THE PIPELINES OF PUERTO RICO INC.
PIPELINES

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May 19, 2010

Ref: Notice of Amendment CPF 2-2010-6001M

Miss. Linda Daugherty
Director, Southern Region
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
233 Peachtree Street Ste. 600
Atlanta, GA 30303

Dear Miss. Daugherty:

Enclosed please find answers to the letter dated March 11, 2010 pursuant to apparent inadequacies found within Pipelines of Puerto Rico procedures on an inspection conducted on April 20-23, 2009.

Sincerely,

Luis A. Rodriguez
General Manager
The Pipelines of Puerto Rico, Inc.

RECEIVED MAY 2 6 2010

THE PIPELINES OF PUERTO RICO, INC.

PO Box 810047

Carolina, Puerto Rico 00981-0047

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety

Administration

233 Peachtree Street Ste. 600

Atlanta, GA 30303

April 26, 2010

Ref: NOTICE OF AMENDMENT CPF 2-2010-6001M

Answers to letter dated March 11, 2010 pursuant to apparent inadequacies found within Pipelines of Puerto Rico procedures on an inspection conducted on April 20-23, 2009.

§ 195.452(f) (8) Qualifications requirements for individuals to review and evaluate assessment results.

Periodic and continual integrity evaluations and assessment must be performed by reliable engineers with vast experience in pipelines operation and maintenance practices. Be able to interpret operating and external monitoring conditions of the pipeline that can affect the integrity of the system. The individuals must be knowledgeable in pipeline corrosion control that could evaluate the cathodic protection condition of the system to ensure that the line integrity is adequate.

The individuals must be knowledgeable and have experience in evaluating potential impacts on releases on the HCA such as:

a. Damage prevention practices
b. Preventive and mitigative actions to protect HCA.
c. Emergency operating procedures to protect line integrity.
d. Flow Restricting Devices and enhancement to Leak Detection Systems to protect HCA's.

§ 195.452 (g) Information analysis for reviewing Integrity Assessment results.

The pipeline operator must gather all information available that has been collected through day to day operation of the line to be used to perform the baseline integrity assessment this should include:

a. Day to Day operation data and information such as Log Sheets, Loss and Gain reports, Incident reports, daily line patrols and any other information that may be relevant to be analyzed.
b. Information critical to determine the potential for, and preventing, damage due to excavation including current and planned damage prevention activities or planned developing along the pipeline segment.
c. Data gathered from periodic cathodic protection surveys carried out along the line including any action taken to modify any of the components of the cathodic protection system.
d. Data gathered in conjunction to line pressure tests, surveillance excavation activities carried out along the pipeline Wright-of-Way that may posed a threat to the integrity of the line.
e. Information about how a failure would affect a high consequence area, such as location of water bodies and or populated areas.

§ 195.452(j) Continual process of evaluation and assessment carried out to maintain the pipeline integrity.

After completing the baseline integrity assessment the pipeline operator must continue to assess the pipeline at periodical intervals as frequently as needed to assure the pipeline integrity. The frequency of evaluation must be based on risk factors specific to its pipeline. The operator must base the assessment schedule on all the risk factors that reflects the risk condition on the pipeline segment.

The factors to be considered includes but are not limited to:

a. Results of previous integrity assessments.
b. Pipe size, material, and manufacturing information, coating type and conditions, and seam type.
c. Leak history, repair history and cathodic protection history.
d. Product transported.
e. Operating stress level
f. Existing or projected activities in the area.

g. Local environmental factors that could affect the pipeline such as corrosivity of soil, subsidence, climatic.
h. Physical support of the segment such as bridge hangers or other method of pipe support.
i. Pressure test of the pipeline or the segment.
j. External corrosion survey assessment of the pipeline.

§ 195.452 (h) What actions must be taken to address integrity issues.

1. *General Requirements;* Pipelines management must take prompt action to address all anomalous conditions that are discovered through the integrity assessment or information analysis. Pipelines management must evaluate all anomalous conditions found as result of the integrity assessment and remediate those that could reduce the pipeline integrity. Pipeline management must be able to demonstrate that remedial action of the condition will ensure that the condition is unlikely to pose a threat to the long term integrity of the pipeline.
   (i) Temporary pressure reduction; The pipeline operator must notify PHMSA, by entering the information directly on the Integrity Management Database Web site at http://primis.phmsa.dot.gov/imdb/; Sending the notification to the Information Resources Manager, Office of Pipeline Safety, Pipelines and Hazardous Materials Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590 or Sending the notification to the Information Resources Manager by facsimile to (202) 366-7128.
   (ii) Long –term pressure reduction; When a pressure reduction exceeds 365 days, the pipeline operator must notify PHMSA to the address shown on paragraph (i) this section and explain the reasons for the delay. The pipeline operator must take further remedial action to ensure the safety of the pipeline.
2. *Discovery of Condition;* Discovery of condition occurs when the line operator has adequate information about the condition to determine that the condition present a potential threat to the integrity of the pipeline. The pipeline operator must promptly, but not later the 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.
3. *Schedule for evaluation and remediation;* The pipeline operator must complete remediation of a condition according to a schedule prioritizing the conditions for

