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

March 28, 2008

Mark Hurley, President
Shell Pipeline Company LP
777 Walker St.
Houston, TX 77002

CPF 4-2008-5009M

Dear Mr. Hurley:

On July 9-13 and 23-27, 2007 representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Shell Pipeline Company procedures for Integrity Management in New Orleans, La.
On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Shell Pipeline Company (Shell) plans or 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.

Shell must modify their process for calculating release volumes to consider the effects of additional inventory from tanks and other potential sources in the vicinity of potential pipeline rupture locations. There may be locations in which additional inventory could increase predicted spill volumes including other potential sources, such as injection points and connections to other pipelines. Shell must also consider small leak spill volume scenarios below SCADA detection thresholds used in release volume calculations, including hole size, pressure, equipment type, operator response times, and drain down volume. It is possible for some segments that these small leak scenarios could result in larger projected spill volumes than for large break scenarios.

2. **§195.452 Pipeline integrity management in high consequence areas.**
(b) What program and practices must operators use to manage pipeline integrity? Each operator of a pipeline covered by this section must:
(3) Include in the program a plan to carry out baseline assessments of line pipe as required by paragraph (c) of this section.

(c) What must be in the baseline assessment plan?
(1) An operator must include each of the following elements in its written baseline assessment plan:
(i) The methods selected to assess the integrity of the line pipe. 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.
(A) Internal inspection tool or tools capable of detecting corrosion and deformation anomalies including dents, gouges and grooves;
(B) Pressure test conducted in accordance with subpart E of this part;
(C) External corrosion direct assessment in accordance with §195.588; or
(D)Other technology that the operator demonstrates can provide an equivalent understanding of the condition of the line pipe. An operator choosing this option must notify the Office of Pipeline Safety (OPS) 90 days before conducting the assessment, by sending a notice to the address or facsimile number specified in paragraph (m) of this section ... (iii) An explanation of the assessment methods selected and evaluation of risk factors considered in establishing the assessment schedule.

Shell must modify the seam failure susceptibility criteria flow chart in Appendix F; page F-5 of their IMP manual. This chart differs from the expanded approach recommended in the Baker/Kiefner report TTO-05 (section 9) and could result in the false justification that pre-70 LF ERW or lap-welded pipe is not susceptible to seam integrity issues.

3. **§195.452 Pipeline integrity management in high consequence areas.**
(f) *see above*
(8) A process for review of integrity assessment results and information analysis by a person qualified to evaluate the results and information (see paragraph (h)(2) 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.

Shell must modify the process for identifying anomalies from ILI results to account for tool tolerance or provide adequate justification and documentation of how tool tolerance is treated. Shell stated they believe the "totality" of their process will adequately address tool tolerance questions and results are evaluated and documented with the Integrity Assessment Database Report, Unity Plot, and Final Integrity Report "Validating ILI Tool Run" section. The current procedure does not adequately account for tool uncertainties and may lead to situations in which response to immediate repair conditions is delayed.

4. **§195.452 Pipeline integrity management in high consequence areas.**
(e) What are the risk factors for establishing an assessment schedule (for both the baseline and continual integrity assessments)? ....

(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 ....**

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

(2) Risk analysis criteria. In identifying the need for additional preventive and mitigative measures, an operator must evaluate the likelihood of a pipeline release occurring and how a release could affect the high consequence area. This determination must consider all relevant risk factors, including, but not limited to:

(i) Terrain surrounding the pipeline segment, including drainage systems such as small streams and other smaller waterways that could act as a conduit to the high consequence area;
(ii) Elevation profile;
(iii) Characteristics of the product transported;
(iv) Amount of product that could be released;
(v) Possibility of a spillage in a farm field following the drain tile into a waterway;
(vi) Ditches along side a roadway the pipeline crosses;
(vii) Physical support of the pipeline segment such as by a cable suspension bridge;

(viii) Exposure of the pipeline to operating pressure exceeding established maximum operating pressure.

Shell must modify the risk scorecard questions in their IMP manual, specifically QF-15 (outside force damage) to include hurricanes as natural force threat. Shell does not list hurricanes as a significant threat to pipelines and must continually evaluate operator-specific and industry leak/failure history to derive lessons learned that can be applied to their risk assessments.

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 your correspondence on this matter, please refer to **CPF 4-2008-5009M** 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*