

Woodard, Marina (UTC)

From: Lykken, David (UTC)
Sent: Monday, November 30, 2009 4:34 PM
To: Woodard, Marina (UTC)
Subject: FW: Docket PG-080108 - 2008 Aberdeen District Inspection Response
Attachments: PG 080108 Cover Letter.pdf; PG 080108 Response Body.docx

Just an FYI Marina. Hard copy coming tomorrow via overnight mail

Dave

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e-mail
NOV 30 2009
WUTC
Pipeline Safety Division

From: Marek, Chanda [mailto:Chanda.Marek@cngc.com]
Sent: Monday, November 30, 2009 4:29 PM
To: Lykken, David (UTC)
Subject: FW: Docket PG-080108 - 2008 Aberdeen District Inspection Response

Dave-

I'm resending this, I'm attaching the word version of the response body since it is a lot smaller (wanted to send a pdf), hopefully this will go through this time!

Chanda

Chanda Marek, P.E. | Director - Operations Services

Cascade Natural Gas Corporation
A Subsidiary of MDU Resources Group, Inc.
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From: Marek, Chanda
Sent: Monday, November 30, 2009 4:20 PM
To: 'Lykken, David (UTC)'
Cc: BOOK, ELDON; CLARK, TIM; Meissner, Keith
Subject: Docket PG-080108 - 2008 Aberdeen District Inspection Response

Dave-

See attached response to the Aberdeen District audit. The hard copy response was mailed out overnight today so you should have it tomorrow. We included a variety of records, etc with the hard copy response as indicated in the attached response documents. Thanks.

Chanda Marek, P.E. | Director - Operations Services

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From: Lykken, David (UTC) [mailto:DLykken@utc.wa.gov]
Sent: Monday, November 30, 2009 2:08 PM



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November 30, 2009

David Lykken
Washington Utilities and Transportation Commission
P.O. Box 47250
1300 S. Evergreen Park Dr. SW
Olympia, WA 98504

RECEIVED *via email*
NOV 30 2009
WUTC
Pipeline Safety Division

Subject: Docket PG-080108 - 2008 Natural Gas Standard Inspection – Aberdeen District

Dear Mr. Lykken:

Attached is our response to the subject inspection report of September 18, 2009, regarding the December 2008 inspection of our Aberdeen operations.

We believe that many of the findings presented as probable violations in the report are not probable violations, but appear to contain opinions that exceed Washington State and federal code requirements. Rather, they seem to stipulate how Cascade should operate its business. We also fail to understand how some of the inspection report conclusions offered by Staff did not take into consideration Company records available at the time of inspection. Also, we are concerned that some of the findings contain interpretations, which we believe to be inconsistent with the codes as well as prior WUTC enforcement. However, we recognize that some of the findings point out areas in which we could implement improvements. In many of these cases improvements or remediation are already occurring.

Cascade and WUTC Pipeline Safety Staff have maintained a cooperative approach toward compliance with pipeline safety codes in the past and we look forward to continuing that relationship. The concerns we identified above are not to be disagreeable, but are meant to be offered constructively as we aspire towards our common goal of pipeline safety.

Sincerely,

for
Eldon N. Book
Executive Vice President and Chief Operating Officer
CASCADE NATURAL GAS CORP.

Cc: Tim Clark
Chanda Marek
Keith Meissner

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2008 Natural Gas Pipeline Safety Inspection
Cascade Natural Gas - Aberdeen District
Docket PG-080108

PROBABLE VIOLATIONS

1. **WAC 480-93-015 Odorization of gas**
 - (1) *Each gas pipeline company must odorize the gas in its pipeline at a concentration in air of at least one-fifth of the lower explosive limit, so that the gas is readily detectable by a person with a normal sense of smell.*
 - (2) *Each gas pipeline company must use an odorant testing instrument when conducting sniff tests. Sniff tests must be performed at least once monthly.*

Charge(s):

CNG did not have or was unable to provide documentation that would verify compliance with the above rule.

1. **Finding(s):**

CNG's procedures do not clearly identify an engineering based method for choosing the location to conduct sniff tests. Documentation indicates that sniff tests are conducted at 19 rotational locations in those Aberdeen systems served by 2 odorizers. However, it is unclear whether the test locations adequately represent those locations where odorant levels are most likely to be the weakest or whether these test locations are continually reviewed and adjusted for factors such as system growth.

Cascade's Company Procedure 747 procedure for selecting sniff test locations meets and exceeds code requirements, per 747.053:

“Sniff tests shall be conducted at least once per calendar month at or near the same time each month as possible for each system being served (including customer locations served by an individual pipeline tap). Since all parts of the distribution systems must be adequately odorized, it is preferable to test odorant levels at the extremities on each system where odorant levels are most likely to be the weakest. Whenever practicable, up to three test sites at the various extremities of each system should be selected for routine testing. Select only one site each month for test but select a different site each month on a rotational basis so that all sites are tested routinely.”

Staff's finding is based upon criteria that are not required by the code. This is not a probable violation.

2. **Finding(s):**
 Sniff tests are not performed at least once monthly.
- a. In the documents provided, no sniff tests were documented as having been completed at any one of the following nineteen (19) locations. CNG has identified as monthly sniff test sites for the Grays Harbor District Monthly Odorant Test Locations for the month of November 2008.
1. Maine's Auto Parts, 2606 Sumner Ave., Hoquiam
 2. Hoquiam Middle School, 200 N. Spencer, Hoquiam
 3. Karr House, 1649 Broadway Ave., Hoquiam
 4. CNG Office, 713 Wishkah St., Aberdeen
 5. BIA, 1208 Skyview Dr., Aberdeen
 6. Western Timber Salvage, 2030 S. Boone St., Aberdeen
 7. Monte Fitness Center, 210 S. Main St., Montesano
 8. Presbyterian Church, 201 McBryde Ave. E., Montesano
 9. Moose Lodge, 3 Monte-Elma Rd., Montesano
 10. Cabinet Distributors, 611 E. Young St., Elma
 11. Get Fit Health Club, 120 E. Main St., Elma
 12. Bethany Baptist Church, 1059 Monte-Elma Rd., Elma
 13. USPS, 135 s. 4th St., McCleary
 14. McCleary Grade School, 575 S. Main St., McCleary
 15. Community Center, 726 W. Simpson Ave., McCleary
 16. Shelton Laundry, 117 N. 1st St., Shelton
 17. Red Apple Market, 707 Cascade Ave., Shelton
 18. Port of Shelton - Maint. Bldg., 71 Business Park Loop, Shelton
 19. Lake Limerick - Pro Shop, 811 E. St. Andrews Dr., Shelton

Cascade performed sniff tests at the following locations in November 2008.

Odorizer	Location	Date of Test
O-02	Hoquiam, 1649 Broadway (Karr House)	Nov 6, 2008
O-02	Montesano, 3 Monte Elma Rd (Moose Lodge)	Nov 6, 2008
O-02	McCleary, 726 Simpson Ave	Nov 4, 2008
O-02	Elma, 1059 Monte-Elma Rd (Bethany Church)	Nov 6, 2008
O-02	Aberdeen, 2030 S Boone St (Western Timber Salvage)	Nov 6, 2008
O-01	Shelton, 707 Cascade Ave	Nov 4, 2008
O-01	Shelton, 811 E St. Andrews Dr	Nov 4, 2008

The locations tested are sufficient to demonstrate compliance with WAC 480-93-015.

Per Cascade's Company Procedure 747, we select up to three alternate locations for sniff test in each system. One location is tested each month on a rotating basis. In the Aberdeen district we have two odorizers. The first odorizer is located in McCleary and odorizes gas flowing to the towns of Aberdeen, Hoquiam, Elma, Montesano, and McCleary. We have selected three

locations at the extremity of each town for rotating sniff test. One location in each town is tested each month; likewise five locations downstream of the odorizer are tested each month. The second odorizer is located in Shelton and odorizes gas flowing to the town of Shelton. We have selected four locations at the extremity of Shelton for rotating sniff test. Two locations are selected for test each month.

Records of the November 2008 sniff tests and all sniff tests performed in 2008 are attached. The records of the 7 sniff tests were available during the inspection.

Comment [MC1]: Attach sniff records.

- b. The 2008 Grays Harbor District Monthly Odorant Tests document reveals an irregular timing pattern or testing frequency between the completion of sniff tests. Irregular time frames between sniff tests were recorded as follows:
1. Shelton Laundry, 117 N. 1st St., Shelton
 - i. February 2008 - 1st sniff test this location in 2008
 - ii. May 2008 - 2 mos. btwn. sniff tests
 - iii. September 2008 - 3 mos. btwn. sniff tests
 - iv. Inspection Dec. 5, 2008 - next test after insp. Unknown, 3 or more mos. btwn. sniff tests
 2. Port of Shelton-Maintenance Bldg., 71 Business Park Loop, Shelton
 - i. January 2008 1st sniff test this location in 2008
 - ii. April 2008 2 mos. btwn. sniff tests
 - iii. August 2008 3 mos. btwn. sniff tests
 - iv. Inspection Dec. 5, 2008. next test after insp. Unknown, 3 or more mos. btwn. sniff tests
 3. Cabinet Distributors, 611 E. Young St., Elma
 - i. February 2008, 1st sniff test this location in 2008
 - ii. May 2008, 2 mos. btwn. sniff tests
 - iii. August 2008 2 mos. btwn. sniff tests
 - iv. Inspection Dec 5, 2008, next test after insp. Unknown, 3 or more mos. btwn. sniff tests

Refer to the response to the previous item. Cascade's procedure involves rotating sniff test locations each month as described above. Cascade performed sufficient sniff tests during the period January 2008 to December 2008. We performed 7 tests each month. 2 of the sniff tests are applicable to Odorizer Station O-01 serving Shelton. 5 of the sniff test locations are applicable to Odorizer Station O-02 serving McCleary, Elma, Montesano, Aberdeen, and Hoquiam. The 7 sniff tests performed are adequate for compliance with WAC 480-93-015 requirements. These records were reviewed by Staff during the field inspection. Cascade's records demonstrate compliance with WAC 480-93-015 and our procedure. This finding exceeds the requirements of code and is not a probable violation.

