. **§195.452 (f) (see above):**

**(5) A continual process of assessment and evaluation to maintain a pipeline's integrity (see paragraph (j) of this section);**

**(j) What is a continual process of evaluation and assessment to maintain a pipeline's integrity?**

**(1) General. After completing the baseline integrity assessment, an operator must continue to assess the line pipe at specified intervals and periodically evaluate the integrity of each pipeline segment that could affect a high consequence area.**

**(2) Evaluation. An operator must conduct a periodic evaluation as frequently as needed to assure pipeline integrity. An operator must base the frequency of evaluation on risk factors specific to its pipeline, including the factors specified in paragraph (e) of this section. The evaluation must consider the results of the baseline and periodic integrity assessments, information analysis (paragraph (g) of this section), and decisions about remediation, and preventive and mitigative actions (paragraphs (h) and (i) of this section).**

ONEOK must modify the process for the performance of periodic evaluations to provide sufficient detail and specificity to ensure consistent application.

6. **§195.452 (f) (5) (see above):**  
**(j) (1) (see above)**

**(3) Assessment intervals. An operator must establish intervals not to exceed five (5) years for continually assessing the line pipe's integrity. An operator must base the assessment intervals on the risk the line pipe poses to the high consequence area to determine the priority for assessing the pipeline segments. An operator must establish the assessment intervals based on the factors specified in paragraph (e) of this section, the analysis of the results from the last integrity assessment, and the information analysis required by paragraph (g) of this section.**

ONEOK must modify the process for the integrity assessment interval determination process to provide sufficient detail and specificity to ensure consistent application.

7. **§195.452 (f) (5) (see above):**  
**(j) (1) (see above)**

**(5) Assessment methods. An operator must assess the integrity of the line pipe by any of the following methods. The methods an operator selects to assess low frequency electric resistance welded pipe or lap welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies.**

ONEOK must modify the process for the determination of pipeline susceptibility to longitudinal seam failure to require periodic verification that pressure cycling remains below "aggressive" levels for applicable lines. The analysis for "susceptibility" of certain lines to seam failures is, in part, a function of observed pressure cycles. If pressure cycles reached "aggressive" levels, an integrity assessment method that ensures the integrity of the longitudinal weld seam would be required.

8. **§195.452 (f) (see above):**

**(7) Methods to measure the program's effectiveness (see paragraph (k) of this section);**

**(k) What methods to measure program effectiveness must be used? An operator's program must include methods to measure whether the program is effective in assessing and evaluating the integrity of each pipeline segment and in protecting the high consequence areas. See Appendix C of this part for guidance on methods that can be used to evaluate a program's effectiveness.**

ONEOK must modify the process for program evaluation by documenting the process in sufficient detail and specificity to ensure consistent application. This process must include suitable performance metrics to provide meaningful results as well as methods for communication of the results and findings to IM-related personnel within the organization.

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 4-2007-5046M** 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*