



STATE OF WASHINGTON

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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Ref. No. Docket PG-080109

CERTIFIED MAIL

July 31, 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 – Tri-Cities/Walla Walla

The Washington Utilities and Transportation Commission (UTC) staff conducted a natural gas safety standard inspection from September 22 through October 8, 2008, of Cascade Natural Gas (CNG) – Tri-Cities/Walla Walla pipeline system. The inspection included a review of records, procedures and pipeline facilities. Staff conducted an informal exit interview with CNG on October 8, 2008 and June 13, 2009, and a formal exit interview on July 27, 2009, during which time CNG reviewed the inspection findings.

Staff documented 33 state and federal safety code violations and eight areas of concern. There were:

- Four repeat violations of two commission orders in Dockets PG-030438 and PG-060217;
- 14 repeat probable violations identified in previous commission letters and CNG abatement commitments; and,
- 15 probable violations;

with more than 400 specific instances. Additionally, on a few violations, a city is named as an instance. It means that all applicable facilities within the city were violation instances as far as could be determined. 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 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 September 2, 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-080109 in any future correspondence regarding this inspection.

Thank you for your attention to this matter.

Sincerely,



Anne F. Soiza
Pipeline Safety Director

Enclosures

cc. Dan Meredith, Cascade Natural Gas Corp.
Keith Meissner, Cascade Natural Gas Corp.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2008 Natural Gas Pipeline Safety Inspection
Cascade Natural Gas – Tri-Cities/Walla Walla
Docket PG-080109

The following areas of concern and probable violation(s) of Title 49, CFR Parts 192 and 199, WAC 480-90 and WAC 480-93 were noted as a result of the inspection of Cascade Natural Gas (CNG) – Tri-Cities/Walla Walla facilities. 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 480-90-328 Meter identification**

Gas utilities must identify each meter by a unique series of serial numbers, letters, or combination of both, placed in a conspicuous position on the meter, along with the utility's name or initials. Utilities must update the name or initials on its meters within three years of a name change.

Charge(s):

CNG has not identified/labeled all meters with the utility's name or initials.

Finding(s):

CNG has not identified/labeled all meters with the utility's name or initials. Examples follow:

- a. 29 E. Sumach St., Walla Walla
- b. 7 E. Main St., Walla Walla
- c. 13 E. Main St., Walla Walla
- d. Meter S. of 21 E. Main St., Walla Walla
- e. 123 E. Main St., Walla Walla
- f. 2825 W. Kennewick Ave., Kennewick

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.

Repeat Probable Violation:

Repeat Probable Violation Dockets PG-060216 WAC 480-93-018(1) due to calibration issues and PG-050001 49 CFR §192.613 due to continuing surveillance issues related to O&M documentation and conditions.

Noted Area of Concern:

Noted Area of Concern under Docket PG-070008 (no regulation cited) due to inadequate documentation of atmospheric corrosion inspection documentation.

Charge(s):

Records lack sufficient detail to determine compliance with rule.

1. **Finding(s):**

Gas pipeline records lack sufficient *mapping* detail or have not been mapped.

Examples follow:

Project/Address	Completion Date	Issue
a. D0082088	04.18.07	Not mapped
b. D0084099	03.08.08	Not mapped
c. D0083742	03.08.08	Not mapped Proj. # on distr. line rpt. = D0083742 Proj. # on as built/dsgn. = D0083743
d. D0080845	11.21.06	Not mapped
e. 4525 Rd. 68, Kennewick	01.25.07	Not mapped
f. 6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
g. 224 Bear Dr., Richland	10.31.07	Not mapped
h. 6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
i. 9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
j. 9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped
k. 3914 Road 104, Pasco	12.24.07	Not mapped
l. 3910 Road 104, Pasco	10.06.06	Not mapped
m. 1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
n. 5109 Road 68, Pasco	03.26.08	Not mapped
o. 2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
p. 2885 Duportail Dr., Richland	09.28.07	Not mapped
q. 3065 Bluffs Dr., Richland	11.27.06	Not mapped
r. 3059 Bluffs Dr., Richland	02.05.07	Not mapped
s. 1527 Thayer, Richland	08.28.07	Service replaced- 01.21.63 card not updated

