NAVAJO NATION OIL & GAS COMPANY, INC.

A Federal Corporation

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December 14, 2007

R.M. Steeley, Director
Anthony Rallis, Project Manager
Office of Pipeline Safety Southwest Region
8701 south Gessner, Suite 1110
Houston, TX 77074

RE: CPF 4-2007-5012M

Dear Sir,

Navajo Nation Oil and Gas Company (NNOGC) is providing the following update to the responses it submitted on May 14, 2007 regarding the notice of Amendment dated April 17, 2007.

Thank you for your attention to this matter and your kind extension time to respond. It is the intention of Navajo Nation Oil and Gas Company to be in full compliance of the pipeline regulations, Title 49, Code of Federal Regulations, Part 195.

Should you have any questions please call me at (928) 871-4880.

Kindest Regards,

Chalmer T Bitsoi for Wilson Groen

Cc: file

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 1.

4.4. Baseline Assessment Plan

RHPL has completed Baseline Assessments for 100% of its pipeline mileage. If RHPL acquires or constructs additional pipeline facilities, Baseline Assessments for these facilities will be conducted in accordance with Section 4.1.1 and 4.1.2.

10.7. Pipeline Threat Factors

3rd Party Intervention

MOP stress/SMYS
One call activity requiring Company response
History of 3rd party interventions related leaks/spills
Patrol frequency Depth of cover/sand or grout bag cover
Pipeline size Construction, development, dredging or farm activity on or near pipeline
ROW Maintenance
Encroachment incidents
Pipeline signs or markers
P&M measures implemented in last 12 months for TPI
Deformation ILI tool run frequency
Security for above ground facilities

Corrosion

Inspection of above ground piping and risers
History of stress corrosion cracking failures
Close interval survey within segment affecting HCA
Internal metal loss monitoring results in last 12 months
Pipe wall thickness
Susceptibility to high pH stress corrosion cracking
P&M measures implemented in last 12 months for corrosion
CP reading results last 12 months
Corrosion coating type
Test lead spacing
Cathodic protection monitoring frequency
Susceptibility to near neutral pH stress corrosion cracking
Frequency of ILI runs or ECDA for corrosion detection
Most recent ILI tool run or ECDA inspection for corrosion detection
History of corrosion related leaks/spills (not stress corrosion cracking)
Atmospheric conditions
Bridge supports

Defects

Welding records for construction and repairs
Pipe type
Joint factor
Pipeline age
P&M measures implemented in last 12 months for defects
History of defect related leaks/spills
Backfill
History of defect related leaks/spills
Pressure test history
MOP stress/ SMYS
Pressure cycles
Caliper pig run for anomaly detection
Pressure cycles

Nature

Earthquake zone - NPMS
Landslide risk -NMPS
History of natural causes related leaks/spills
P&M measures implemented in last 12 months for natural causes
Number of days with temperature < 28°F
Hurricanes zone - NPMS
Flooding zone -NPMS
ROW/terrain

Operator Error

Number of safety related condition reports per §195.55 in last 12 months
P&M measures implemented in the last 12 month for operator error
Relief valve releases in last 12 months
Training program
Leak/spill drill frequency
History of operator error related leaks/spill

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 2.

7.9.4. RHPL Personnel Qualification Requirements

7.9.4.1. ILI Assessment Results Evaluation

RHPL personnel evaluating in-line integrity assessment results shall have as a minimum the following qualifications and working experience.

1. Minimum of 5 years experience in pipeline operations, engineering and/or maintenance work.
2. Knowledge of Part 195 and detailed knowledge of §195.450 and §195.452.
3. Knowledge of RHPL's Pipeline Integrity Management Plan.
4. Knowledge of RHPL's in-line inspection specification and Vendor contract.
5. Ability to recognize common anomalies and features from Vendor's log.
6. Have an understanding of ASME B31G and Section 451.7 of ASME B31.4 calculations and their impact on pipeline operating pressures.
7. Ability to recognize anomalies discovered during field digs.

7.9.4.2. Pressure Testing Results Evaluation

RHPL personnel evaluating pressure testing assessment results shall have as a minimum the following qualifications and working experience.