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

- (1) *Each gas pipeline company must maintain records sufficient to demonstrate compliance with all requirements of 49 CFR §191, 192 and chapter 480-93 WAC.*
- (5) *Each gas pipeline company must update its records within six months of when it completes any construction activity and make such records available to appropriate company operations personnel.*

Charge(s):

Records lack sufficient detail to determine compliance with rule.

1. **Finding(s):**

Accurate records/maps of pipeline markers were not available to operations personnel. Pipeline markers were not mapped by June 5, 2007, as was identified by CNG in their letter of intent dated 10.23.06 in response to Docket PG-060216.

Pipeline marker maps are not specifically required by WAC 480-93-018(5). 480-93-124(7) requires that operators have records sufficient to indicate class locations and other areas where pipeline markers are required. Cascade indicates areas where pipeline markers are required in CP 610.01. This standard is used by employees while they perform marker surveys. Cascade therefore does not believe we are in violation of the code.

Our intent going forward is to update all leak survey maps with pipeline marker location information and perform a pipeline marker survey in conjunction with leak survey. In addition, locations where gas pipelines are attached to bridges or otherwise span an area will be included on quarterly patrols. Pipeline marker surveys will be performed for these locations during quarterly patrol. See attached Aberdeen district maps including pipeline marker locations.

Comment [Chanda2]: Add leak maps.

2. **Finding(s):**

Gas pipeline maps utilized by personnel in the field were identified by CNG as having not been updated since 2006. Gas pipeline maps carried in CNG GM vehicle were utilized in the field CNG during CNG/staff site visit at Calder Rd. and Monte Elma (W. of N. 18th St.) in Aberdeen. This field use of maps, that have not been updated, necessitates that all field maps issued to personnel be properly updated. The accurate and up-to-date master maps located in the District office are not a substitute to updated field maps.

Records of construction activity are located in the operations office. Those records are available to operating personnel within 6 months of the construction activity. The field maps used by personnel are not required by WAC 480-93-018. The field maps in trucks are adequate for which they are used. Staff did find that these maps had not been updated for some time so we will update them. The finding exceeds the requirements of the code. This is not a probable violation.

Cascade does not currently have a system in place that provides for field access to electronic information such as maps. Therefore, field personnel sometimes carry hard copies of some maps for reference. Field personnel are aware that the most up to date maps and records are available in the district office and these records are retrieved when needed. Cascade is proceeding with implementation of a new mobile data system that will provide field personnel with field access to electronic information such as maps. Once implemented, our performance in this area will be significantly improved.

3. **Finding(s):**

The following System Surveillance records make no mention either way, as to whether or not pipeline markers were surveyed:

- a. 02.15.05 Grays Harbor District, Town of Elma - Section 2
- b. 02.13.07 Aberdeen District, Town of McCleary - Section 4
- c. 02.03.06 Aberdeen District, Town of McCleary - Section 3
- d. 01.13.03 Aberdeen District, Town of McCleary - Section 5

This is a duplicate of Finding 6.3. Please refer to that response.

4. **Finding(s):**

Pressure Test records provided did not contain all required information for 1502 Riverside, Hoquiam on 10.17.08 - Line pipe length missing.

This is a duplicate of Area of Concern 2. Please refer to that response.

3. **WAC 480-93-080 Welder and plastic joiner identification and qualification.**

(1) *All welding procedures and welders, except welders listed in (a) of this subsection, must be qualified to API Standard 1104 or section IX of the ASME Boiler and Pressure Vessel Code.*

Charge(s):

API 1104 Weld and Coupon Test Data Reports do not contain weld test data.

Finding(s):

The following API 1104 Weld and Coupon Test Data Reports do not contain test data and do not indicate that tests on the welds were conducted:

- a. API 1104 Weld and Coupon Test Data Report for CNG employee K.B. submittal date 04.25.06 for Specification: GB-42Y-2D-TW-G8-6G.
- b. API 1104 Weld and Coupon Test Data Report for CNG employee K.B. submittal date 07.09.07 for Specification: GB-42-SD- TW-G8-6G.
- c. API 1104 Weld and Coupon Test Data Report for CNG employee K.B. submittal date 10.20.08 for Specification: GB-42Y-SD-TW-G8-6G.

The records cited above were copies of the test *request* sent by that welder to our test lab. The completed test lab records have the test data and test results. If Staff had notified us during the field inspection, or prior to submitting this inspection report that the records provided were insufficient, we could have resolved this matter then. Copies of the completed tests are attached.

Comment [MC3]: Attach records

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

(6) *Each gas pipeline company must record the condition of all underground metallic facilities each time the facilities are exposed.*

Charge(s):

CNG failed to record the condition of exposed metallic pipe.

Finding(s):

The following Substructure Damage/Leak Reports fail to identify the condition of exposed metallic pipe:

- a. Incident 6113 at 105 S. 12th St. #7, Shelton - steel service installation/replacement.
- b. Incident 6522 at 125 Academy St. S., Montesano - steel service repair.

- a. The Incident 6113 Substructure Damage/Leak Report form does not record the condition of the pipe. The work order attached to Incident 6113 records that the pipe was in poor condition. After repairs were made, the condition was recorded as good. Condition of the exposed metal pipe was recorded sufficient to demonstrate compliance. These records are attached.
- b. The Incident 6522 Substructure Damage/Leak Report form does not record the condition of the pipe. The work order attached to Incident 6522 records that the pipe was in good condition. Condition of the exposed metal pipe was recorded sufficient to demonstrate compliance. These records are attached.

Comment [Chanda4]: Attach records

Comment [Chanda5]: Attach record

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

(9) *Each gas pipeline company must have a written atmospheric corrosion control monitoring program. The program must have time frames for completing remedial action.*

Charge(s):

CNG did not provide protection for their pipe in accordance with this rule.

Finding(s):

CNG did not schedule within 90 days and/or complete within 6 months, all required atmospheric corrosion remediation for those appurtenances their crews identified as "Needing Paint" in accordance with CNG Procedure CP 754.037.

- a. CNG identified that +/- 322 services remain un-remediated within this District.
- b. The 2008 atmospheric corrosion survey is not dated. It is unknown when this survey was started or when atmospheric corrosion issues were identified.
- c. The date at the top of the atmospheric corrosion survey does not necessarily

identify when surveys were started and time sheets do not identify the particular type of atmospheric corrosion maintenance task individuals are working on or whether it is the current year's or a previous year's remediation.

- a. WAC 480-93-110 does not specify a maximum remediation time frame. Part 192.479 and 192.481 do not specify a maximum remediation time frame. Staff's finding is that Cascade failed to meet our own standard, not a pipeline safety code that specifies remediation periods.

Cascade established a written policy for our operations that customer meters requiring repainting be finished in 6 months. We also established a policy that if the condition exhibited corrosion, that the condition be addressed promptly, but within 90 days. We have addressed all 90 day conditions which might reasonably become a hazard in a prompt manner. Staff found that we have 322 services found to need paint, but that we have not yet repainted. These locations do not fully meet the definition of corrosion, but require recoating to inhibit the potential for future corrosion. These locations are also not expected to become a hazard before the next atmospheric corrosion survey.

We have been working as the weather allows repainting as many meters as we can schedule. Coatings require periodic maintenance, so each year of atmospheric corrosion surveys finds additional locations that have reached a state of needing recoating. Our goal is to continue to reduce the size of our backlog and continue improving the paint on our system. Paramount in this effort is the evaluation of the potential for hazard due to corrosion, and if those conditions are found, we have not failed to correct them in a prompt manner.

We agree with Staff that we have not been meeting our policy of a 6 month maximum period for repainting. In retrospect, our written policy to repaint meters within 6 months was too ambitious, especially for a region such as Grays Harbor County experiencing few dry periods. The wet weather makes atmospheric corrosion more prevalent, and likewise more difficult for us to schedule painting activities. We understand Staff to be motivated just as we are to eliminate hazardous conditions. We do not see that hazardous conditions exist in Staff's finding. Our procedure will be updated to reflect new maximum repainting intervals and we will maintain our 90 day standard for potentially hazardous conditions.

- b. The meters scheduled for 2008 were completed on December 20, 2008. The UTC field inspection of Aberdeen was completed on Dec 5, 2008. Surveys and tasks that are completed after the inspection are not normally included as part of the inspection. Please refer to our cover letter statements that relate to our concerns about Staff's practice and performance of this inspection.
- c. This finding does not present any evidence that a probable violation of WAC 480-93-015 exists. WAC 480-93-015 does not require that the start date of the inspection be recorded. WAC 480-93-015 does not require that the task type be recorded. We do not track completion of remediation using time sheets.