2. **Finding(s):**

Gas pipeline records lack sufficient detail to identify which *sniff test instruments* were utilized to perform required testing. Examples follow:

Date	Location, City	Odorizer #
a. 01.08.08	Grunderson, Finley	O-1
b. 06.11.07	6001 Rd. 84, Pasco	O-9
c. 12.06.07	Finley School Reg, Finley	O-1
d. 07.07.08	2802 W. 35 th , Kennewick	O-3

- e. 01.02.08 Grunderson, Finley O-1
- f. 09.08.08 2901 Commercial Ave., Pasco O-05

3. **Finding(s):**

Gas pipeline records lack sufficient detail regarding the *calibration of sniff test instruments*. Examples follow:

Date	Location, City	Odorizer #
a. 01.08.08	Grunderson, Finley	O-1
b. 06.11.07	6001 Rd. 84, Pasco	O-9
c. 12.06.07	Finley School Reg, Finley	O-1
d. 07.07.08	2802 W. 35 th , Kennewick	O-3
e. 01.02.08	Grunderson, Finley	O-1
f. 09.08.08	2901 Commercial Ave., Pasco	O-05

4. **Finding(s):**

Records for the 2007 Leak Survey for Section 5 contain incongruities and/or are inadequate.

- a. Form CNG 295 Leak Survey Detection Log records for Section 5, Kennewick District, Town of Richland dated as completed 08.15.07 and also dated as completed 08.14.07, contain incongruities in chronological record keeping.
- b. The 08.08.07 leaks have been documented as having been found after 08.09.07.
- c. This record also identified that leak 1527 Thayer was repaired on 08.13.07 when it was not repaired. On 08.21.07 General Manager graded this leak as a grade 2 and deferred the leak repair.
 - 1. Leak was not graded.
 - 2. O&M Request form dated 08.13.07 identifies two employees "bar holed and probed main. Exposed main at the highest reading no leak found Deferred to GM."
 - i. No map completed/provided
 - ii. No criteria documented regarding leak deferral.
 - iii. No bar hole locations/read locations identified
 - iv. No equipment identified as being used for this investigation to complete leak investigation
 - v. No pipe condition report/information
 - vi. No size and type of pipe identified
 - 3. O&M Request for re-evaluation of leak dated 09.05.07 contains insufficient data to determine compliance.
 - i. No equipment identified as being used for this investigation to check for residual gas.
- d. This record identified that leak 1503 Wright was repaired on 08.14.07 when it was not repaired. On 08.21.07 General Manager graded this leak as a grade 2 and deferred the leak repair.

1. Leak was not graded.
2. O&M Request form dated 08.14.07 identifies two employees "bar holed and probed main took reads see attached sheet"
 - i. No sheets attached
 - ii. No map completed in association with investigation
 - iii. No criteria documented regarding leak deferral.
 - iv. No bar hole locations/read locations identified
 - v. No equipment identified as being used for this investigation to complete leak investigation
 - vi. No pipe condition report/information
 - vii. No size and type of pipe identified
- e. FI Units used for this Leak Survey were not calibrated according to the log sheets provided with this survey.
 1. No calibration records for FI Units 48240 and 48101 for survey identified as completed on different dates. One location states completion on 08.14.07 and another on 08.15.07. Either way there are no calibration records between the last recorded leak and the completion date. No survey start date has been identified.
- f. Re-evaluation of leak after repairs

5. **Finding(s):**

Company did not have or was unable to provide clear and accurate records for gas leak at *Sycamore and Lewis Streets, Pasco*. For additional detail see *Probable Violation 11, Finding 15*.

- a. Form 286 System Surveillance Record is incompatible with other leak records and is signed by employees and General Manager as correct. (Incorrectly indicates no leaks: "completed survey all appeared ok.")
- b. Present status of leak is indeterminate. Original leak form was altered causing confusion and lack of information to document whether repaired on 11.07.08.
 1. Grade of leak remains Grade 2 with read of 19% w/o deferment information/approval/documentation.
 2. No residual reads taken.
 3. No read perimeter identified.
 4. No type of repair identified.
 5. No CGI or FI equipment identified or used.
 6. No documentation showing deferred leak reviewed by General Manager
 7. No pipeline class identified.
 8. No pipe condition information.
 9. No size or material description.
 10. No date of pipe installation.

