



STATE OF WASHINGTON

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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Ref. No. Docket PG-110020

December 20, 2011

Tim Clark
Vice President, Operations
Cascade Natural Gas Corporation
555 South Cole Road
PO Box 7608
Boise, ID 83707

Dear Mr. Clark:

RE: 2011 Natural Gas Standard Inspection – Whatcom County

Thank you for your letter dated July 15, 2011, responding to our letter related to the inspection of Cascade Natural Gas Corporation (CNG), Whatcom County, Washington conducted in April 2011.

Staff accepts CNG's response, with comments (attached), with the understanding that unresolved issues noted will be dealt with in conjunction with the commission approved settlement agreement under docket PG-110443. Docket PG-110020 will be closed as of December 20, 2011.

If you have any questions, or if we may be of assistance, please contact Stephanie Zuehlke at (360) 664-1318.

Sincerely,

David D. Lykken
Pipeline Safety Director

cc: Steve Kessie, Manager-Operations Services

Enclosure



WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2011 Natural Gas Pipeline Safety Inspection
Cascade Natural Gas – Whatcom County
Docket PG-110020

The following is staff's response to CNG's letter dated July 15, 2011 regarding the findings of the staff's inspection of the CNG – Whatcom County facilities.

Probable Violations

1. **WAC 480-93-018 Records.**

Staff does not accept CNG response. Staff requested both the (1) MAOP (which was provided during the inspection and is not identified as part of this probable violation) AND the (2) Actual Operating Pressure at the time of the inspection. All requested Actual Operating Pressures were not provided at the time of inspection and are not part of the MAOP Table CNG has provided – the Table identifies the MAOP's in the system not the Actual (Current) Operating Pressures.

The following charts provided in CNG's letter of intent Exhibit A are acceptable:

1. Line 11 Chart date 04.06.2011
2. Line 20 Chart date 04.06.2011
3. Staff located notes during response review which identifies an Inlet for Line 19 of 613psig which was identified during inspection.

The remainder of the records CNG provided in their letter of intent Exhibit A are from a year other than 2011 and are not Actual Operating Pressures applicable to this inspection.

Staff makes every effort to identify a complete list of probable violations for the gas pipeline company during the exit interview. Until all inspection information is compiled and sent to a gas pipeline company the findings should not be considered final, especially when a large volume of information is collected.

Staff accepts CNG's response with the understanding that this item will be addressed under Docket 110443 Settlement Agreement item number Four "Remedial Action Concerning Commission Inspection Letters."

2. **WAC 480-93-018 Records.**

Staff accepts CNG's response that they failed to maintain records for the life of their pipeline at this location. Staff understands that this failed pipeline section has been replaced.

3. **WAC 480-93-018 Records.**

Staff accepts CNG's response that items b. and c. will be addressed under Docket 110443 Settlement Agreement item number Five. Staff erred in including item c. in this inspection report even though it further evidences of the importance of maintaining accurate records.

4. **WAC 480-93-110 Corrosion control.**

Staff reviewed casing short follow-up read dates in conjunction with the dates of shorted casing discovery and finds that CNG meets with rule requirements for following-up within 90 days and twice annually thereafter (NTE 7.5 months) to determine that the shorted condition did not negatively impact their cathodic protection system. Also, staff notes that leak surveys were completed within 90 days and twice annually thereafter (NTE 7.5 months) of identifying the shorted casing conditions during the completion of two separate annual surveys at this location. However, staff notes CNG procedures are more restrictive than the rules (NTE 7.5 mos.) in requiring a 180 day follow-up between shorted casing investigation follow-up with one read exceeding this time-frame (03.16.07 discovery w/10.04.07 follow-up).

CNG has indicated in their response letter that personnel complete a leak survey for shorted casing conditions by taking a gas reading at the vent only – this procedure does not meet leak survey requirements of WAC 480-93-185 and the procedure and training should be corrected. Lastly, all reads taken should be recorded, including those taken with passed T/R tests. Staff appreciates that CNG brought these additional records to our attention.

Staff expectation is for CNG to address these issues under Docket 110443 Settlement Agreement item number Two, Three, Four, Six, and Seven.

5. **WAC 480-93-110 Corrosion control.**

Staff accepts CNG's response and understands that this finding will be addressed under Docket 110443 Settlement Agreement item number Five. Also see staff response to PV 4.

6. **WAC 480-93-124 Pipeline markers.**

Staff accepts CNG's response.

7. **49 CFR §192.161 Supports and anchors.**

Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Three.

8. **WAC 480-93-175 Moving and lowering metallic gas pipelines.**

Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, Three, and Six.

9. **WAC 480-93-180 Plans and procedures.**

1. **Finding(s):**

Staff does not accept CNG's response. CNG shall immediately cease installing these coupons. Per PHMSA, the method CNG has chosen to attach test leads is not best practice and may increase the risk of a pipeline failure such as, in-service cracking of the fillet weld; any defects in the fillet weld can be subjected to hoop stresses leading to failure, and if the fillet weld is not all away around or has defects that allows moisture in shielded corrosion can develop between the pipe and steel attachment.