evaluation and remediation. If the operator cannot meet the schedule for any reason, the operator must explain the reasons why it cannot meet the schedule and how the changed schedule will not jeopardize public safety or environmental protection.

4. *Special requirements for scheduling remediation;*

(i) Immediate repair condition. The pipeline operator evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, the operator must temporarily reduce operating pressure or shutdown the pipeline until repairs of the condition are completed. The pipeline operator must treat the following conditions as immediate repair conditions.

(A) Metal loss greater than 80% of the nominal wall thickness regardless of dimensions.

(B) A calculation of the remaining strength of the pipe shows a predicted burst pressure less than the established maximum operating pressure at the location of the anomaly.

(C) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) that has any indication of metal loss, cracking or a stress riser.

(D) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) with depth greater than 6% of the nominal pipe diameter.

(E) An anomaly that in the judgment of the person designated by the pipeline operator to evaluate the assessment results requires immediate action.

(ii) 60-day conditions. Except for conditions listed in paragraph (4)(i) of this section, the pipeline operator must schedule evaluation and remediation of the following conditions within 60 days of discovery of the condition.

(A) A dent located on the top of the pipeline (above the 4 and 8 o'clock position) with a depth greater than 3% of the pipe diameter (greater than 0.250 inches in depth for a pipeline diameter less than Nominal Pipe Size (NPS) 12.

(B) A dent located on the bottom of the pipeline that has any indication of metal loss, cracking or stress riser.

(iii) 180-day conditions; Except for conditions listed in paragraph (4)(i) or (ii) of this section, the pipeline operator must schedule the evaluation and remediation of the following within 180 days of discovery of the condition.

(A) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects the pipe curvature at a girth weld or a longitudinal seam weld.

(B) A dent located on the top of the pipeline (above 4 and 8 o'clock position) with a depth greater than 2% of the pipeline's diameter (0.250 inches in dept for a pipeline diameter less than NPS 12).

(C) A dent located on the bottom of the pipeline with a depth greater than 6% of the pipeline diameter.

(D) A calculation of the remaining strength of the pipe shows an operating pressure that is less than the current established maximum operating pressure at the location of the anomaly.

(E) An area of general corrosion with a predicted metal loss greater than 50% of the nominal wall thickness.

(F) Predicted metal loss greater than 50% of the nominal wall thickness that is located at the crossing of another pipeline, or is in an area with widespread circumferential corrosion, or is in an area that could affect a girth weld.

(G) A potential crack indication that when excavated is determined that is a crack.

(H) Corrosion of or along a longitudinal seam weld.

(I) A gouge or groove greater than 12.5% of the nominal wall thickness.

(iv) Other Conditions; In addition to the conditions listed in paragraph (4)(i) through (iii) of this section, the pipeline operator must evaluate any condition identified by an integrity assessment or information analysis that could impair the integrity of the pipeline, and as appropriate, schedule the condition for remediation.

§195.452 (e) Risk factors required for establishing an assessment schedule (for both the base line and continual integrity assessment)

1. The pipeline operator must establish an integrity assessment schedule that prioritizes pipeline segments for assessment. The line operator must base the assessment schedule on all risk factors that reflect the risk conditions on the pipeline segment. Some of the factors that the pipeline 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 such as corrosivity of soil, subsidence, climatic.
(viii) Geo-technical hazards;
(ix) Physical support of the pipeline such as bridge hangers.

§ 195.452 (i) Preventive and mitigative measures that the pipeline operator must take to protect the high consequence area.