1. Minimum of 5 years experience in pipeline operations, engineering and/or maintenance work.
2. Knowledge of Part 195 and detailed knowledge of Part 195 Subpart E, §195.450 and §195.452.
3. Knowledge of RHPL's pressure testing Vendor contract if an outside Vendor is used for the testing.
4. Knowledge of RHPL's Pipeline Integrity Management Plan.
5. Knowledge of RHPL's hydrostatic testing procedure contained in RHPL's O&M manual.
6. Ability to recognize and document a pressure reversal occurring in a section under test.
7. Ability to inspect and analyze pressure and temperature logs during an ongoing test for satisfactory/unsatisfactory progress of the test.
8. Ability to determine test pressures based on maximum operating pressure requirements.
9. Ability to recognize a successful test carried out in accordance with Subpart E of Part 195 and RHPL's pressure testing procedure.

7.9.5. Subject Matter Expert (SME)

RHPL considers that personnel having the following qualifications and working experience can be designated SME's for integrity management related activities.

1. Minimum of 10 years experience in pipeline operations, engineering and/or maintenance work including minimum of 5 years experience with RHPL pipelines.
2. Minimum of two years experience working directly with RHPLs IMP.
3. A record of continual training to maintain and extend knowledge of pipeline related topics.

7.9.6. Training for Evaluating Assessment Results

RHPL personnel that evaluate integrity assessment results will maintain those qualifications through a combination of industry seminars, formal integrity management related training, ILI Vendor tool specific training or other as appropriate. The Operations Manager will, at least six months prior to an assessment, identify training requirements and schedule the necessary training. Training records are maintained for each individual that evaluates assessment results.

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 3.

8 - Section 8 - Identification of Preventative and Mitigation Measures to Protect Environmentally Sensitive and Populated Areas

8.1. Identification and Evaluation Process for New Measures

The Operations Manager will conduct a Preventative and Mitigative Measures Analysis of each of RHPL's pipeline segments using the form in Appendix F. This analysis will be completed by January 1 every second year beginning in 2010 and after the Risk Analysis update is complete.
The Operations Manager in conjunction other appropriate resources will identify potential Preventative and Mitigation Measures for each pipeline segment. Measures to be considered must include at a minimum those measures listed below

1. Implementing damage prevention best practices.
2. Enhanced monitoring of cathodic protection.
3. Shortening inspection intervals.
4. Installing EFRD's.
5. Modifying systems that detect leaks and monitor pressure.
6. Additional emergency response training.
7. Drills with local emergency responders.
8. Other Measures as appropriate for a specific pipeline segment.

The Operations Manager will identify the needs for and benefit of implementing identified Measures and make appropriate recommendations for implementing preventative and mitigation Measures to the Operations Manager. The Operations Manager will utilize reasonable technical and financial judgment in evaluating recommended Measures for implementation. The Operations Manager will return all unapproved recommended Measures to the Maintenance Manager for possible modification. If approved, the Operations Manager will be responsible for implementing the approved Measures within the time frame specified in the approved Measures. For significant projects, the Operations Manager may request a technical review by a third party of the proposed Measures prior to forwarding the recommendation to the Operations Manager and Regulatory Affairs. The Operations Manager will complete this process as part of the IMP update with all records being retained permanently.

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 4.

8.4. Leak Detection Evaluation

The Operations Manager is responsible for performing a leak detection evaluation on each of RHPL's pipelines by March 31, 2008. The evaluation will consider the following factors and sub-factors.

1. Length and size of the pipeline.
   a. Pipe size.
   b. Operating pressure.
   c. Flow-rate.
   d. Line length.
2. Type of product transported.
   a. Physical properties such as flash point, vapor pressure etc.
   b. Upon release, liquid only or liquid and gas present.
3. Pipeline proximity to HCAs.
   a. Number of HCAs.
   b. Type of HCAs.
   c. Level of "one call" activity.
   d. Identify sole source drinking water locations.
4. Swiftness of existing leak detection.
   a. Existing leak detection methods.
   b. Leak scenarios such as catastrophic, pin-hole, small hole.
   c. SCADA capabilities.
   d. Encroachment history.
   e. Balancing frequency.
   f. Imbalance tolerances.
5. Location of nearest response personnel.
   a. Drill frequency.
   b. Training level.
   c. Potential weather impacts.
   d. Accessibility to ROW.
6. Leak history.
   a. Number of leaks in last 5 years.
   b. Cause of each leak.
   c. Remedial action taken for each leak.
   d. Quantity released in each instance.
7. Risk assessment results.
   a. Threat scores.
   b. Threshold levels for threats to be of concern.