6. **WAC 480-93-124 Pipeline markers.**
- (1) *Each gas pipeline company must place pipeline markers at the following locations:*
 - (b) *Over mains and transmission lines at river, creek, drainage ditch, or irrigation canal crossings where hydraulic scouring, dredging, or other activity could pose a risk to the pipeline (custom signage may be required to ensure visibility);*
 - (d) *Over gas pipelines at railroad crossings;*
 - (2) *If practical, the gas pipeline company must place markers on both sides of any crossing listed in subsection (1) of this section.*
 - (3) *Where markers are required on buried gas pipelines, they must be placed approximately five hundred yards apart and at points of horizontal deflection if practical.*
 - (4) *Each gas pipeline company must conduct surveys of pipeline markers required by this subsection at least annually, not to exceed fifteen months.*
 - (5) *Each gas pipeline company must replace markers that are reported damaged or missing within forty-five days.*
 - (6) *Surveys of pipeline markers not associated with subsection (4) of this section must be conducted at least every five calendar years but not to exceed sixty-three months, to ensure that markers are visible and legible...*
 - (7) *Each gas pipeline company must have records such as maps or drawings sufficient to indicate class locations and other areas where pipeline markers are required.*

Charge(s):

CNG is unable to provide records or documentation verifying that they are in compliance with this rule.

1. **Finding(s):**

Pipeline markers were found missing at the following creek crossings:

- a. Wildcat Creek, Elma.
- b. Monte-Elma Rd., E. of Elma Elementary School, Elma
- c. Monte-Elma Rd., E. of Lutheran Church, Elma

Staff's finding is that 3 locations exhibited missing markers. The rule requires that if we find a marker missing or damaged during the course of a required survey then we must replace it within 45 days. Staff's inspection that markers are missing is not a probable violation.

Pipeline markers have been placed at the locations indicated above.

2. **Finding(s):**
Pipeline markers were missing from the following railroad crossings:
- a. S. Main St., Montesano
 - b. Bay Ave. and 2nd Ave., Hoquiam

Staff's finding is that 2 locations exhibited missing markers. The rule requires that if we find a marker missing or damaged during the course of a required survey then we must replace it within 45 days. Staff's inspection that markers are missing is not a probable violation.

These locations will be reviewed and the markers replaced if necessary.

3. **Finding(s):**
CNG was unable to provide accurate records which sufficiently indicate where pipeline markers are required. CNG identified that they conduct their pipeline marker surveys with their leak surveys and identified that their pipeline marker locations are reviewed and indicated in their quarterly patrol form and log. However, CNG was unable to identify the specific location of their pipeline markers other than those areas identified as "marked crossings" such as railroad crossings, scour crossings, etc.

CNG's leak survey section maps identify pipeline marker locations by indicating "pipeline marker area" via a map key designation. It is unclear whether those crews completing the leak survey, quarterly patrol form and log actually reviewed all required pipeline markers during their survey. The following System Surveillance records make no mention either way, as to whether or not pipeline markers were surveyed:

- a. 02.15.05 Grays Harbor District, Town of Elma – Section 2
- b. 02.13.07 Aberdeen District, Town of McCleary – Section 4
- c. 02.03.06 Aberdeen District, Town of McCleary – Section 3
- d. 01.13.03 Aberdeen District, Town of McCleary – Section 5

We believe Staff is misinterpreting Cascade's marker survey and records. The code requires that surveys be performed to identify locations where markers need to be replaced, and that the markers be replaced within 45 days of discovery. Cascade provided records to our employees indicating where markers were required and dispatched them on the survey. If employees did not find adequate markers at the required locations, they replaced them and documented the replacement on our survey documents. Staff's finding reports that our employees did not record all the places that markers were found during the survey. Recording the locations where markers were found is not required by WAC 480-93-124. This finding is not a probable violation.

Additionally, surveys (a) and (d) were performed prior to the adoption of the marker survey rule. The marker survey rule is not applicable to these surveys.

See also response to probable violation 2, finding 1. A copy of the current Aberdeen leak survey maps showing marker locations is attached.

4. Finding(s):

CNG was unable to provide documentation that identified where pipeline markers were located or required on buried gas pipelines. Based upon the records provided:

GM's 10.31.08 Work Order in response to 10.24.08 System Surveillance Report wherein a deficiency of pipeline markers on the G.H. HP Lateral was noted. (GM's WO stated the nature of his request as, "More H-99 markers needed between Satsop & McCleary." No documentation was produced which identified existing marker locations or locations for the newly placed markers.

We believe that Staff is misinterpreting the documents inspected. Our employee performed a survey on October 24, 2008 to leak survey and review the markers for the Grays Harbor HP Lateral. At the completion of that survey the employee noted that "More H-99 markers needed between Satsop & McCleary." The area supervisor (GM) created a work order to revisit that zone and place markers as needed per Cascade CP 610.01. That task was completed on December 11, 2008 per the attached completed work order.

Comment [Chanda6]: Attach doc

5. Finding(s):

CNG was unable to provide documentation that they had replaced missing and damaged pipeline markers within forty-five days. The following pipeline markers were found by staff in their pre-field investigation to be either missing or damaged and unaware of whether they had not been remediated by 12.05.08 (the last day of the standard inspection). It should be noted that in a System Surveillance Record of the G.H. Lateral (a HP Line Leak Survey) dated 10.24.08, CNG employees made the following documentation under the heading of Pipeline Signs/Markers: "O.K. – More markers needed between Satsop & McCleary. Work Orders #0014652 was generated by GM on 10.31.08 stating work request as "More H-99 Markers needed between Satsop & McCleary. However, no documentation was available indicating whether this work was accomplished or whether the following marker issues were remedied.

Date ID'd	Location	Marker Issue
a. 05.01.08	Bay Ave. – 2 nd Rxing, Aberdeen	Missing markers
b. 1968	Wildcat Creek xing, Elma	Missing markers
c. 05.28.08	Monte-Elma Rd. xing, E. of Elma Elementary School, Elma	Missing markers
d. 05.28.08	Monte-Elma Rd., E. of Lutheran Church at bridge xing, Elma	Missing markers

e.	05.28.08	East of E. Satsop Rd. – Rrxing, Elma	Missing markers
f.	04.30.08	S. Main St. Rrxing, Montesano	Missing markers

The following pipeline marker issues were noted during site visit in December with CNG staff:

g.	W. of R-46, Elma-McCleary Rd. Elma (Map 14-B)	Damaged markers
h.	Calder Rd. & Monte-Elma Rd., Elma (W. of N. 18 th)	Missing markers
i.	Hwy 8, S. of R-46 & at Rrxing S. of R-23	Damaged markers
j.	1820 Main St., Elma	Missing markers

We believe that Staff exceeds code by stating that finding missing or damaged markers is a violation of the code. Code requires Cascade to survey markers periodically, and replace markers that are missing or damaged. Missing or damaged markers are not probable violations by themselves.

We will survey the locations above and replace the markers if needed.

6. **Finding(s):**

CNG was unable to provide sufficient documentation verifying that they are able to identify the placement or location of pipeline markers.

- a. CNG is unable to provide sufficient documentation identifying the placement or location of pipeline markers. Therefore, CNG would be unaware of whether required markers meeting this rule were missing.
- b. CNG has no documentation with which to identify marker location or to complete an accurate survey of all pipeline markers.

Cascade CP 610.01 provides sufficient documentation to instruct our employees where pipeline markers need to be placed. See also responses to probable violation 2, finding 1 and probable violation 6, finding 3.

7. **WAC 480-93-140 Service regulators.**

(1) *To ensure proper operation of service regulators, each gas pipeline company must install, operate, and maintain service regulators in accordance with federal and state regulations, and in accordance with the manufacturer's recommended installation and maintenance practices.*

Charge(s):

CNG's regulators are not adequately protected from possible accumulations of dirt, liquids or other debris that might prevent proper operation of service regulator and relief vents.

Finding(s):

Additional measures were not taken to protect sideways oriented regulator vents/relief vents without taking additional measures to prevent the possible entry foreign matter. Examples follow:

- a. 325 W. Main St., "Elma Variety", Elma - Meter 256445
- b. 109 N. Broadway, "Whiteside Mortuary", Aberdeen - Meter 247029
- c. 1006 North H St., "Grays Harbor Health & Rehab Center", Aberdeen
- d. 915 Anderson Dr., "Aberdeen Hospital", Aberdeen
- e. 708 Simpson, Hoquiam (In the alley)

WAC 480-93-140 and manufacturer's recommendations do not prescribe requirements for service regulator relief vent orientation. Part 192.355 has performance requirements that the service regulator vents must meet. The 192.355 performance requirements were met because:

- a. No rain or insect ingress was found,
- b. The vents were sufficient distance from building openings; and
- c. The vents are not in an area subject to flooding.

These locations will be reviewed. If needed, the orientation of the vents will be modified and/or additional protective measures will be implemented.

