

#### STATE OF WASHINGTON

# WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 • Olympia, Washington 98504-7250 (360) 664-1160 • TTY (360) 586-8203

Ref. No. Docket PG-080108

## **CERTIFIED MAIL**

September 18, 2009

Eldon N. Book Executive Vice President Chief Operating Officer 555 South Cole Road PO Box 7608 Boise, ID. 83707

Dear Mr. Book:

# RE: 2008 Natural Gas Standard Inspection - Aberdeen District

The Washington Utilities and Transportation Commission (commission) staff conducted a natural gas safety standard inspection from December 1 through December 5, 2008, of Cascade Natural Gas (CNG) – Aberdeen District pipeline system. The inspection included a review of records, procedures and pipeline facilities. Staff conducted an informal exit interview with CNG on December 5, 2008.

Staff documented 25 state and federal safety code violations and five areas of concern with more than 350 specific instances noted. The areas of concern could also potentially lead to future violations of state or federal pipeline safety rules if not addressed by CNG.

CNG is responsible for ensuring that it is in full compliance with all applicable state and federal pipeline safety regulations, and maintain and operate their pipeline system so that it is safe, reliable, and efficient.

The attached report presents staff's decisions regarding probable violations and does not constitute a finding of violation by the commission at this time. The report is not necessarily the position or opinion of the commission, should it be called upon to rule on these issues in an appropriate proceeding.

CNG committed to the commission in the approved April 5, 2005 Order No. 01 settlement agreement under Docket PG-030438 that if and when probable violations were identified in *one area* of their system by commission staff, that *all areas* within their system would be analyzed and any problems discovered would be corrected, thereby addressing and eliminating probable

Cascade Natural Gas Corp.-Aberdeen District Docket PG-080108 September 18, 2009 Page 2

violations on a company-wide basis (Order No. 01 PG-030438 under MEMORANDUM Part II, paragraph 9). As evidenced by the number of issues identified in this inspection, CNG's actions since the commission orders have not resulted in the statewide system compliance outcome expected by the commission. It appears that CNG has not implemented an effective audit or assessment process to determine and institute correction where similar violations may exist elsewhere in its system.

## Your response needed

Please review the attached report and respond in writing by October 30, 2009.

# What happens after you respond to this letter?

The commission has discretion to take various actions with respect to this docket. Commission staff has decided to recommend that the commission issue a complaint in this matter, seeking monetary or other penalties as authorized by law. Once the complaint is issued, CNG will have the opportunity to answer the complaint and to present its position to the commissioners at a hearing.

If you have any questions, please contact Stephanie Zuehlke, Pipeline Safety Engineer at (360) 664-1318. Please refer to docket number PG-080108 in any future correspondence regarding this inspection.

Thank you for your company's cooperation during the inspection process.

Sincerely.

Anne F. Soiza

Pipeline Safety Director

**Enclosure** 

cc: Dan Meredith, MDU Utilities Group

Keith Meissner, Cascade Natural Gas Corp.

#### WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

# 2008 Natural Gas Pipeline Safety Inspection Cascade Natural Gas – Aberdeen District Docket PG-080108

The following areas of concern and probable violation(s) of Title 49, CFR Part 192 and WAC 480-93 were noted as a result of the inspection of Cascade Natural Gas (CNG) – Aberdeen District. The inspection included a random selection of records, operation and maintenance (O&M), emergency response, inventory and field inspection of the pipeline facilities.

## 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.

## 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. 4<sup>th</sup> 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
- 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. 1<sup>st</sup> St., Shelton

•	E 1 0000	18 100 111 1 1 1 0000
1	February 2008	1 <sup>st</sup> sniff test this location in 2008
	1 001 441 7 2000	

ii. May 2008iii. September 20082 mos. btwn. sniff tests3 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 1<sup>st</sup> sniff test this location in 2008

ii. April 2008iii. August 20082 mos. btwn. sniff tests3 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 1<sup>st</sup> 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

#### 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.

## Repeat Probable Violation:

Repeat Probable Violation <u>Dockets PG-060216</u> WAC 480-93-018(1) due to calibration issue, <u>PG-050001</u> 49 CFR §192.613 due to continuing surveillance issues related to O&M documentation and conditions, and <u>Docket PG-080109</u> for insufficient/lack of mapping.

#### **Noted Area of Concern:**

Noted Area of Concern under <u>Docket 070008</u> (no regulation cited) due to inadequate documentation of atmospheric corrosion inspection documentation and under <u>Docket PG-060216</u> due to pipeline marker surveys. <u>CNG's letter of intent</u> states, "This project is in work. CNG will map pipeline marker locations per WAC 480-93-124 by June 5, 2007."