6. **Finding(s):**
Company has altered existing documents. Rather than create a new document (service card), CNG partially altered a 1963 document for 1527 Thayer, Richland.
7. **Finding(s):**
CNG did not have or was unable to provide documentation of *pressure testing equipment and pressure testing equipment calibration*. Examples follow:
- | | | |
|----|---|------------------|
| a. | 9115 W. Clearwater Ave., Kennewick | Contract crew |
| b. | 9120 W. Clearwater Ave., Kennewick | Contract crew |
| c. | 6511 W. 5 th Ave., Kennewick | Unknown CNG crew |
| d. | 3059 Bluffs Dr., Richland | Contract crew |
| e. | 3065 Bluffs Dr., Richland | Contract crew |
| f. | 596 Clermont Dr., Richland | Contract crew |
| g. | 2885 Duportail Dr., Richland | Contract crew |
| h. | 2855 Duportail St., Richland | Contract crew |
| i. | 3910 Road 104, Pasco | Contract crew |
| j. | 1915 Road 84, Pasco | Unknown CNG crew |
| k. | 5426 Road 68, A-D, Pasco | Contract crew |
| l. | 6501 W. 6 th Ave., Kennewick | Contract crew |
| m. | 224 Bear Dr., Richland | Contract crew |
| n. | 4525 Convention Pl., Pasco | Contract crew |
| o. | Sycamore & Lewis, Pasco | CNG crew |
| p. | 1503 Wright Ave., Richland | CNG crew |
| q. | 1527 Thayer, Richland | CNG crew |

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

- (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.*

Noted Area of Concern:

Noted as an Area of Concern under Docket PG-060216 due to pipeline marker surveys. CNG's letter of intent states, "This project is in work. CNG will map pipeline marker locations per WAC 480-93-124 by June 5, 2007."

Charge(s):

Maps were not updated within six months *and* accurate records were not made available to operations personnel.

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.

2.

Finding(s):

Accurate records were not available to operations personnel. Examples follow:

- a. 224 Bear Dr., Richland
 - 1. On svc. Card, not on hanging grid maps, not on CAD map
- b. 6501 W 6th Ave., Kennewick
 - 1. On svc card, not on hanging grid maps, not on CAD map
- c. 4525 Road 68 Bldg. Unit A, Pascoe
 - 1. On svc card, not on hanging grid maps, not on CAD map
- d. 4525 Convention Pl., Pasco
 - 1. On svc card, not on hanging grid maps, is on CAD map
- e. Kennewick Grid Sheet 3-F
 - 1. Contains hand drawn construction activity from December 1990 through August 2008 but does not include February 2005 W. 4th Ave. gas main information. Project # D0070888
 - 2. Contains hand drawn construction documentation from 06.30.06 Project # D0080351 stating that on S. Penn Pl., the main was not tied-in in 2006 with Project # D0070888 but new map, Kennewick Grid Sheet 3-G, shows main tied-in with no separate construction date or project number.
- f. Kennewick Grid Sheet 3-F was changed to Kennewick Grid Sheet 3-G but service cards or gas main project # information was not updated to reflect Grid change. No Grid conversion sheet exists which would direct employees to correct map grids.

3.

Finding(s):

Mapping records were not updated within six months. (General Manager identified that CAD maps and Grid maps were identical.) Examples follow:

Project/Address	Completion Date	Issue
a. D0082088	04.18.07	Not mapped
b. D0084099	03.08.08	Not mapped
c. D0083742	03.08.08	Not mapped Proj. # on distr. line rpt. = D0083742 Proj. # on as built/dsgn. = D0083743
d. D0080845	11.21.06	Not mapped
e. 4525 Rd. 68, Kennewick	01.25.07	Not mapped
f. 6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
g. 224 Bear Dr., Richland	10.31.07	Not mapped
h. 6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
i. 9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
j. 9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped

k.	3914 Road 104, Pasco	12.24.07	Not mapped
l.	3910 Road 104, Pasco	10.06.06	Not mapped
m.	1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
n.	5109 Road 68, Pasco	03.26.08	Not mapped
o.	2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
p.	2885 Duportail Dr., Richland	09.28.07	Not mapped
q.	3065 Bluffs Dr., Richland	11.27.06	Not mapped
r.	3059 Bluffs Dr., Richland	02.05.07	Not mapped
s.	1527 Thayer, Richland	08.28.07	Service replaced Existing 01.21.63 service card altered