8. WAC 480-93-180 Plans and procedures.

- (1) *Each gas pipeline company must have and follow a gas pipeline plan and procedure manual (manual) for operation, maintenance, inspection, and emergency response activities that are specific to the gas pipeline company's system. The manual must include plans and procedures for meeting all applicable requirements of 49 CFR §191, 192 and chapter 480-93 WAC, and any plans or procedures used by a gas pipeline company's associated contractors.*
- (2) *The manual must be filed with the commission forty-five days prior to the operation of any gas pipeline. Each gas pipeline company must file revisions to the manual with the commission annually. The commission may, after notice and opportunity for hearing, require that a manual be revised or amended. Applicable portions of the manual related to a procedure being performed on the pipeline must be retained on-site where the activity is being performed.*
- (3) *The manual must be written in detail sufficient for a person with adequate training to perform the tasks described. For example, a manual should contain specific, detailed, step-by-step instructions on how to maintain a regulator or rectifier, conduct a leak surveyor conduct a pressure test.*

Charge(s):

CNG did not follow their procedures or their procedures do not comply with the requirements

identified in the rule.

1. **Finding(s):**

Under 49 CFR § 192.16 Customer Notification: New customers are to be notified, within 90 days, of their responsibility for those service lines not maintained by the operator. CNG identified that their new customer notification is auto-generated based upon turn-on notification from the field. There is no procedure/process by which to determine whether this information is actually being generated, sent, or received by the appropriate customers. There is no auditing or monitoring of this notification task by CNG.

CNG has developed a program which results in the generation of a welcome letter for all accounts for which a turn-on work order was initiated. These letters print out each day and are mailed with an insert that covers customer responsibility for service lines. An example of the letter and a copy of the insert are attached. This task is monitored by personnel in the Administrative Services department who keep a log of the number of letters that are sent out each day (see attached 2009 log).

Comment [Chanda7]: Attach letter/insert and log

2. **Finding(s):**

CNG has not included recent updates to their procedure manual. CNG's NDT procedure CP 760 was last updated May 2, 2008. This procedure was updated in their computer "S: Drive" procedures but the hard copy manual presented for staff inspection still contained an outdated NDT procedure from December 2007.

CNG recently performed a company-wide audit of the contents of all procedures manuals. All manuals were updated with current versions of all procedures if needed. Procedures manuals are currently up to date.

3. **Finding(s):**

CNG did not have applicable procedures on-site where the activities were being performed.

- a. CNG Aberdeen has only one copy of emergency shutdown and startup procedures available for use by district personnel.
 - i. CNG Procedure 925.05 Emergency Shutdown and Startup does not sufficiently describe that applicable portions of a manual related to a procedure being performed on the pipeline must be retained on-site where the activity is being performed in accordance with WAC 480-93-180(2). CNG identified that by providing one copy for the General Manager (GM) while at the same time allowing district use of that same copy.
 - ii. Identified in CP 925 Emergency Policy. The Emergency Policy does not identify outage information. CNG Procedures have not been updated in accordance with applicable codes or previous CNG statements made to commission under similar issues/circumstance. See Yakima response letter and report dated 08.28.08 under Docket PG-081306 for related/similar Probable Violation(s) and Area(s) of Concern (AOC).
- b. CNG identified that they believe by providing one copy for the General Manager (GM) while at the same time allowing *district use* of that same copy that they have met with this requirement. The single copy is located in the Aberdeen GM's office. Commission staff notes that a procedures manual located in Aberdeen would not be readily available to employees work locations in outlying areas.

This same issue was raised in PG-080109 – 2008 Tri-Cities audit. See our response to probable violation 11, finding 5 in the letter dated October 2, 2009.

4. **Finding(s):**

CNG did not follow their procedures for evaluation, investigation and documentation of underground leaks as identified in their Operations Manual under CP 750. Documentation provided for the long standing leak (approximately 9-1/2 months or between 12.31.07 and 09.25.08) located at R-12 Sheldon & Matlock Rd., identifies that CGI reads were repetitively taken at the same/exact bar hole locations.

Documentation indicates that no additional action was taken as the reads increased but rather that the read frequency was declined. No bar holes were made past the point of those locations where a gas concentration of greater than 0% was detected for the purpose of establishing the perimeter of the leak. Staff also reviewed leak reports where CNG neglected to identify any bar hole locations used to obtain the CGI read(s) reported. Blank copies of a drawing, which indicated the locations of where bar holes were located and the same location where new reads were to be obtained, were provided to crews to

repeatedly utilize to report the condition of this leak.

Based upon the above noted failures in the reporting required leak investigation details and the lack of documentation which would identify that the leak investigation reports were reviewed and/or the investigation should be modified or the perimeter extended, leaves staff unclear as to whether management was cognizant that conditions had drastically changed indicating that this leak classification should be reviewed in accordance with CNG procedures and regulations.

This finding is a repeat of probable violation 10, see response to that finding.

5. **Finding(s):**

Substructure Damage/Leak-Report CNG Form 293 Incident # 6522 dated 07.25.08, does not identify the name of the person(s) that replaced a 21' section of bent service line on 07.29.08.

The records discussed do not identify the person performing the repair. We will retrain personnel on the importance of completely filling out all records.

6. **Finding(s):**

CNG did not paint/coat Regulator Station 41 in accordance with their procedures CP 710.041 and CP 754. During pre-field inspection on 04.28.08, staff noted that this regulator station had been primed with red oxide primer but had not been coated with the required company standard grey paint. An atmospheric corrosion review had been recently completed by CNG at this site on 01.14.08 and the coating was rated as "good."

Regulator station 41 has been painted in accordance with applicable procedures.

7. **Finding(s):**

Visible atmospheric corrosion and pitting was noted on Regulator Station 23 during site visit with CNG on 12.08.08. Crew identified that paint was needed on 09.30.06, 05.22.07 and 05.23.08 but was not remediated in accordance with CP 754.04 and more specifically under .045 and .046 which identifies remediation responsibility and requires action within a 90 day scheduling with 6 month remediation time period.

The R-23 site was investigated. The pipe had a layer of surface rust but was not really pitted. The station has been coated and wrapped.

8. **Finding(s):**

CNG did not follow their atmospheric corrosion remediation procedures. During pre-field inspection on 05.01.08, staff noted severe atmospheric corrosion with some pitting on the meter loop located at 109 E. 2nd in Aberdeen – meter #247029. Staff and CNG returned to this location to complete an OQ on corrosion identification/pipe loss on 12.09.08. Upon arriving at this site, it was noted that loop had been just recently painted. The following were noted on 12.09.08:

- a. Loop had been painted without wire-brushing the surface.
- b. Paint had been built-up in the pitted area and was now level with the surrounding pipe surface.
- c. No pit gauge measurement was taken and no documentation of pitting was noted/provided.
- d. Weeds at the interface had been painted over indicating that this may not have been reviewed.
- e. The underside of the pipe remaining untouched with no remediation/paint with large paint peels still visible and attached to pipe.

CNG documents identify the following:

- a. This loop had been painted on 12.08.08 in response to Service Request # 0052350 generated on 11.17.08 with the instructions: "LIS AOC – Paint Meter. Painted meter set. Turned vent downward."
- b. The previous inspection of this loop occurred on an unknown date in 2006 (identified on a print-out dated 12.07.05 put utilized for the survey completed in 2006) by an unknown employee.
- c. A handwritten attachment to the above described 2006 inspection wherein it appears to identify that this loop had already been painted on 04.29.08 or on 04.29.08 a noted AGC was identified and painting was requested. Either way, the 6 month remediation timeframe had expired.

9. **Finding(s):**

CNG did not follow their Pipeline Marker Procedures identified in CP 610.05 in that they did not have maps which accurately depict the location of their pipeline markers. Example: CNG's leak survey section maps identify pipeline marker locations by indicating "pipeline marker area" via a map key designation. It is unclear whether those crews completing the leak survey, quarterly patrol form and log actually reviewed required pipeline markers during their survey. In some instances, there is no evidence that maps accompanied their leak surveys and therefore no evidence that pipeline marker locations were identified or reviewed.

This is a repeat of previous findings. See response to probable violation 2, finding 1.

10. **Finding(s):**

The following vent installations are not in accordance with the CNG Procedures CP 685.0302 which references WAC 480-93-140(1) and CP 685.0308 Venting-Vents for regulators shall be carried through to outside discharge. The pipe shall terminate with a bug screen and be discharged downwards. Additionally, all Standard Meter Set drawings within CNG Procedure 685 identify that the regulator vent shall be pointed downward.

- a. 325 W. Main St., "Elma Variety," Elma – Meter 256445
- b. 109 N. Broadway, "Whiteside Mortuary," Aberdeen – Meter 247029
- c. 1006 North H St., "Grays Harbor Health & Rehab Center," Aberdeen
- d. 915 Anderson Dr., "Aberdeen Hospital," Aberdeen
- e. 708 Simpson, Hoquiam (In the alley)

This is a repeat of probable violation 7. Please see that response.

11. **Finding(s):**

The meter set installation for Broadway Manor located at W. 2nd & N. Broadway, Aberdeen, has combustible material placed between the meter and the meter table. This is not in accordance with CNG Procedure CP 685 wherein it identifies that meters are to be set directly on meter tables in Standard Meter Set drawings No.10, 10-P, 11, 11-P, 12, and 12-P.

The wood block at this location has been removed.