The Operations Manager will follow the following process in making this evaluation.

1. Establish acceptable leak detection criteria for each pipeline considering the factors above. The number of criteria may vary by pipeline but at least five criteria should be established for each line. For example, 8 hour volume balancing on a rural pipeline may be acceptable but hourly volume balancing for a gasoline line in a populated area may be appropriate.
2. Evaluate existing leak detection capabilities for each pipeline using the factors noted above against the acceptability criteria.
3. Identify any deficiencies in the existing leak detection methods and point out modifications and improvements as appropriate.

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 5.

8.3. Emergency Flow Restricting Device (EFRD) Evaluation

The Operations Manager is responsible for performing an evaluation for the need to install EFRDs in order to protect HCAs on each of RHPL's pipelines by March 31, 2008. For the purpose of this evaluation EFRDs include check valves, new remotely controlled actuators on existing valves, new valves with remotely controlled actuators and new or existing valves with actuators and controls that automatically close as a result of pressure changes in the pipeline. The evaluation will consider the following factors[5] and sub-factors.

1. Swiftness of leak detection and pipeline shutdown capabilities.
a. Surveillance level in the control room.
b. Existing leak detection methods.
c. Public awareness
2. Commodity transported.
a. Physical properties.
b. Spill type (liquid and vapor, liquid only).
3. Rate of potential leakage.
a. Size of hole in the pipe.
b. Operating pressure.
c. Flow rate.
4. Potential release volume.
a. Existing valve locations.
b. Spill location.
c. Pump shutdown timing.
d. Pipe size and flow rate.
e. Leak history.
f. Spill volume with and without the EFRD.
5. Pipeline profile.
a. High point locations
b. Low point locations.
6. Potential for ignition.
a. Flash point of product transported.
b. Urban or industrial areas proximity to spill location.
7. Proximity to power sources.
a. Proximity to electric power.
b. Proximity to gas sources.
8. Location of nearest response personnel.
a. Drill frequency.
b. Level of training.
c. Potential weather impacts.
d. Accessibility to spill location.
9. Specific terrain between pipeline segment and HCAs.
a. Locations of flowing waterways.
b. Slopes.
c. Soil characteristics.
10. Benefits gained by reducing the spill.
a. Spill size reduction.
b. Consequences mitigated.
c. Additional HCA protection gained.

The Operations Manager will use the following process in making the evaluation.

1. Establish benefit threshold criteria that installation of an EFRD must satisfy in order to justify installation of the EFRD. Such criteria may include requirements such as minimum 50% reduction in quantity released, HCA no longer affected by quantity released and/or a significant reduction in the consequences of the spill.
2. Evaluate each of the factors noted above with the EFRD installed.
3. Determine if the threshold factors are satisfied and make a recommendation regarding installation of the EFRD.

The Operations Manager will use guidance found in GRI report GRI-98/0076 in establishing threshold factors and making the evaluation.

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 6&7.

7.1. Integrity Evaluation

The Operations Manager will conduct an Integrity Evaluation of each of RHPL's pipeline segments that are capable of affecting one or more HCAs by using the form in Appendix E within twelve months after completing an integrity assessment. This evaluation will determine whether an integrity assessment is required prior to the end of the five year maximum reassessment interval.

The Operations Manager may carry out an unscheduled integrity evaluation if unusual or unexpected conditions arise that warrant such a review. Such conditions include a release or spill from one of RHPL's pipelines, occurrence of an Abnormal Operating Condition as described in §195.402(d), an encroachment incident, unexplained changes in cathodic protection levels, landslides or washouts in a pipeline ROW or any other events that give rise to questions concerning a particular pipeline's integrity condition.

The Operations Manager will use the Integrity Evaluation form found in Appendix E to perform each evaluation and to document results of the evaluation. The Operations Manager will consult with appropriate operations, maintenance and/or engineering personnel to determine the need for an unscheduled integrity evaluation. Results from these consultations will be recorded in the Comments section of the evaluation form.