4. **WAC 480-93-100 Valves**

- (1) *Each gas pipeline company must have a written valve maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which valves will be maintained under 49 CFR §192.745, 49 CFR §192.747, and this subsection. The written program must also outline how the gas pipeline company will monitor and maintain valves during construction projects to ensure accessibility. The following criteria and locations must be incorporated in the written program. The written program shall explain how each of the following are considered in selecting which valves require annual inspections and maintenance under 49 CFR §192.747 . . .*
- (2) *Each gas pipeline company must have a written service valve installation and maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which new services will be required to have valves installed and maintained under this section. . .*
- (3) *All service valves selected for inspection in the program required in subsection (2) of this section must be operated and maintained at least once annually, but not to exceed fifteen months between operation and maintenance.*
- (6) *Each gas pipeline company must fully implement the requirements of this section within one year of the adoption date of this rule. [Effective date 06.02.05.]*

Charge(s):

CNG procedures do not incorporate all requirements of WAC 480-93-100 Valves.

1. **Finding(s):**

CNG's written program/procedures do not appear to outline how the gas pipeline company will monitor and maintain valves during construction projects to ensure accessibility, nor does it address items all items (a) through (j) in accordance with WAC 480-93-100(1).

2. **Finding(s):**
CNG procedures do not meet the above requirements in that their procedures do not explain how each of the criteria and/or locations are considered and selected for installation and maintenance.
3. **Finding(s):**
CNG procedures do not meet the above requirements in that their procedures (CP 740.015 b.) require or advise that operational valves shall not be operated.
4. **Finding(s):**
CNG has not fully implemented the requirements of this section within one year of the adoption of this rule.

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

- (2) *Each gas pipeline company must complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by any test, survey, or inspection. An additional thirty days may be allowed for remedial action if due to circumstances beyond the gas pipeline company's control the company cannot complete remedial action within ninety days. Each gas pipeline company must be able to provide documentation to the commission indicating that remedial action was started in a timely manner and that all efforts were made to complete remedial action within ninety days. (Examples of circumstances allowing each gas pipeline company to exceed the ninety-day time frame include right of way permitting issues, availability of repair materials, or unusually long investigation or repair requirements.)*

Repeat Probable Violation:

Repeat Probable Violation under Docket(s) UG-001926 49 CFR §192.465(d) and UG-010113 WAC 480-93-110.

Charge(s):

CNG did not begin or complete cathodic protection remediation in accordance with this rule. CNG did not provide or was unable to provide records or documentation indicating that they had conducted follow-up tests or completed a cathodic protection determination in accordance with WAC 480-93-110 or 49 CFR 192 Appendix D.

Finding(s):

During pre-field inspection staff noted a CP read of -0.556 at 305 E. Columbia Dr., Kennewick. A follow-up field visit with CNG revealed a CP read of -0.733. CNG stated that this service had been low for many years. Note: The General Manager stated that this meterless riser and 5 other meterless risers at this location would be retired within the next two weeks.

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

- (1) *Each gas pipeline company must place pipeline markers at the following Locations ...*
- (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 Docket PG-060216 WAC 480-93-124 mapping pipeline markers per CNG Letter of Intent and 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.

1. **Finding(s):**

CNG was unable to provide adequate and reliable documentation to verify or identify the accurate placement/location of pipeline markers. General Manager identified that corporate office is presently in the process of compiling maps which will identify marker locations but they were not available for or in use in Tri-Cities yet. General Manager identified that in the future these maps would be utilized for all future line walks and marker surveys.

