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

July 24, 2007

Mr Todd Hubble
Nippon Oil Exploration, Inc
Vice President, Exploration
5847 San Felipe, Suite 2800
Houston, Texas 77057

CPF 4-2007-5022M

Dear Mr. Hubble.

On August 7 to 10, 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 Nippon Oil Exploration Inc.'s plans or procedures, as 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.

Nippon Oil Exploration Inc. (NOEX) must modify its process for conducting overland spread analysis for its High Island pipeline segment ending at the Plains Tank battery in Jefferson County, Texas for developing a more accurate buffer zone NOEX's process must incorporate suitable information for all systems and locations to which the buffer zone is applied (and/or any modeling of overland transport analysis) to ensure accurate results are produced.

2. **§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).**

NOEX's process must be modified to document qualification requirements for personnel performing information analysis and reviewing integrity assessment results.

3. **§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?

> **(2) Discovery of a condition. Discovery of a condition occurs when an operator has adequate information about the condition to determine that the condition presents a potential threat to the integrity of the pipeline. An operator must promptly, but no later than 180 days after an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator can demonstrate that the 180-day period is impracticable.**
>
> **(4) (in its entirety)**

NOEX must modify the ILI inspection process, to ensure that all repair conditions are discovered within 180 days of completion of the integrity assessment and that all anomalies are correctly categorized in accordance with the repair provisions of the rule ("immediate repair," 60-day, 180-day, and "other" conditions). NOEX should further refine its definition of date of discovery and establish when adequate information about indicated anomalies has been received to determine that the condition presents a potential threat to the integrity of the pipeline. NOEX must also ensure that when immediate repair conditions are discovered, an appropriate pressure reduction is taken and the conditions are promptly addressed.

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)? ....

> **(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., corrosiveness of soil, subsidence, climatic);
(viii) geo-technical hazards; and
(ix) physical support of the segment such as by cable suspension bridge

(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.

(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.

NOEX must modify the risk analysis process to include all risk factors required by the IM rule in §195.452 (e)(1) and (i)(2) and any other pertinent information for evaluating risks that impact pipeline integrity NOEX's risk analysis process lacks sufficient analytical evaluation that adequately measures risks for development or modification of the BAP and for implementing preventative and mitigative measures. The process must be able to identify the most important risk drivers for segments that can affect HCAs Input data defaults were sometimes used because of a lack of information about the actual condition of the pipeline, and NOEX's process should ensure that the most accurate and up-to-date information possible is used in the risk analysis.

5. §195.452 Pipeline integrity management in high consequence areas.

(f) see above

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

(i) see above

(1) (2) see above

NOEX must modify the process for identifying the most significant threat drivers of segment-specific risk (e.g., third party damage, internal corrosion, etc) when evaluating additional preventive and mitigative (P&M) actions for implementation NOEX's process must include the requirement to establish prioritized implementation schedules and documentation of actions to protect HCAs NOEX's process must also include a systematic decision-making process to include input from relevant parts of the organization (e.g , operations, maintenance, engineering, corrosion control) that considers the results of the risk analysis along with other information in making decisions about which P&M actions to implement.

6. §195.452 Pipeline integrity management in high consequence areas.

(f) see above

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

(i) see above

(3) *Leak detection.* An operator must have a means to detect leaks on its pipeline system. An operator must evaluate the capability of its leak detection means and modify, as necessary, to protect the high consequence area. An operator's evaluation must, at least, consider, the following factors: length and size of the pipeline, type of product carried, the pipeline's proximity to the high consequence area, the swiftness of leak detection, location of nearest response personnel, leak history, and risk assessment results.

NOEX must modify their process to include all of the required factors in §195 452(i)(3), including risk assessment results If all required factors are not considered, a documented basis for the exclusion of certain listed factors must be documented.

7. §195.452 Pipeline integrity management in high consequence areas.

(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.

NOEX must modify the process to measure the IMP effectiveness to reflect the accomplishment of the program's objectives Performance matrices discussed during the inspection included: number of miles of pipeline assessed, number of anomalies found requiring repair or mitigation; number of right-of-way encroachments, number of leaks caused by internal/external corrosion, anomalies from manufacturing defects; third party damage, operator error; and equipment or non-pipe problems NOEX' benchmarking process must also include performance data from outside the company for better comparison.

In regard to Items 1, 2, 3, 5 and 7 listed above, Nippon provided finalized documentation via email to PHMSA on September 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, 2, 3, 5 and 7 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 4-2007-5022M** 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*