7.2. Reassessment Intervals

After completing the initial integrity assessments, the Operations Manager will then conduct additional integrity assessment on each pipeline segment not more that five calendar years after completion date of the preceding assessment but at intervals not exceeding sixty-eight months except as provided for in Sections 7.1, 12.3 and 12.4. The current re-assessment schedule is found in Section 5.

Following is the response to the letter dated April 17, 2007 CPF 4-2007-5012M Item number 8.

7.3. Risk Analysis Update
Prior to the Risk Analysis update, the Operations Manager will review the then effective Risk Factors, threat and consequence weighting factors and the need for new Risk Factors in Section 10 and make revisions to Appendix B to reflect current pipeline conditions. Changes will be documented in the Revision Log.
Also prior to performing the Risk Analysis update, the Operations Manager will gather from field personnel using the form in Appendix C and integrate the new or revised information into the Risk Factors information located in Appendix A. The information in the revised Appendix A will then used in the new Risk Analysis update. An information update form will be completed for each pipeline segment capable of affecting an HCA.
The Operations Manager and SME's, as appropriate, will collect, analyze, and integrate the following data (minimum) for use in the Risk Analysis Update:
1. Patrol reports.
2. Rectifier inspection reports.
3. Valve inspection reports.
4. Dig reports.
5. Relief valve test reports.
6. Pipe to soil reading reports.
7. "One Call" reports.
8. Above ground pipe inspection reports.
9. Information on development of new HCAs.
10. Leak/spill/near miss incident reports.
11. Prior integrity assessment results reports.
12. Results of integrity assessments completed within the last year.
13. Repair/remediation reports.
14. Information and insights gained from field personnel.
15. Industry Statistics and information.
16. Abnormal operating condition reports.
17. Pipeline maintenance work reports and
18. Other relevant information.

In the second quarter of the update years, the Operations Manager will update each pipeline's Risk Analysis using the methodology contained in Appendix B. This updated analysis will be reviewed and approved per RHPL's Quality Assurance Procedures and distributed per Section 12.

8.6. Review Process for Plan Effectiveness
The Operations Manager will prepare an Annual Integrity Management Report by January 31 every year with first report in 2008 that includes the following:
1. Overall assessment of the IMP's effectiveness.
2. List of integrity assessments completed and results obtained.
3. Repair/remediation work completed in the previous year.
4. Process improvements identified and implemented.
5. Performance against the previous year's Program Performance Parameters and any identified trends.
6. New HCA's identified.
7. Any other Integrity Management Activities carried out in the previous year.
8. Identification of any Integrity Management work scheduled in the previous year but not completed.
9. A Recovery Plan for work scheduled but not completed.

The Annual Integrity Management Report will be reviewed and approved in accordance with RHPL's Quality Assurance Procedures contained in Section 12.

9 - Section 9 - Annual Program Measurement Parameters
9.1. Process
RHPL has selected both pipeline specific and system wide performance measures to evaluate the overall effectiveness of RHPL's IMP. Each measure will be evaluated, in the 2nd quarter of every other year and reported in the Annual Pipeline Integrity Management Report. Any changes recommended by the Operations Manager per Section 7.4 will be reviewed and approved by the Maintenance Manager. All recommended changes will be managed using the RHPL MOC process.

9.2. Pipeline Specific Performance Targets

PARAMETERS ▶ PIPELINE ▼	NUMBER OF LEAKS, SPILLS OR RELEASES	CATHODIC PROTECTION READINGS	QUANTITY OF PRODUCT RELEASED (BARRELS)	MAINLINE VALVE, RECTIFIER AND RELIEF VALVE MAINTENANCE AND INSPECTIONS COMPLETED AS REQUIRED	UNPLANNED RELIEF VALVE OPENINGS
Running Horse Pipeline	0	All acceptable	0	All completed as required	0

9.3. System-Wide Performance Measures

1. Community outreach.
a. Annual awareness mailing to local community.
b. Annual meeting with local emergency agencies.
2. Integrity assessment schedule maintained per Sections 4 and 5.
3. All personnel performing pipeline operations and maintenance tasks, including contractors, are qualified for tasks performed per RHPL's [redacted] Qualification Program or an acceptable third party [redacted] gram.