2. **Finding(s):**

CNG was unable to provide documentation or records which identify marker locations and therefore, do not meet with this rule. Pipeline markers were found missing in the field at the following locations:

- a. Columbia Center Blvd. at two canal crossings in Kennewick;
- b. S. Penn canal crossing, Kennewick; and
- c. Kellogg canal crossing, Kennewick.

3. **Finding(s):**
CNG was unable to provide documentation that identified where pipeline markers were located or required on buried gas pipelines.
For example, no markers were located outside the Finley odorizer or at the points of horizontal deflection. Tri-Cities General Manager identified that markers would be placed at this location.

4. **Finding(s):**
CNG was unable to provide adequate or reliable documentation verifying that they are able to identify the placement or location of pipeline markers.
CNG identified that they complete an annual pipeline marker survey at the same time as their annual leak surveys and that marker locations are denoted on their leak survey maps. However, leak survey maps are not kept up-to-date and marker documentation was unavailable.

- 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 markers.
- c. CNG has no documentation which indicates class locations for the purpose of denoting 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):

The regulator installation is not in accordance with manufacturer's recommendations.

Finding(s):

The sideways orientation of the regulator does not provide vent protection in accordance with manufacturer's recommendations. Examples follow:

- a. 1 E. Alder St., Walla Walla
- b. 2825 W. Kennewick Ave., Kennewick

8. **WAC 480-93-170 Tests and reports for gas pipelines.**

(4) *All service lines that are broken, pulled, or damaged, resulting in the interruption of gas supply to the customer, must be pressure tested from the point of damage to the service termination valve (generally the meter set) prior to being placed back into service.*

Repeat Probable Violation:

Repeat Probable Violation under Dockets UG-011161 and UG-011305 49 CFR §192.725.

Repeat Probable Violation:

Repeat Probable Violation under Docket PG-021297 WAC 480-93-188(f) references CFR 192.725 - due to insufficient pressure test records for reinstatement of service due to third-party damage.

Charge(s):

CNG did not have or was unable to provide sufficient service line test documentation.

Finding(s):

Reinstatement records for the following service lines do not identify sufficient test information to determine compliance in accordance with the above rule.

- a. 1225 Fuji, Richland
- b. 1211 Fuji, Richland

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

(7) *Each gas pipeline company must keep records of all pressure tests performed for the life of the pipeline and must document the following information:*

- (a) *Gas pipeline company's name;*
- (b) *Employee's name;*
- (c) *Test medium used;*
- (d) *Test pressure;*
- (e) *Test duration;*
- (f) *Line pipe size and length;*
- (g) *Dates and times; and*
- (h) *Test results.*

Noted Area of Concern:

Noted Area of Concern under Docket PG-020706 WAC 480-93-188(6)(f) – inadequate pressure test documentation.

Charge(s):

CNG's records did not include all required documentation in accordance with this rule.

Finding(s):

One or more of the above elements is missing from documentation. Examples follow:

<u>Project/Address</u>	<u>Omitted Data</u>
a. 7115 W. 6 th Ave., Kennewick	Test duration
b. 9115 W. Clearwater Ave., Kennewick	Test duration
	Test medium
c. 9120 W. Clearwater Ave., Kennewick	Test medium

d.	6511 W. 5 th Ave., Kennewick	Test medium Employee's name
e.	3059 Bluffs Dr., Richland	Test medium
f.	3065 Bluffs Dr., Richland	Test medium
g.	596 Clermont Dr., Richland	Test medium
h.	2885 Duportail Dr., Richland	Test medium
i.	2855 Duportail St., Richland	Test medium
j.	3910 Road 104, Pasco	Test medium
k.	3914 Road 104, Pasco	Test medium
l.	5109 Road 68, Suite 101-105, Pasco	Test duration Test medium
m.	1915 Road 84, Pasco	Test duration Test medium Employee's name
n.	5426 Road 68, A-D, Pasco	Test medium
o.	4525 Road 68 A, Pasco	Test medium Pipe length
p.	6501 W. 6 th Ave., Kennewick	Test medium
q.	224 Bear Dr., Richland	Test medium
r.	4525 Convention Pl., Pasco	Test medium
s.	D0081186 – 2" Main, Pasco	Test medium
t.	1527 Thayer, Richland	Test medium Test pressure Test duration Test date & time Employee name