1. *General Requirements;* The pipeline operator must take all measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include performing a risk analysis of the pipeline segment to identify additional actions to enhance public safety and environmental protection. Such actions may include, but are not limited to, damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing Emergency Flow Restricting Device on the pipeline segment, modifying the system that monitors 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:* As part of risk analysis criteria the pipeline operator must identify and evaluate the need for additional prevention and mitigative measures, must evaluate the likelihood of a pipeline release occurring and how the 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, road culverts and other smaller waterways that could act as conduit to the high consequence area.
   (ii) Elevation profile;
   (iii) Characteristic of the product transported;
   (iv) Amount of product that can be released;
   (v) Possibility of a spillage in a farm field following the drain tile into a waterway;
   (vi) Ditches alongside a roadway the pipeline crosses or runs alongside;
   (vii) Physical support of the pipeline segment such as bridge hangers;
   (viii) Exposure of the pipeline to operating pressures exceeding the established maximum operating pressure.
3. *Leak detection;* The pipeline operator must have a means to detect product leaks on the pipeline system. The pipeline operator must evaluate the capability of its leak

detection means and modify, as necessary, to protect the high consequence area. The pipeline operator evaluation must consider the following factors; length and size of the pipeline, type of product transported, the pipeline proximity to the high consequence area, the swiftness of the leak detection, location of the nearest response personnel, leak history and risk assessment results.

4. *Emergency flow restricting devices (EFRD's);* If the pipeline operator determine the need to install an EFRD on a pipeline segment to protect a high consequence area in the event of a pipeline release. In making this determination, he must consider at least the following factors; swiftness of the pipeline leak detection, and the pipeline shutdown capabilities, the type of product transported, the rate of potential leakage, the volume of product that can be released, topography of the pipeline profile, power sources, location of nearest response personnel, proximity of the pipeline to the high consequence area, and benefits expected by reducing the spill size.

§ 195.452 (j) Pipeline continual process of evaluation and assessment to maintain the pipeline integrity.

1. *General.* After completing the baseline integrity assessment, the pipelines operator must continue to assess the pipeline at specified and periodically evaluate the integrity of each pipeline segment that could affect a high consequence area.
2. *Evaluation;* The pipeline operator must conduct a periodic evaluation as frequently as needed to assure pipeline integrity. The pipeline operator must base the frequency of the evaluation on risk factors specific to PLPR, including the factors specified in paragraph (e) of this report. The evaluation must consider the results of the baseline and integrity assessment and the information analysis that has been performed in the past.
3. *Assessment intervals.* The pipeline operator must establish a five (5) year intervals, not to exceed 68 month, for continually assessing the pipeline integrity. PLPR operator must base the assessment intervals on the risk the line poses to the high consequence area to determine the priority for assessing the pipeline segments.
4. *Variance from the 5- year intervals in limited situations.*
   (i) *Engineering basis.* PLPR operator may be able to justify an engineering basis for a longer assessment interval on a segment of the pipeline. The justification must be supported by a reliable engineering evaluation combined with the use of other technology, such as external monitoring technology, that provides an understanding of the conditions of the

pipeline equivalent to that which can be obtained from the assessment methods.

(i) *Unavailable technology;* PLPR operator may require a longer assessment period for a segment of the pipeline. The pipeline operator must justify the reasons why it cannot comply with the required assessment period and must also demonstrate the actions it is taking to evaluate the integrity of the pipeline segment in the interim. The PLPR operator must notify OPS 180 days before the end of the five-year (or less) interval that the operator may require a longer assessment interval, and provide an estimate of when the assessment can be completed. The operator must send a notice to PHMSA to the following address: Information Resources Manager, Office of Pipeline Safety, Pipeline and Hazardous Material Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590 or Sending the notification to the Information Resources Manager by facsimile to (202) 366-7128. Or entering the information directly on the Integrity Management Database Web site at http://primis.phmsa.dot.gov/imdb/.

(i) *Assessment Methods;* PLPR must assess the integrity of the pipeline by any of the following methods. The methods that the 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.

(i) Internal inspection tool or tools capable of detecting corrosion and deformation anomalies including dents, gouges and grooves.

(ii) Pressure test of the pipeline or pipeline segment.

(iii) External corrosion direct assessment in accordance with § 195.588.

(iv) Other technology that the operator can demonstrate can provide an equivalent understanding of the conditions of the pipeline. If the operator chooses this option must notify OPS 90 days before conducting the assessment by sending a notice to the address shown on paragraph 4(ii) above.

§ 195.452 (k) Methods used to measure program effectiveness to whether the program is effective in assessing and evaluating the integrity of the pipeline.

1. In addition to the development of a written Integrity Management Program that addresses the risks on each pipeline segment, the program must include the identification of each pipeline segment, baseline assessment of the pipeline and a framework that addresses each element of the integrity management program.
2. Documents to support the decisions and analyses, including any modifications, justifications, variances, deviations and determinations made, and actions taken, to implement and evaluate each element of the integrity management program.
3. Identification of the high consequence areas and the factors for considering a pipeline segment's potential impact on a high consequence area.