49 CFR §192.471(b) requires each test lead wire must be attached to the pipeline so as to minimize stress concentration on the pipe. The use of the metal disk and fillet welding clearly does not minimize stress to the pipe - especially, considering the commonly used practice of cad welding.

CNG must take prompt action to address the identified conditions at all locations where test lead coupons have been installed. CNG's action and response shall be in accordance with 49 CFR Subpart O. This issue will be addressed under Docket 110443 Settlement Agreement item numbers Two, Three, Four, and Six.

2. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Six.
3. **Finding(s):**
Staff does not accept CNG's response. CNG incorrectly interprets a manufacturer's certificate of compliance for a particular component as a substitute for a detailed construction/installation procedure. Staff expectations are that CNG address this finding under Docket 110443 Settlement Agreement item number One, Two, and Six.
4. **Finding(s):**
Staff accepts CNG's response that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Seven.
5. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, Three, and Six.
6. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item number One, Two, and Six.
7. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers Three and Six.
8. **Finding(s):**
Staff does not accept CNG's response. Staff expectation is that CNG correct this procedure language and address is under Docket 110443 Settlement Agreement item numbers One and Six.

9. **Finding(s):**
Staff accepts CNG's response.
10. **Finding(s):**
Staff accepts CNG's response.
11. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Five.
12. **Finding(s):**
Staff does not accept CNG's response. Staff expectations are that this finding will be addressed under Docket 110443 Settlement Agreement item numbers Three and Eight.
13. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Six.
14. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One and Three. CNG's maximum cumulative ultraviolet light exposure times identified in CP 607.044 cannot exceed the plastic pipe manufacturer's recommended maximum period of exposure or a maximum of two years, whichever is less, unless the pipes meet the American Society for Testing of Materials (ASTM) D-2513-99 requirements." Section A1.5.7 of ASTM D-2513-99 references Outdoor Storage Stability. CNG should have and maintain proof of compliance. Please reference PHMSA 192.321 Interpretation 10, dated Sep. 17, 2010.
15. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Six.
16. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Six.
17. **Finding(s):**
Staff accepts CNG's response with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One, Two, and Three.

18. **Finding (s):**
Staff accepts CNG's response that they did not complete the required annual self-audit for implementation and resource evaluation with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One and Two.
19. **Finding (s):**
Staff accepts CNG's response that this finding will be addressed under Docket 110443 Settlement Agreement item numbers Three and Six.
10. **WAC 480-93-186 Leak evaluation.**
Staff agrees with CNG's response that leak survey information was not provided and/or not available and that this main has been replaced. Staff accepts CNG's response with the understanding that future items of this nature will be addressed in the manner described in Docket 110443 Settlement Agreement item numbers One, Six, and Seven.
11. **WAC 480-93-186 Leak evaluation.**
Staff agrees with CNG's response that leak survey information was not provided and/or not available. Staff accepts CNG's response with the understanding that future items of this nature will be addressed in the manner described in Docket 110443 Settlement Agreement item numbers One, Two, Three and Seven.
12. **WAC 480-93-188 Gas leak surveys.**
 1. **Finding(s):**
Staff accepts CNG's response that this finding will be addressed under Docket 110443 Settlement Agreement item number Five, with the additional understanding that this finding will also be addressed under Docket 110443 Settlement Agreement item number Two, Three, and Seven.
 2. **Finding(s):**
Staff accepts CNG's response that this finding will be addressed under Docket 110443 Settlement Agreement item number Five, with the additional understanding that this finding will also be addressed under Docket 110443 Settlement Agreement item number Two, Three, Four and Seven.
13. **WAC 480-93-188 Gas leak surveys.**
Staff accepts CNG's response that leak survey mapping information was not recorded with the understanding that future items of this nature will be addressed in the manner described in Docket 110443 Settlement Agreement item numbers Three, Four, Five, and Seven.
14. **WAC 480-93-200 Reporting requirements.**
Staff agrees that CNG submitted these reports late and accepts CNG's response.

15. **49 CFR §192.143 General requirements.**
Staff accepts CNG's response that they failed to maintain records for the life of their pipeline at this location. Staff understands that this pipeline section has been replaced.

16. **49 CFR §192.183 Vaults: Structural design requirements.**
Staff does not accept CNG's response. CNG failed to maintain and protect installed equipment – pipeline vault walls are failing and CNG has not demonstrated corrective action taken.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, and Four.

CNG's response which identifies that CNG engineering will review within the next month for the purposes of updating emergency shut-down plan to include a contingency plan based upon valve accessibility due to poor vault condition of multiple vaults, is acceptable.