12. **Finding(s):**

CNG Procedure CP 716.013 identifies that the condition of pipeline markers must be noted on the patrol log and specifically states, "Indicate any concerns or changes found during the patrol and take appropriate action to repair or mitigate the concern or change. If there are no concerns then indicate that..." These procedures were not followed. Examples follow:

- a. 02.15.05 Grays Harbor District, Town of Elm a – Section 2
- b. 02.13.07 Aberdeen District, Town of McCleary – Section 4
- c. 02.03.06 Aberdeen District, Town of McCleary – Section 3
- d. 01.13.03 Aberdeen District, Town of McCleary – Section 5

The CNG procedure referenced above relates to pipeline patrols. The examples listed are leak survey records. Per previous responses, CNG intends to document the location of pipeline markers on leak survey maps per the attached examples. A pipeline marker survey will then be performed in conjunction with leak survey. In addition, above ground spans will be listed on quarterly patrols and marker surveys for these locations will be performed during quarterly patrol. Items a and d are prior to marker rule enactment.

13. **Finding(s):**

CNG's does "not adequately identify and list persons who normally engage in excavation activities in the area. CNG appears to maintain" a list of only the predominant excavators rather than maintain a list of area excavators as required by CNG's procedures manual. Excavators that have caused damage to CNG's system have not been included. CNG did not follow their public awareness procedures CNG Procedure CP 500.

This same issue was raised in PG-080109 – 2008 Tri-Cities audit. See our response to probable violation 31 in the letter dated October 2, 2009.

14. **Finding(s):**

CNG Procedure 747.05 Testing Odorant Levels (Sniff Tests) does not identify that sniff tests require the use of calibrated equipment or that instruments utilized to perform sniff tests are to be recorded.

Equipment used to perform sniff tests is calibrated. CNG procedure 756 “Instrument calibration” discusses calibration of sniff test equipment. WAC 480-93-015 does not require that instruments used to perform sniff tests are recorded.

15. **Finding(s):**

CNG did not follow their calibration and equipment labeling procedures. CNG does not identify a calibration/recalibration procedure for their odorant testing instruments.

CNG procedure 756 covers calibration of odorant testing instruments.

16. **Finding(s):**

CNG did not follow their procedures for evaluation, investigation and documentation of underground leaks. Records indicate that CNG leak responders did not document the *perimeter* of the underground leak area at the following locations:

CNG did not properly determine and/or identify the perimeter of the leak area at R-12 Sheldon & Matlock Rd. Bar holes and reads should have been extended past the point of where a positive gas concentration was identified until a 0% CGI read was obtained. The following examples of this condition were documented on CNG Form 330A O&M Request(s):

- a. # 0006112 – 01.04.08
- b. # 0006114
 - i. 01.07.08
 - ii. 01.09.08
 - iii. 01.11.08
- c. # 0006117 – 01.18.08
- d. # 0006123 – 02.01.08
- e. # 0006130 – 02.05.08
- f. # 0006133 – 02.13.08
- g. # 0006160 – 03.07.08
- h. # 0006130 – 02.05.08
- i. # 0006161 – 03.21.08
- j. # 0006170 – 03.28.08
- k. # 0006178 – 04.10.08
- l. # 0006180 – 04.23.08
- m. # 0006186 – 05.06.08
- n. # 0006189 – 05.29.08
- o. # 0006191 – 06.12.08
- p. # 0006194 – 07.25.08
- q. # 0006214 – 08.12.08 (2 separate reads completed on this date)

- r. # 0006220 – 08.25.08
- s. # 0006228 – 09.04.08 No map accompanied this form
- t. # 0006231 – 09.25.08 No bar holes or perimeter identified

Copies of these work orders are attached along with copies of the related incident (6018). They generally include maps showing barhole locations and the % gas in air detected at each location. Reads were extended past the point of where a positive gas concentration was identified until a 0% CGI read was read.

17. **Finding(s):**

CNG did not properly determine and document the leak location at R-12 Sheldon and Matlock Rd. in that bar hole locations were not identified, the gas concentration at each bar hole/read location was not identified, and the perimeter of the leak area (normally identified with a 0% CGI read) was not identified/determined on the following:

- a. CNG Form 293 Substructure Damage/Leak Report initiated 12.31.07 in conjunction with CNG Form 330A O&M Request #0006109 – 12.31.08
- b. CNG Form 330A O&M Request #0006231 – 09.25.08

The results of the barhole testing were not documented on the forms discussed above. The location was barholed on several subsequent occasions as discussed in probable violation 8, finding 16.

18. **Finding(s):**

CNG identified that their computer S: drive contains their most recent plans and procedures revisions, not their manuals. Applicable portions of the procedures manual related to a procedure being performed on the pipeline must be retained on-site where the activity is being performed. If all staff are provided with computers that contain the up-to-date and applicable portions of the CNG procedures manual, it would be an acceptable alternative to providing paper copies for utilization at the location where the activity is being performed.

All employees are given hard copies of procedures required to perform their job duties. As discussed previously, we have recently completed an audit of all procedure manuals and all manuals were updated as required. In addition, we are currently in the process of implementing a mobile data solution which will provide employees with field access to procedures in the future.

9. **WAC 480-93-186 Leak Evaluation.**

(1) *Based on an evaluation of the location and/or magnitude of a leak, the gas pipeline company must assign one of the leak grades defined in WAC 480-9318601 to establish the leak repair priority. A gas pipeline company may use an alphabetical grade classification, i.e., Grade A for Grade 1, Grade B for Grade 2, and Grade C for Grade 3 if it has historically used such a grading designation. Each gas pipeline company must apply the same criteria used for initial leak grading when reevaluating leaks.*

(2) *Each gas pipeline company must establish a procedure for evaluating the concentration and extent of gas leakage. When evaluating any leak, the gas pipeline company must determine and document the perimeter of the leak area. If the perimeter of the leak extends to a building wall, the gas pipeline company must extend the investigation inside the building. Where the reading is in an unvented, enclosed space, the gas pipeline company must consider the rate of dissipation when the space is ventilated and the rate of accumulation when the space is resealed.*

(3) *The gas pipeline company must check the perimeter of the leak area with a combustible gas indicator. The gas pipeline company must perform a follow-up inspection on all leak repairs with residual gas remaining in the ground as soon as practical, but not later than thirty days following the repair.*

Charge(s):

CNG did not properly evaluate leaks in accordance with the rule.

1. **Finding(s):**

CNG did not properly determine and document the leak location at R-12 Sheldon and Matlock Rd. in that bar hole locations were not identified, the gas concentration at each bar hole/read location was not identified, and the perimeter of the leak area (normally identified with a 0% CGI read) was not identified/determined on the following:

- a. CNG Form 293 Substructure Damage/Leak Report initiated 12.31.07 in conjunction with CNG Form 330A O&M Request #0006109 - 12.31.08
- b. CNG Form 330A O&M Request #0006231 - 09.25.08

This finding is a repeat of probable violation 8, finding 17. See response for that finding.

2. **Finding(s):**

CNG did not properly determine and/or identify the perimeter of the leak area at R -12 Sheldon & Matlock Rd. Bar holes and reads should have been extended past the point of where a positive gas concentration was identified until a 0% CGI read was obtained. The following examples of this condition were documented on CNG Form 330A O&M Request(s):

- a. # 0006112 - 01.04.08
- b. # 0006114
 - i. 01.07.08
 - ii. 01.09.08
 - iii. 01.11.08
- c. # 0006117 - 01.18.08
- d. # 0006123 - 02.01.08
- e. # 0006130 - 02.05.08
- f. # 0006133 - 02.13.08
- g. # 0006160 - 03.07.08
- h. # 0006130 - 02.05.08
- i. # 0006161 - 03.21.08
- j. # 0006170 - 03.28.08
- k. # 0006178 - 04.10.08
- l. # 0006180 - 04.23.08
- m. # 0006186 - 05.06.08
- n. # 0006189 - 05.29.08
- o. # 0006191 - 06.12.08
- p. # 0006194 - 07.25.08
- q. # 0006214 - 08.12.08 (2 separate reads completed on this date)
- r. # 0006220 - 08.25.08
- s. # 0006228 - 09.04.08 No map accompanied this form
- l. # 0006231 - 09.25.08 No bar holes or perimeter identified

This finding is a repeat of probable violation 8, finding 16. Please see response for that finding.

3. **Finding(s):**

CNG did not label the magnitude of the reads taken (example: Finding 2 above) with a label identifying LEL or gas in air.

CNG will retrain employees to identify % gas readings as LEL or gas on all documentation.

10. **WAC 480-93-18601 Leak classification and action criteria – Grade –
Definition Priority of leak repair**

(1) *A "Grade 1 leak" is a leak that represents an existing or probable hazard to persons or property and requiring prompt action, immediate repair, or continuous action until*

the conditions are no longer hazardous.

(b) Examples. Grade 1 leaks requiring prompt action include, but are not limited to:

- (i) Any leak, which in the judgment of gas pipeline company personnel at the scene, is regarded as an immediate hazard;*
- (ii) Escaping gas that has ignited unintentionally;*
- (iii) Any indication of gas that has migrated into or under a building or tunnel;*
- (iv) Any reading at the outside wall of a building or where the gas could potentially migrate to the outside wall of a building;*
- (v) Any reading of eighty percent LEL or greater in an enclosed space;*
- (vi) Any reading of eight percent LEL, or greater in small substructures not associated with gas facilities where the gas could potentially migrate to the outside wall of a building; or*
- (vii) Any leak that can be seen, heard, or felt and which is in a location that may endanger the general public or property.*

Charge(s):

CNG originally classified the leak at R-12 Sheldon & Matlock Rd. as a Grade 3 nonhazardous leak but did not upgrade/re-grade the classification of the leak as conditions changed. The continuous action in the monitoring of this leak was in accordance with the regulation as it pertains to a Grade 1 leak, however, the lack of a prompt and immediate repair, once the gas concentration severely increased, is not in accordance with the regulation.