#### 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 <u>Docket PG-060216</u>.

## 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. 18<sup>th</sup> 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.

## 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

#### 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.

alds of

## 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'. [sic]
- 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.

# 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. 12<sup>th</sup> St. #7, Shelton steel service installation/replacement.
- b. Incident 6522 at 125 Academy St. S., Montesano steel service repair.

# 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.

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.

# 6. WAC 480-93-124 Pipeline markers

- (1) Each gas pipeline company must place pipeline markers at the following locations:
  - (c) 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.

#### **Noted Area of Concern:**

Noted Area of Concern under  $\underline{Docket\ PG-060216}\ WAC\ 480-93-124$  mapping pipeline markers per CNG letter of intent and  $\underline{Docket\ UG-020706}$  (no regulation cited) inadequate markers.

#### Charge(s):

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

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

## 2. Finding(s):

Pipeline markers were missing from the following railroad crossings:

- a. S. Main St., Montesano
- b. Bay Ave. and 2<sup>nd</sup> Ave., Hoquiam

#### 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

#### 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.

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 <sup>nd</sup> RRxing, Aberdeen	Missing markers
b.	1968	Wildcat Creek xing, Elma	Missing markers
c.	05.28.08	Monte-Elma Rd. xing, E. of Elma Elementa	ary
		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 <sup>th</sup> )	Missing markers
i.	Hwy 8, S. of R-46 & at RRxing S. of R-23	Damaged markers
j.	1820 Main St., Elma	Missing markers

## 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.

## 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)

## 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 is 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 survey or conduct a pressure test.

#### **Repeat Probable Violation:**

Repeat Probable Violation under <u>Docket PG-070004</u> 49 CFR §192.605(b)(8) due to insufficiently addressing procedures and documentation per WAC 480-93-188(6) for periodic review of work done by operator personnel to determine effectiveness, etc. CNG's letter of intent dated 07.16.07 states, "We will update our procedures by September 30, 2007."

Repeat Probable Violation under <u>Dockets UG-010113</u> and <u>PG-070003</u> CFR §192.13(c) and <u>UG-020706</u> CFR §192.13.

#### **Noted Area of Concern:**

Noted Area of Concern under <u>Docket PG-060216</u> WAC 480-93-124 due to noncompliance with required pipeline marker surveys, and WAC 480-93-188(3)(a) due to inadequate incorporation of High Occupancy Structures into their Leak Survey Program.

Noted Area of Concern under <u>Docket PG-070002</u> (no regulation cited) wherein staff states that CNG has completed a review of their entire system to ensure leak surveys encompass all high occupancy structures in Sunnyside. And under same Docket in Yakima staff identifies that CNG failed to identify a ten store strip mall and two high occupancy structures.

Noted Area of Concern under <u>Docket PG-070008</u> (no regulation cited) due to difficulty to determine where progress of corrective/remedial action pertaining to inaccessible meters. Staff noted that CNG should implement a consistent company-wide methodology for documenting when remedial action is taken and when special arrangements are made and completed for inaccessible meters.

#### Charge(s):

CNG did not follow their procedures or their procedures do not comply with the requirements identified in the rule.

# 1. $\underline{\text{Finding}(s)}$ :

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.

#### 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.

## $3. \quad \underline{Finding(s)}:$

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 <a href="Docket PG-081306">Docket PG-081306</a> 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.

#### 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 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.

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.

## 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."

## 7. $\underline{\mathbf{Finding}(\mathbf{s})}$ :

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.

## 8. $\underline{\text{Finding}(s)}$ ;

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. 2<sup>nd</sup> 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: "L/S 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 but 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 AOC was identified and painting was requested. Either way, the 6 month remediation timeframe had expired.

## 9. $\underline{\mathbf{Finding}(\mathbf{s})}$ :

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.

## 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)

#### 11. Finding(s):

The meter set installation for Broadway Manor located at W. 2<sup>nd</sup> & 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.

## 12. $\underline{\mathbf{Finding}(\mathbf{s})}$ :

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 Gravs 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

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.

