U.S. Department
of Transportation
**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

MAR 2 9 2007

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 28, 2007

Mr. Richard Peneguy, Jr.
Noble Energy, Inc.
Vice President and General Manager, Offshore Division
100 Glenborough, Suite 100
Houston, Texas 77067

CPF 4-2007-5009M

Dear Mr. Peneguy, Jr.:

On July 10-14, 2006, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected your procedures for your Integrity Management Program (IMP) in Houston, TX.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Noble Energy, Inc.'s (Noble) plan or procedure and are described below:

1. **§195.452 Pipeline integrity management in high consequence areas.**

(f) *What are the elements of an integrity management program?*
An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. 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.

(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);

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

Noble Energy must modify their procedures to provide sufficient detail to ensure consistent application for the consideration of threats and preventive and mitigative measures for pipeline facilities. Noble does not include facilities as separate from the main pipeline, and analysis of the direct or the indirect impact of facilities on a High Consequence Area (HCA) is not considered. Noble must identify threats in a comprehensive manner in those facilities identified as affecting an HCA in order to provide the basis for determination of appropriate assessments to be performed and the prioritization of preventive and mitigative measures to reduce facility risks.

2. **§ 195.452 Pipeline integrity management in high consequence areas.**

(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 integrity assessment or information analysis ... evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity ... demonstrate that the remediation of the condition will ensure 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.

(4) Special requirements for scheduling remediation—

(i) Immediate repair conditions. An operator's evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formula in section 451.7 of ASME/ANSI B31.4 (incorporated by reference, see §195.3).

Noble Energy must modify their procedure for calculation of the appropriate pressure reduction for metal loss anomalies caused by corrosion or other factors that incorporates ASME/ANSI B31.4. Noble Energy's IMP manual section 4.01, paragraph 3-4 does not adequately refer to the use of the ASME B31.4 Section 451.7 or document other acceptable methods to ensure that appropriate action is taken for immediate or other repair conditions.

3. **§ 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)?

(1) An operator must establish an integrity assessment schedule that prioritizes pipeline segments for assessment (see paragraphs (d) (1) and (j) (3) of this section). An operator must base the assessment schedule on all risk factors that reflect the risk conditions on the pipeline segment. The factors an operator must consider include, but are not limited to:

(i) Results of the previous integrity assessment, defect type and size that the assessment method can detect, and defect growth rate;
(ii) Pipe size, material, manufacturing information, coating type and condition, and seam type
(iii) Leak history, repair history and cathodic protection history;
(iv) Product transported;
(v) Operating stress level;
(vi) Existing or projected activities in the area;
(vii) Local environmental factors that could affect the pipeline (e.g., corrosivity of soil, subsidence, climatic);
(viii) Geo-technical hazards; and
(ix) Physical support of the segment such as by a cable suspension bridge.

(2) Appendix C of this part provides further guidance on risk factors.

Noble Energy must modify their risk analysis process to include all risk factors required by §195.452 (e) for evaluation of threats that impact the integrity of the pipeline system. Noble Energy's risk analysis process shows modest participation or review by IM personnel and lacks a sufficient analytical evaluation that adequately measures risks for development or modification of the BAP. Input data defaults were sometimes used because of a lack of information about the actual condition of the pipeline. Noble must take steps to collect data to minimize distortion in risk ranking and to identify the most important risk drivers for segments that can affect an HCA.

4. **§ 195.452 Pipeline integrity management in high consequence areas.**

(f) *see above*

(2) A baseline assessment plan meeting the requirements of 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.

(2) An operator must document, prior to implementing any changes to the plan, any modification to the plan, and reasons for the modification.

Noble Energy must modify the process to ensure the appropriate assessment method is selected and the justification for that selection must be comprehensive and formally documented. Noble Energy must have the ability to understand all the threats to each pipeline segment (e.g., susceptible to dents, has exhibited crack-like features in past). The relative importance of threats and their associated consequences that make up this risk profile must be understood to support effective decision-making regarding the overall management of pipeline integrity.

In regard to Items 1 and 2 listed above, Noble provided finalized documentation via email to PHMSA on December 1, 2006, of various changes made to the IMP. After considering the material provided, PHMSA deemed the modifications adequate, and no further action is required in response to Items 1 and 2 of this Notice.

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 4-2006-5009M,** 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*