Finding(s):

The following magnitude documentation was reviewed as gas in air reads. CNG initially responded to the above described leak as a follow-up to damage of their reg. sets by completing an O&M Request # 0006109 CNG Form 330A on 12.28.07. On 12.31.07 CNG completed their first follow-up leak survey on all below ground lines in the area of the damaged reg. sets. This site visit (and leak survey) was documented on CNG Form 293 Substructure Damage/Leak Report on 12.31.07 wherein CNG identified that they had performed bar hole testing with a maximum sustained read of 25% at this location although, no bar hole locations were identified.

CNG completed approximately 27 CGI test reads at this location between 12.31.07 and 09.11.08, a period of nearly 9-1/2 months. Other than the sustained read of 25% reported on 12.31.07, the range of the CGI reads from bar holes fluctuated between a low of 0.38% to a high of 7.31 % between 01.04.08 and 05.06.08. On 05.29.08 the CGI reads increased dramatically with a reported a gas concentration of 69%. Although, the levels of gas concentration continued to fluctuate, by 09.04.08 they reported a gas concentration of 79.3%. After review of the documentation provided, it appears that CNG determined that this leak was best classified as a Grade 3 leak.

The regulation not only provides examples of leaks that require prompt action but also identifies

that the list of examples provided is not inclusive. In this case, CNG did not immediately respond as is required with Grade 1 leaks. In determining repair priority, this leak was not appropriately reclassified as a Grade 1 leak. The following issues should have assisted in prompting CNG to reclassify this leak:

1. The large fluctuation in gas concentrations with a peak read of 79.3%,
2. The urgency and continuous action with which CNG monitored this leak, which is synonymous with the action required for a Grade 1 leak,
3. The pressure of the main,
4. The probability for potential ignition,
5. The number of customers which may be affected in an emergency shut-down, and
6. The potential for desensitizing the public's ability in odorant recognition.
7. The length of time the leak existed.

Staff notes that the location of this leak presented CNG with a higher than average level of remediation difficulties which takes time to arrange and in addition, the level of monitoring completed by CNG meets with the requirements and continuous actions of a Grade 1 leak.

Neither our procedures nor the WAC or federal code require a leak such as this to be reclassified as a Grade 1. Our handling of this leak is not a violation. This leak was extensively monitored to ensure that it would not become a hazard to the public. The leak was remediated in September of 2008. Staff appears to have some concerns with our leak grading philosophy. We will meet with you to discuss this further if desired.

11. WAC 480-93-187 Gas leak records.

Each gas pipeline company must prepare and maintain permanent gas leak records. The leak records must contain sufficient data and information to permit the commission to assess the adequacy of the gas pipeline company's leakage program. Gas leak records must contain, at a minimum, the following information:

- (1) *Date and time the leak was detected, investigated, reported, and repaired, and the name of the employee(s) conducting the investigation;*
- (2) *Location of the leak (sufficiently described to allow ready location by other qualified personnel);*
- (3) *Leak grade;*
- (4) *Pipeline classification (e.g., distribution, transmission, service);*
- (5) *If reported by an outside party, the name and address of the reporting party;*
- (6) *Component that leaked (e.g., pipe, tee, flange, valve);*
- (7) *Size and material that leaked (e.g., steel, plastic, cast iron);*
- (8) *Pipe condition;*
- (9) *Type of repair;*
- (10) *Leak cause;*

- (11) *Date pipe installed (if known);*
- (12) *Magnitude and location of CGI readings left; and*
- (13) *Unique identification numbers (such as serial numbers) of leak detection equipment.*

Charge(s):

CNG did not have or did not provide sufficient documentation in accordance with this rule.

1. **Finding(s):**

Documentation of leaks identified during their leak survey contains errors. The Leak Survey Detection Log for Aberdeen District Distribution System for Town of McCleary, Section 1 dated 02.15.08 was prepared in conjunction with their System Surveillance record date4 as starting 02.14.08 and ending 02.15.08. The Leak Survey Detection Log designates the date the leak was detected, the location/address, the Work Order #, and the repair date among other things.

a. The Leak Survey Detection Log identifies leaks which were detected at one address but the WO identifies the repair occurred at a different address. The possibility remains that the leak identified in the Survey Log still exists.

Date Detected	Address	WO#	Repair Date
1.	<i>Log:</i> 02.15.08	100 E. Simpson Ave.	0049724 02.25.08
	<i>WO:</i>	100 S. 3 rd St.	0049724 02.25.08
	<i>Addendum:</i>	100 E. Simpson Ave.	
2.	<i>Log:</i> 02.15.08	100-B Simpson Ave.	0049725 02.25.08
	<i>WO:</i>	100 S. 3 rd St.	0049725 02.25.08
	<i>Addendum:</i>	100-B Simpson Ave.	

b. Neither the Work Order nor the McCleary Section #1 Leak Addendum documentation identify the leak detection equipment utilized to check for residual gas for the following;

- 1. WO# 0049724
- 2. WO# 0049725

- a. The addresses in this area of McCleary recently changed. The addresses for these accounts were previously off Simpson Ave. The new addresses for these accounts have addresses off 3rd St. The leaks have been fixed.
- b. The serial number for the leak detection equipment is shown on the System Surveillance Record for McCleary section 1, see attached.

2. **Finding(s):**

The location of bar holes or CGI readings was not identified for 320 Cleveland St., Hoquiam - WO 0045180.

Work order 0045180 is attached. The record indicates "Checked meter set. Found loose meter spud nut. Tightened found no more leaks. Did bar hole test found no leaks." The probing of the service line was a survey to determine if any additional leaks may have existed. It was not a leak investigation because we had not yet found evidence that an underground leak existed. The record contains sufficient information to determine that the leak survey followed procedure CP 750.02 and WAC 480-93-188. It shows the area surveyed was the service line, the survey result was no leaks found, the survey method was underground probes and CGI, the person performing the survey is noted, the date of survey is October 4, 2006.

Comment [Chanda8]: attach

3. **Finding(s):**

The SN for the CGI equipment was not identified for the following:

- a. 320 Cleveland St., Hoquiam - WO# 0045180
- b. 3005 North View Circle, Shelton - WO# 0025286

- a. Work order 0045180 does not show the instrument tracking or identification number. Our records do indicate that all instruments available for use on October 4, 2006 were calibrated according to our monthly schedule. See attached 2006 Calibration Log Sheet – Aberdeen.
- b. Work order 0025286 does not show the instrument tracking or identification number. Our records do indicate that all instruments available for use on September 29, 2006 were calibrated according to our monthly schedule. See attached 2006 Calibration Log Sheet – Aberdeen.

12. **WAC 480-93-188 Gas leak surveys**

(1) *Each gas pipeline company must perform gas leak surveys using a gas detection instrument covering the following areas and circumstances:*

(a) *Over all mains, services, and transmission lines including the testing of the atmosphere near other utility (gas, electric, telephone, sewer, or water) boxes or manholes, and other underground structures;*

Charge(s):

The documentation accompanying Aberdeen's leak survey records do not provide enough detail or information with which to identify that leak surveys were performed or occurred "over" the

pipeline and other locations required by the rule.

1. **Finding(s):**

Leak survey records lack sufficient documentation to verify that leak surveys occurred over the pipeline and services, and that the testing of underground structures was properly completed. Maps associated with this survey do not provide enough detail with which to determine that all main and services have been surveyed. Leak surveys have been completed utilizing maps which are devoid or nearly devoid of dimension/location detail. Examples follow:

- a. System Surveillance Records for CNG High Pressure Line #6 dated 04.21.06, do not contain any mapping records which would detail location of this pipeline.
- b. System Surveillance Records for Aberdeen dated 03.20.07 which include Hoffman Rd. and Wishkah Rd.

2. **Finding(s):**

Leak survey records lack sufficient documentation to verify that leak surveys occurred over the pipeline and services, and that the testing of underground structures was properly completed. CNG did not have or did not provide maps associated with the following leak surveys:

- a. 02.03.06 Business District and Outside Business District Section 3 Leak Surveys
- b. 02.13.07 Business District Leak Survey
- c. 02.13.07 Outside Business District Leak Survey Section 4
- d. 02.15.08 Business District Leak Survey
- e. 02.14.08 Outside Business District Leak Survey Section 5

As a result of discussion with the WUTC, CNG changed it's procedures regarding documentation kept for leak surveys between 2007 and 2008. Prior to 2008, mapping documentation was not kept. A copy of the documentation kept for the 2008 McCleary Business District and Section 5 leak survey (items d and e above) is attached and does include maps.