#### 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.

## 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.

## 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
       #0006161 - 03.21.08
i.
       #0006170 - 03.28.08
į.
       #0006178 - 04.10.08
k.
       #0006180 - 04.23.08
1.
       # 0006186 - 05.06.08
m.
       #0006189 - 05.29.08
n.
       #0006191 - 06.12.08
0.
       # 0006194 - 07.25.08
p.
       #0006214 - 08.12.08 (2 separate reads completed on this date)
q.
       # 0006220 - 08.25.08
r.
       # 0006228 - 09.04.08 No map accompanied this form
s.
```

# 0006231 - 09.25.08 No bar holes or perimeter identified

#### 17. Finding(s):

t.

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

#### 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.

# 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 480-93-18601 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

## 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
- 1. # 0006180 04.23.08
- m. # 0006186 05.06.08
- 11 0006100 07 00 00
- 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

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

# 10. <u>WAC 480-93-18601 Leak classification and action criteria – Grade – Definition – Priority of leak repair</u>

- (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 non-hazardous 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.

# 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.

## Repeat Violation:

Repeat Violation by commission order under <u>Docket PG-030438</u> WAC 480-93-187(2) due to not properly recording CGI readings.

## Repeat Probable Violation:

Repeat Probable Violation under <u>Docket PG-021194</u> WAC 480-93-187(1), (2)(s) due to not recording CGI readings on leak document.

#### Charge(s):

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

## 1. $\underline{\mathbf{Finding}(\mathbf{s})}$ :

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 dated 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. Log: 02.15.08	100 E. Simpson Ave.	0049724	02.25.08
WO:	100 S. 3 <sup>rd</sup> St.	0049724	02.25.08
Addendum:	100 E. Simpson Ave.		
2. Log: 02.15.08	100-B Simpson Ave.	0049725	02.25.08
WO:	100 S. 3 <sup>rd</sup> St.	0049725	02.25.08
Addendum:	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

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

## $3. \quad \underline{Finding(s)}:$

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

# 12. <u>WAC 480-93-188 Gas leak surveys</u>

- (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;

## Repeat Probable Violation:

Repeat Probable Violation under <u>Dockets UG-010113</u> and <u>PG-081306</u> WAC 480-93-188(1). The docket findings conclude that CNG did not conduct leak surveys over the main, adjacent vaults, boxes, or other structures, as is required and further, that the locator was not exactly sure where the main was located at the time of the survey. CNG's letter of intent dated 08.28.08 indicates that they did not follow their leak survey procedures and that they employee was confused by the maps. CNG also indicated that all CNG employees conducting leak surveys will receive a review in the use of their maps to identify the pipe location, use a serpentine path to ensure passing over the main and what to do if there is confusion in understanding the map.

#### 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. $\underline{\mathbf{Finding}}(\mathbf{s})$ :

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.

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

# 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;

## Repeat Probable Violation:

Repeat Probable Violation under <u>Dockets UG-010113</u>, <u>PG-060216</u>, and <u>UG-020706</u> WAC 480-93-188.

# **Noted Area of Concern:**

Noted Area of Concern under Docket PG-060216 WAC 480-93-188.

#### 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.

#### 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

## 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.

#### 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
  - 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

# $3. \quad \underline{Finding(s)}:$

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

## 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.

## 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.

## **Repeat Probable Violation:**

Repeat Probable Violation under <u>Docket PG-060217</u> 49 CFR §192.161 due to meter placed on two combustible wood blocks.

#### Charge(s):

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

## 1. $\underline{\mathbf{Finding}(\mathbf{s})}$ :

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

## 2. Finding(s):

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

## 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 . . .

#### Repeat Probable Violation:

Under <u>Docket PG-050001</u> 49 CFR §192.481 due to facility access issues by obstructions or inability to gain access from customer. This Probable Violation includes details from <u>Docket PG-030438</u> wherein CNG's letter of intent committed to conduct a comprehensive O&M Review and revision.

#### 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.

## 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.

#### **Repeat Probable Violation:**

Repeat Probable Violation under <u>Docket PG-070002</u> 49 CFR §192.365 due to inaccessible service line shut-off valves.

#### 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

#### 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 meterless 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).

## 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:

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. 2<sup>nd</sup>, 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.

## 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

# 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.

#### Repeat Probable Violation:

Repeat Probable Violation under <u>Docket PG-060217</u> 49 CFR §192.481 due to inappropriate monitoring for AC under pipe supports.