17. **49 CFR §192.321 Installation of plastic pipe.**
Staff accepts CNG's response in that the above described pipe was not installed. However, staff does not accept CNG's response regarding their procedure CP 607.044. CNG has not demonstrated that the exposure time limit identified in their procedures does not exceed the manufacturer's recommended maximum period of exposure or 2 years, whichever is less in accordance with this regulation. This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Three, and Six.

18. **49 CFR §192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971.**
Staff accepts CNG's response that they failed to maintain records for the life of their pipeline at this location. Staff understands that this failed pipeline section has been replaced.

19. **49 CFR §192.481 Atmospheric corrosion control: Monitoring.**
Staff does not accept CNG's response. CNG has not demonstrated corrective action.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, Four, and Six.

20. **49 CFR §192.609 Change in class location: Required study.**
Staff does not accept CNG's response that it is Company practice to design and operate all of its pipeline systems to Class 4. CNG's CP 601 identifies utilization of design factors other than those associated with Class 4 locations. CNG has not demonstrated that they are operating at the MAOP in accordance with 49 CFR 192.611 and Subpart O. Adjust CNG procedures to meet CNG actual practice.

Staff accepts CNG's response to leak survey all pipelines with the expectation that this item, similar items, and future items of this nature will be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, Four, and Six.

21. **49 CFR §192.613 Continuing surveillance.**

1. **Finding(s):**

Staff accepts CNG's response with the expectation that this item and future items of this nature will be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, Four, Five, and Six.

2. **Finding(s):**

Staff does not accept CNG's response. CNG has not demonstrated corrective action.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, and Four

3. **Finding(s):**

Staff does not accept CNG's response. CNG failed to maintain and protect installed equipment and has not demonstrated corrective action.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, and Four.

4. **Finding(s):**

Staff does not accept CNG's response. CNG failed to demonstrate corrective action.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, and Four

5. **Finding(s):**

Staff does not accept CNG's response. CNG failed to recognize the Squalicum Creek is a creek with moving water and has not demonstrated corrective action.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, Four and Six.

6. **Finding(s):**
Staff does not accept CNG's response. CNG failed to demonstrate corrective action.

This item and future items of this nature will need to be monitored and addressed in the manner described in Docket 110443 Settlement Agreement item numbers Two, Three, and Four

22. **49 CFR §192.616 Public awareness.**

Staff accepts CNG's response that they did not complete the required annual self-audit for implementation and resource evaluation with the understanding that this finding will be addressed under Docket 110443 Settlement Agreement item numbers One and Two.

23. **49 CFR §192.703 General.**

1. **Finding(s):**
Staff accepts CNG's response with the expectation that this finding will be addressed under Docket 110443 Settlement Agreement item number Two, Three, Four, and Six.

2. **Finding(s):**
Staff accepts CNG's response with the expectation that this finding will be addressed under Docket 110443 Settlement Agreement item number Two, Three, Four, and Six.

3. **Finding(s):**
Staff disagrees with CNG's assessment that gas at UEL is an acceptable monitoring level for this location without demonstrating why these conditions are acceptable.

However, since this defective pipeline has been replaced, Staff accepts CNG's response with the expectation that this finding and future issues of a similar nature will be addressed under Docket 110443 Settlement Agreement item number Two, Three, Four, Six, and Seven.

24. **49 CFR §192.717 Transmission lines: Permanent field repair of leaks.**

Staff does not accept CNG's response. CNG failed to demonstrate they investigated the cause of this leak on the transmission pipeline identified as a "split seam" thereby failing to demonstrate the repair permanently restored the serviceability of the transmission pipeline.

CNG should take prompt action to address the identified conditions at all locations. CNG's action and response plan shall be in accordance with 49 CFR Subpart O. This issue will be addressed under Docket 110443 Settlement Agreement item numbers Two, Three, Four, Six and Seven.

25. **49 CFR §192.747 Valve maintenance: Distribution systems.**
Staff accepts CNG's response. This issue will be addressed under Docket 110443 Settlement Agreement item numbers Four.

26. **49 CFR §192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?**
Staff does not accept CNG's response. CNG failed to demonstrate they investigated the cause of this leak on the transmission pipeline identified as a "split seam" thereby failing to demonstrate the repair permanently restored the serviceability of the pipeline. Engineering signed this paperwork with no reference to whether he was aware of the crew documentation of a long seam split in the transmission pipeline.

Prompt action should be taken to address the identified conditions at all locations. CNG's action and response plan shall be in accordance with 49 CFR Subpart O. This issue will be addressed under Docket 110443 Settlement Agreement item numbers Two, Three, Four, Six, and Seven.

AREAS OF CONCERN OR FIELD OBSERVATIONS

Staff accepts CNG's AOC responses for all items with the expectation that these items will be addressed under Docket 110443 Settlement Agreement item numbers Three, Four, and Six.