13. **WAC 480-93-188 Gas leak surveys**

(3) *Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:*

- (a) *Business districts - at least once annually, but not to exceed fifteen months between surveys. All mains in the right of way adjoining a business district must be included in the survey;*
- (b) *High occupancy structures or areas - at least once annually, but not to exceed fifteen months between surveys;*

Charge(s):

High occupancy structures have been excluded or removed from the high occupancy structure list and have not been surveyed in accordance with the minimum high occupancy survey requirements.

CNG stated that all changes, procedures, etc. are based upon a company-wide understanding. However, the following described removal and reason for removal of HO structures from Aberdeen's HO survey list stand in direct contrast to documentation and information provided by CNG during the 2008 Tri-Cities Standard Inspection Docket PG-080109.

CNG procedures include WAC 480-93-005(14) definition for "High Occupancy structures" yet several active high occupancy structures within Aberdeen's Business Districts were removed from the HO survey list. CNG identified that they are able to pull up a listing of HO structures off a HO structure survey list by SIC code leaving only those non-Business District HO structures (located outside of Business Districts) on their HO list and thereby eliminating Business District HO structures from being walked more than once per year.

This probable violation does not list any specific HO structures that have not been surveyed. In general our procedures regarding survey of HO structures are consistent across all districts. Per code, the service line of HO structures must be surveyed a minimum of once per year. CNG leak surveys HO structures that are located in a business district once per year as part of the entire business district leak survey. Since these structures are already surveyed once per year during the leak survey, they are not surveyed again as part of the HO structure survey.

14. **WAC 480-93-188 Gas leak surveys.**

(4) *Each gas pipeline company must conduct special leak surveys under the following circumstances:*

(e) *After third-party damage to services, each gas pipeline company must perform a gas leak survey from the point of damage to the service tie-in.*

Charge(s):

CNG did not provide adequate leak survey records.

Finding(s):

The documentation provided to staff for review for third party damage special leak surveys is insufficient.

- a. Incident # 6522; 07.25.08 – 232 N. Talbot St., Montesano
- b. Incident # 6740; 10.17.08 – 1502 Riverside, Hoquiam

- a. This is a repeat of probable violation 15, finding 2a, see that response.
- b. This finding does not specify what is insufficient. See attached records for incident 6740.

Comment [Chanda9]: Attach records

15. **WAC 480-93-188 Gas leak surveys.**

(5) *Each gas pipeline company must keep leak survey records for a minimum of five years. At a minimum survey records must contain the following information:*

- (a) *Description of the system and area surveyed (including maps and leak survey logs);*
- (b) *Survey results;*
- (c) *Survey method;*
- (d) *Name of the person who performed the survey;*
- (e) *Survey dates; and*
- (f) *Instrument tracking or identification number.*

Charge(s):

CNG did not keep adequate leak survey records.

1. **Finding(s):**

CNG did not have or did not provide mapping records for their leak survey of HP Line #6 dated 04.21.06.

See response to probable violation 12.

2. **Finding(s):**

The documentation provided to staff for review of special leak surveys lacks' sufficient detail. Examples follow:

- a. 232 N. Talbot St., Montesano - 07.25.08
 - i. No map
 - ii. No survey results
 - iii. No survey method identified
 - iv. No name of person who performed survey
 - v. No date identifying when survey was done
 - vi. No equipment SN identified
- b. 321 Emerson Ave., Hoquiam - 10.13.08
 - i. No equipment SN identified
- c. Shelton Matlock Rd. R-12
 - i. No name of person who performed follow-up survey - 01.14.08
 - ii. No name of person who performed follow-up survey - 01.16.08
 - iii. No name of person who performed follow-up survey - 02.01.08
 - iv. No instrument tracking or identification number - 02.01.08
 - v. No survey method - 02.01.08
 - vi. No name of person who performed follow-up survey - 02.11.08
 - vii. No name of person who performed follow-up survey - 02.19.08

- a. Our records for incident 6522 contain all the information mentioned above. See attached.
- b. The Substructure Damage Report for 321 Emerson Ave, Hoquiam, October 13, 2008 is attached. This form does not indicate the instrument identification number. The form does indicate that the instrument was a GasTrac Gas Sentry CGI. Our records do indicate that all instruments available for use on October 13, 2008 were calibrated according to our monthly schedule. See attached 2008 Calibration Log Sheet – Aberdeen.
- c. These follow-up leak surveys were documented on work orders rather than on our typical leak report. In some cases this has led to the omission of some of the required information. We will review our procedures related to leak survey and follow-up and revise and retrain accordingly. See also response to probable violation 8, finding 16.

Comment [Chanda10]: attach

3. **Finding(s):**

CNG did not have or was unable to provide supporting mapping documentation for leak surveys completed in the Town of McCleary. Examples follow:

- a. 02.03.06 Business District and Outside Business District Section 3 Leak Surveys
- b. 02.13.07 Business District Leak Survey
- c. 02.13.07 Outside Business District Leak Survey Section 4
- d. 02.15.08 Business District Leak Survey
- e. 02.14.08 Outside Business District Leak Survey Section 5

See response to probable violation 12.

16. **WAC 480-93-200 Reporting requirements**

(4) *Each gas pipeline company must provide to the commission a written report within thirty days of the initial telephonic report required under subsections (1) and (2) of this section. At a minimum, the written reports must include the following:*

- (i) *The cost of the incident to the gas pipeline company;*

Charge(s):

CNG has not provided the cost of incidents to the commission.

Finding(s):

As of the date of this inspection, CNG identified that they had not included/provided the cost of incidents to the commission since 2004. CNG stated that these figures would be provided beginning now (December 2008) but that this information had not been previously requested by the commission. Commission rules requiring the reporting of cost of incidents have been in effect since 12/2005.

We do not understand why this has been written as a probable violation. Staff had not notified us of any problems with our reporting in previous inspections. The only other time Staff has discussed this topic with us is a letter that was sent in 2009, after this inspection. If Staff had

notified us of a deficiency at an earlier inspection, we would have taken action then. We have already made the correction that Staff requested during this inspection.

17. **49 CFR & 192.161 Supports and anchors**
(c) *Each support or anchor on an exposed pipeline must be made of durable, noncombustible material and must be designed and installed as follows:*
(1) *Free expansion and contraction of the pipeline between supports or anchors may not be restricted.*
(2) *Provision must be made for the service conditions involved.*
(3) *Movement of the pipeline may not cause disengagement of the support equipment.*

Charge(s):

Pipe supports potential for restricting expansion/contraction of pipeline exists.

1. **Finding(s):**

Pipe supports are tack-welded to the above ground meter manifold piping causing a potential restriction of expansion/contraction of the pipe between supports. Examples follow:

- a. 709 "I" St., Hoquiam
- b. 1006 N. "H" St., Aberdeen

We will review these locations and modify if warranted.

2. **Finding(s):**

The meter for Broadway Manor located at W. 2nd & N. Broadway, Aberdeen, has been set on combustible material (2-4x4 wood blocks).

See probable violation 8, finding 11.

18. **49 CFR §192.317 Protection from hazards:**
(a) *The operator must take all practicable steps to protect each transmission line or main from washouts, floods, unstable soil, landslides, or other hazards that may cause the pipeline to move or to sustain abnormal loads...*

Charge(s):

CNG has not protected their HP pipeline from potential hazards.

Finding(s):

CNG identified that their 8" High Pressure Line #2 contains 2 areas of exposure with the potential for damage. Records reviewed for both 2007 and 2008 verify that CNG is presently monitoring these areas through quarterly patrols, as well as completing the required annual leak surveys. CNG identified that in October of 2006, they contacted a contractor for remediation of the 8" HP #2 Line but the contractor was unable to access the site due to poor weather and soil conditions. Even though CNG continues to complete quarterly patrols and annual leak surveys, no evidence of remediating the exposure/potential exposure conditions was provided. No documentation was provided identifying any engineering analysis, studies, or remediation work that has been completed with regard to this line or what conditions may have changed/improved since October 2006 that has caused CNG to discontinue or postpone remediation.

192.317 is a construction standard and is not applicable to the maintenance of a pipeline. This is not a probable violation.

The 2 exposures were caused by rain run-off erosion. The sites are periodically inspected according to the maintenance requirements of 192.721 which apply to this distribution main. We patrol the exposed pipe locations to look for physical movement or external loading. No inspection that we have performed has found physical movement or external loading that requires remediation, and Staff reviewed those patrol records during the inspection. Staff's finding includes opinions that exceed code requirements.

19. **49 CFR & 192.365 Service lines: Location of valves**

(b) *Outside valves. Each service line must have a shutoff valve in a readily accessible location that, if feasible, is outside of the building.*

Charge(s):

Required service line shutoff valve(s) were not readily accessible.

Finding(s):

Required service line shutoff valve(s) were not readily accessible. Example(s) follow:

- a. 109 Marcy, Montesano
- b. 1958 Simpson Rd., Hoquiam

The facilities at these locations were reviewed. The shutoff valves were found to be readily accessible in our opinion.

20. **49 CFR §192.379 New service lines not in use**

Each service line that is not placed in service upon completion of installation must comply with

one of the following until the customer is supplied with gas:

- (a) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.*
- (b) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.*
- (c) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.*

Charge(s):

CNG does not meet the requirements of the above rule.

Finding(s):

The meter less riser located at 615 N. Church St., Montesano is not in compliance with the above rule in that the valve on the riser is not locked and the riser pipe has an open thread end (not capped or plugged).

We will review the facilities at the above location and remediate as necessary.