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

- (3) *Before moving or lowering a gas pipeline other than the line pipe described in subsection (2) of this section, each gas pipeline company must prepare a study to determine whether moving or lowering will cause an unsafe condition. The gas pipeline company's engineering department must review, approve, and retain the study for the life of the pipeline. The study must analyze the following factors:*
- (a) *The required deflection of the pipe;*
 - (b) *The diameter, wall thickness, and grade of pipe;*
 - (c) *The characteristics of the pipeline;*
 - (d) *The terrain and class location;*
 - (e) *The present condition of the pipeline;*
 - (f) *The anticipated stresses of the pipeline including the safe allowable stress limits; and*
 - (g) *The toughness of the steel.*

Charge(s):

CNG did not provide or was unable to provide documentation that meets the above rule.

Finding(s):

CNG's records do not demonstrate that the required engineering study had properly analyzed and considered the following required factors for the project located at Road 84 & Roberts Dr., Pasco, in May 2008.

- a. The terrain and class location;
- b. The present condition of the pipeline

11. **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 Violation:

Repeat Violation by Commission Order under Docket PG-060217 49 CFR §192.481.

Repeat Probable Violation:

Repeat Probable Violation under Dockets PG-041532, PG-030438, and PG-030435 49 CFR §192.481; Docket PG-070004 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.

Repeat Probable Violation under Docket PG-070004 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 Dockets UG-010113 and PG-070003 CFR §192.13(c) and UG-020706 CFR §192.13.

Noted Area of Concern:

Noted Area of Concern under Docket PG-060216 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 Docket PG-070002 (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 Docket PG-070008 (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. **Finding(s):**

CNG's procedural manual does not state that it is required for visual inspection of welding be conducted by an individual qualified by appropriate training and experience. CNG was previously notified of this on April 27, 2007, as an area of concern (AOC).

2. **Finding(s):**

CNG did not provide the commission with available procedure manual revisions as required by the rule.

- a. Procedure 500 – Public Awareness Program
- b. Procedure 680 – High Pressure Service Setting
- c. Procedure 685 – Meter and Regulator Sets
- d. Procedure 745 – Regulator Station Inspection and Maintenance
- e. Procedure 750 – Leak Investigation
- f. Procedure 754 – Atmospheric Corrosion Control
- g. Procedure 760 – Welding Standards
- h. Procedure 835 – Damage Prevention
- i. Procedure 860 – Facilities Installation Report
- j. Procedure 925 – Emergency Policy

3. **Finding(s):**

CNG has not updated their manual with procedure CP 760.07 regarding the visual inspection of welds. CNG's response to PG-070004 area of concern (AOC) Finding j: states that CNG would update their procedures by September 30, 2007.

4. **Finding(s):**
 CNG's 2008 annual procedural review documentation identified that procedure changes/updates had been made but the updates did not appear in the Tri-Cities manual.

a. CNG Procedure #760 – Welding Standards.

5. **Finding(s):**
 CNG did not have applicable procedures on-site where the activities were being performed.

a. CNG Tri-Cities has only one copy of emergency shutdown and startup procedures available for use by district personnel.

1. 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).

The General Manager stated, "No supervisor receives an individual copy" and further identified that the only copy is located in the Tri-Cities office and if they need information they contact people in the office.

2. Identified in CP 925 Emergency Policy. The Emergency Policy does not identify outage information. The General Manager identified that it is included Appendix B of CP 925. However, 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 Procedure #760 – 2008 updates to visual inspection of welds.