Also noted under this docket were similar details previously identified under <u>Dockets PG-041532</u>, <u>PG-030438</u>, <u>and PG-030435</u>. CNG's letter of intent dated 06.18.04, committed to incorporate inspections of pipelines under supports, straps or other places where moisture accumulation is possible and could cause corrosion.

Repeat Probable Violation under <u>Docket PG-070002</u> 49 CFR §192.479(b) due to inadequate coating material suitable for the prevention of atmospheric corrosion.

#### 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

# 2. $\underline{\mathbf{Finding}(\mathbf{s})}$ :

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

# 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.

# **Repeat Probable Violation:**

Repeat Probable Violation under <u>Docket UG-011161</u> 49 CFR §192.614(c).

## Charge:

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:

Location	Excavator(s)
Shelton:	Mason County Excavators
Montesano:	Quigg Brothers

Aberdeen:

Pilchuck Roglin's

Elma:

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

## 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.

# 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. 2<sup>nd</sup>, 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.

## 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.

# 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.

## 3. $\frac{\text{WAC } 480-93-188(6)}{\text{(e)}}$ 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.

# 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.
- 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.

## **CNG PAST LETTERS OF INTENT:**

- 1. <u>Docket PG-021297</u> CFR 49 §192.481. Staff noted under this docket that CNG had not complied with AC survey requirements but also had not complied with statements made in their letter of intent dated 10.31.01 under <u>Docket UG-010113</u> wherein CNG states, "We will modify our atmospheric corrosion survey procedure to produce sufficient records to demonstrate our compliance with these requirements. We anticipate completion of this and implementation by December 31, 2001."
- 2. <u>Docket PG-021601</u> CFR 49 §192.481.Staff noted under this docket that CNG had not complied with AC survey requirements but also had not complied with statements made in their letter of intent dated 10.31.01 under <u>Docket UG-010113</u> wherein CNG states, "We will modify our atmospheric corrosion survey procedure to produce sufficient records to demonstrate our compliance with these requirements. We anticipate completion of this and implementation by December 31, 2001."
- 3. Under <u>Docket PG-060217</u> 49 CFR §192.481 due to inappropriate monitoring for AC under pipe supports. Also noted under this docket were similar details previously identified under <u>Dockets PG-041532</u>, <u>PG-030438</u>, and <u>PG-030435</u>. CNG's letter of intent dated 06.18.04, committed to incorporate inspections of pipelines under supports, straps or other places where moisture accumulation is possible and could cause corrosion.
- 4. Under <u>Docket PG-060216</u> WAC 480-93-124 due to noncompliance with required pipeline marker surveys. CNG's letter of intent dated 10.23.06 states, "This project is in work. CNG will map pipeline marker locations per WAC 480-93-124 by June 5, 2007."
- 5. Under <u>Docket PG-060216</u> WAC 480-93-188(3)(a) due to inadequate incorporation of High Occupancy Structures into their Leak Survey Program. CNG's letter of intent dated 10.23.06 states, "This project is in work. CNG will incorporate the WAC 480-93-188(3)(a) requirements into our leak survey maps by June 5, 2007."
- 6. Under <u>Docket PG-050001</u> 49 CFR §192.481 due to facility access issues by obstructions or inability to gain access from customer. This Probable Violation includes details from

- <u>Docket PG-030438</u> wherein CNG's letter of intent\_committed to conduct a comprehensive O&M Review and revision.
- 7. Under <u>Docket PG-070004</u> WAC 480-93-180(1) due to no reference to 49 CFR §192.241(a) in CNG manual regarding visual inspection of welding to be conducted by individual qualified by appropriate training and experience CNG's letter of intent dated 07.16.07 states, "We will update our procedures by September 30, 2007." In an 11.06.07 meeting with staff, CNG committed to provide further clarifying language in the procedure manual regarding this item and to provide a copy to the commission no later than 12.31.07.
- 8. Under <u>Docket PG-070004</u> 49 CFR §192.605(b)(8) due to insufficiently addressing procedures and documentation per WAC 480-93-188(6) for periodic review of work done by operator personnel to determine effectiveness, etc. CNG's letter of intent dated 07.16.07 states, "We will update our procedures by September 30, 2007."
- 9. Under <u>Docket PG-070004</u> WAC 480-93-180(1) due to insufficiently addressing WAC 480-93-188(6) requirements pertaining to self audits of leak detection and recordkeeping programs at intervals not to exceed 3 years between audits. CNG's letter of intent dated 07.16.07 states, "We will update our procedures by September 30, 2007."
- 10. <u>Docket PG-081306</u> WAC 480-93-188(1). The 2008 Docket findings conclude that CNG did not conduct leak surveys over the main, adjacent vaults, boxes, or other structures, as is required and further, that the locator was not exactly sure where the main was located at the time of the survey. CNG's letter of intent dated 08.28.08 indicates that they did not follow their leak survey procedures and that the employee was confused by the maps. CNG also indicated that all CNG employees conducting leak surveys will receive a review in the use of their maps to identify the pipe location, use a serpentine path to ensure passing over the main and what to do if there is confusion in understanding the map.

# **CNG PAST COMMISSION AGREEMENT(S):**

- 1. <u>Docket PG-060217</u>; 49 CFR §192.463, 49 CFR §192.481 and 49 CFR §192 Appendix D Corrosion Control: Cathodic protection, and Atmospheric corrosion control: Monitoring.
- 2. <u>Docket PG-030438</u>; Assuring compliance system-wide; commitment to completing all periodic maintenance tasks of 49 CFR §192 and WAC 480-93 prior to the compliance deadline.