21. **49 CFR §192.479 Atmospheric corrosion control: General**

- (a) Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.*
- (b) Coating material must be suitable for the prevention of atmospheric corrosion.*

Charge(s):

CNG did not clean and coat pipeline in accordance with this rule.

1. **Finding(s):**

In response to Service Request # 0052350 generated by CNG on 11.17.08, for 109 E. 2nd, Aberdeen, CNG crews documented that they had completed painting task on 12.08.08. During a site visit with CNG staff noted the following:

- a. Loop had been painted without wire-brushing the surface.
- b. Paint had been built-up in the pitted area and was now level with the surrounding pipe surface.
- c. The underside of the pipe remaining untouched with no remediation. Paint with large paint peels still visibly attached to pipe.
- d. Painting task had not been completed in accordance with CNG Procedures.

See response to probable violation 8, finding 8.

2. **Finding(s):**

Service risers were found embedded or partially embedded into stucco walls. CNG is unable to

inspect the coating material on these risers. Examples follow:

- a. 109 Marcy, Montesano
- b. 325 W. Main St., Elma

The facilities at the locations above will be reviewed and modified if needed.

22. **49 CFR §192.481 Atmospheric corrosion control: Monitoring**
(b) During inspections the operator must give particular attention to pipe at soil-to air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

Charge(s):
CNG did not provide protection for their pipe in accordance with this section.

1. **Finding(s):**
Pipe supports are tack-welded to the above ground meter manifold piping causing a potential restriction of-expansion/contraction of the pipe between supports. Examples follow:

- a. 709 "J" St., Hoquiam
- b. 1006 N. "H" St., Aberdeen

Part 192.481 has no requirements for expansion or contraction of the pipe between supports. This is not a probable violation. We will evaluate the facilities at this location and modify if needed.

2. **Finding(s):**
The following are examples of locations which have atmospheric corrosion Issues:

a.	1246 Monte Elma Rd., Elma - Meter#290725	Loose interface coating
b.	414 E. Broadway St., Montesano - Meter# 101980	Damaged interface coating
c.	118 W. Marcy, Montesano	No interface coating
d.	201 S. Main St. Montesano	No interface coating
e.	109 Marcy, Montesano	No interface coating
f.	313-315 S. Main St., Montesano	Damaged interface coating
g.	709 J St., Hoquiam	Damaged interface coating
h.	Meter 413371, Hoquiam	Damaged interface coating
i.	Meter 154553, Hoquiam	Damaged interface coating
j.	109 N. Broadway, Aberdeen - Meter# 247029	Coating damaged/peeling

This finding contains opinions about the condition of piping. This is not a probable violation.

We will evaluate the condition of our facilities at the locations above and remediate if needed.

23. **49 CFR §192.614 Damage prevention program**
(c) *The damage prevention program required by paragraph (a) of this section must, at a minimum:*
(1) *Include the identity, on a current basis, of persons who normally engage in excavation activities in the area in which the pipeline is located.*

Charge(s):

CNG does not have a current list of excavators for the Aberdeen District.

Finding(s):

CNG provided the following as their current list of persons who normally engage in excavation activities:

<u>Location</u>	<u>Excavator(s)</u>
Shelton:	Mason County Excavators
Montesano:	Quigg Brothers
Aberdeen:	Pilchuck
Elma:	Roglin's Brumfield Const.

Staff finds the above list of contractors lacks scope in that the list appears to include only the predominant excavating contractors. Staff located 36 active excavating contractors in as many seconds for only one of the above locations.

In reviewing eight - Third Party Damage Reports, three additional companies were noted by CNG staff to have engaged in excavation activities within in this District. These companies are not included in your current list and they are:

- a. Hawkeye Construction working in Hoquiam - excavation damage caused on 06.20.06
- b. Mason County Public Works Dept. working in Shelton - excavation damage caused on 07.03.07
- c. All Purpose Structures working in Shelton - excavation damage caused on 02.06.08

This same issue was raised in PG-080109 – 2008 Tri-Cities audit. See our response to probable violation 31 in the letter dated October 2, 2009.

24. **49 CFR §192.615 Emergency plans**

- (a) *Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:*
- (4) *The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.*

Charge(s):

CNG emergency procedures are not available at the scene.

Finding(s):

Emergency shut-down information/plan is not provided at the sites where shut down activity is being performed. CNG identified that they believe they comply with this rule by providing one copy for the GM while at the same time allowing district use of that same copy meets requirement. Copy is located in Aberdeen GM Office.

This same issue was raised in PG-080109 – 2008 Tri-Cities audit. See our response to probable violation 11, finding 5 in the letter dated October 2, 2009.

25. **49 CFR §192.807 Recordkeeping.**

Each operator shall maintain records that demonstrate compliance with this subpart.

(a) *Qualification records shall include:*

- (1) *Identification of qualified individual(s);*
(2) *Identification of the covered tasks of the individual is qualified to perform;*
(3) *Date(s) of current qualification; and*
(4) *Qualification method(s).*

(b) *Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.*

Charge(s):

CNG did not provide complete current qualification and training records.

Finding(s):

On 12.16.08, staff requested that CNG provide Atmospheric Corrosion OQ (above ground corrosion identification) and training records for those CNG employees that painted/remediated the meter loop located at 109 E. 2nd Aberdeen.

The documentation provided was a copy of an Energy World Screen print dated 12.19.08 for 3 employees. The Energy World documentation did not identify the date(s) of current qualification(s). No training records pertaining to the identified task(s) including the method of qualification were provided.

Qualification records that include those details are available for Staff to inspect. Staff never notified us that the records provided did not meet their need.

AREAS OF CONCERN/FIELD OBSERVATIONS

1. WAC 480-93-015 Odorization of gas

CNG did not have or did not provide sufficient documentation detailing whether their system contained the appropriate level of odorant during a multiple pump failure for odorizer facility # 0-01 located at 971 Deegan Rd. in the Town of Shelton on 02.25.07. CNG identified that they were aware that this odorizer was a problem, continued monthly checks, and replaced the odorizer in 2008.

Sniff testing documents for the months February 2007 to September 2008 demonstrate that sufficient odorant was evident during the entire period.

2. WAC 480-93-170(7) Tests and reports for gas pipelines

Pressure Test records provided did not contain all required information for 1502 Riverside, Hoquiam on 10.17.08 – Line pipe length missing.

We will retrain employees to include all required information on pressure test records.

3. WAC 480-93-188(6)(e) Gas leak surveys

The following leak survey records contain inaccuracies.

- a. The CNG Substructure Damage Leak Report and the Service Request WO# 0052004 for 321 Emerson Ave., Hoquiam, contain conflicting Arrival and Completion times in the documentation.
- b. The CNG Substructure Damage/Leak Report and the Service Request WO# 0014643 for 1502 Riverside, Hoquiam, contain conflicting Completion time documentation.

- a. The attached CNG 305 #0052004 is the record of the service request and dispatch for our service mechanic employee to a broken and blowing line. The 293 Leak Report Incident #6727 is a summary of the leak investigation, and repair. The #6727 shows the investigated time as 12:47. The #0052004 Request shows an arrival time of 12:47. These times are the same and should be the same. We do not see a discrepancy. The form #6727 shows a repaired time of 13:55. The #0052004 form shows a time completed of 14:09. Repaired time and completed time describe different events. The times are not the same because our employee repaired the line at 13:55 and continued to complete other work at the site until 14:09, such as putting away tools. There is no discrepancy. Both records are attached.

Comment [Chanda11]: attach

- b. The attached CNG 330 #0014643 is the record of the service request and dispatch for our service mechanic employee to a broken and blowing line. The 293 Leak Report Incident #6740 is a summary of the leak investigation, and repair for all the employees working on the leak repair. Order #0014643 shows the one service mechanic that was initially dispatched completed their work on that site at 11:30. The leak report #6740 indicates that the line was repaired at 16:00 by 3 other employees that were sent to repair the steel service line. We do not see a discrepancy. Both records are attached.

Comment [Chanda12]: attach

4. **49 CFR §192.225 Welding procedures**

- a. CNG's API 1104 Weld and Coupon Test Data Report for welder K.B with a submittal date of 07.09.07 incorrectly identifies the welding procedure specification utilized in performing qualifying test welds. Staff believes the standard identified on the report contains a typo as follows: Report states specification GB-42-SD-TW-G8-6G was utilized when the standard should read GB-42Y-SD- TW-G8-6G.
- b. Submittal date for API 1104 Weld and Coupon Test Data Report for welder K.B. is 10.20.08. The CNG Welding Permit identifies the qualifying date as 10.23.08. Staff believes that the difference in dates is due to time needed for review.

- a. The procedure code written on the July 9, 2007 Report was not confused for another procedure.
- b. An employee is not qualified until their performance is evaluated. The evaluation was performed on October 23, 2008. The Welding Permit records the employee's qualification date. We do not understand why Staff has included this information in this report.

5. **49 CFR &192.707(d) Line markers for mains and transmission lines**

The existing pipeline markers located at R-23 and R-46, and the opposite side of Highway 8 (S. of R-46) and the pipeline markers at both sides of the RRxing S. of R-23 should be reviewed for appropriate language, lettering size, and visibility. These signs are older, difficult to see due to fading and do not provide the adequate contrast:

We will review the markers and take action if our inspection finds any action is needed.