6. **Finding(s):**
 CNG did not follow their mapping procedures. (CP 860, 865, 869, 870, 880, and 881) Examples follow:

Project/Address	Completion Date	Issue
a. D0082088	04.18.07	Not mapped
b. D0084099	03.08.08	Not mapped
c. D0083742	03.08.08	Not mapped Proj. # on distr. line rpt. = D0083742 Proj. # on as built/dsgn. = D0083743
d. D0080845	11.21.06	Not mapped
e. 4525 Rd. 68, Kennewick	01.25.07	Not mapped
f. 6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
g. 224 Bear Dr., Richland	10.31.07	Not mapped

h.	6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
i.	9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
j.	9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped
k.	3914 Road 104, Pasco	12.24.07	Not mapped
l.	3910 Road 104, Pasco	10.06.06	Not mapped
m.	1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
n.	5109 Road 68, Pasco	03.26.08	Not mapped
o.	2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
p.	2885 Duportail Dr., Richland	09.28.07	Not mapped
q.	3065 Bluffs Dr., Richland	11.27.06	Not mapped
r.	3059 Bluffs Dr., Richland	02.05.07	Not mapped

7. **Finding(s):**

CNG did not follow their construction installation records procedures. (CP 860, 865, 869, 870, 880, and 881.) Examples follow:

- a. 7115 W. 6th Ave., Kennewick
- b. 9115 W. Clearwater Ave., Kennewick
- c. 9120 W. Clearwater Ave., Kennewick
- d. 6511 W. 5th Ave., Kennewick
- e. 3059 Bluffs Dr., Richland
- f. 3065 Bluffs Dr., Richland
- g. 596 Clermont Dr., Richland
- h. 2885 Duportail Dr., Richland
- i. 2855 Duportail St., Richland
- j. 3910 Road 104, Pasco
- k. 3914 Road 104, Pasco
- l. 5109 Road 68, Suite 101-105, Pasco
- m. 1915 Road 84, Pasco
- n. 5426 Road 68, A-D, Pasco
- o. 4525 Road 68 A, Pasco
- p. 6501 W. 6th Ave., Kennewick
- q. 224 Bear Dr., Richland
- r. 4525 Convention Pl., Pasco

8. **Finding(s)**

CNG incorrectly maintains only a listing of those contractors that have caused damage to their system rather than maintain a list of area excavators per their procedures manual. CNG did not follow their public awareness procedures CNG Procedure CP 500.

9. **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.
10. **Finding(s):**
CNG did not follow their calibration and equipment labeling procedures.
- a. CNG does not identify a calibration/recalibration procedure for their odorant testing instruments.
 - b. An odorator recalibration label dated 01.23.08 had not yet been updated on an instrument (Heath Odorator SN#2000629003) as of 10.08.08. Although further investigation identified that this instrument had been calibrated, CNG employees continued to utilize an instrument whose label clearly identified it had exceeded its calibration limits.
11. **Finding(s):**
Tri-Cities did not follow their pipeline marker procedures CP 610. See Probable Violation(s) 3, 6, and 30.
12. **Finding(s):**
- a. CNG did not follow their procedures for evaluation, investigation and documentation of underground leaks. The following leaks were discovered during system surveillance [Leak Survey] on 08.15.07 but were not graded until 08.21.07:
 1. 1527 Thayer, Richland
 2. 1503 Wright, Richland
 - b. The practice of field staff not assigning a grade to a leak (described by crews as "deferred to GM" [General Manager]) is not in accordance with their procedures. Leaks are to be graded as soon as possible by personnel that have intimate knowledge of the leak. There appears to be a misconception regarding the definition and usage of the word "deferment". Field personnel who have discovered and investigated a leak describe leak grading as having been "deferred" to the area General Manager.
 - c. CNG procedures make provisions for General Manager to defer repair of certain leaks based upon specific criteria. However, the General Manager has not identified criteria for all leak deferments.
13. **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:

- a. 1527 Thayer, Richland
- b. 1503 Wright, Richland
- c. 648 Cottonwood Dr., Richland
- d. 3184 Willow Point Dr., Richland
- e. 202 Kranichwood Ct., Richland
- f. 7325 W. Deschutes #B, Kennewick
- g. 5307 Texada Ln., Pasco
- h. 30 S. Vancouver St., Kennewick
- i. 6307 W. Rio Grande Ave., Kennewick
- j. 404 S. Dawes St., Kennewick

14. **Finding(s):**

CNG did not follow their procedures for evaluation, investigation and documentation of underground leaks. Records indicate that CNG responders did not identify that they had investigated the perimeter of the underground leak area utilizing a *combustible gas indicator* (CGI) at the following locations:

- a. 1527 Thayer, Richland
- b. 1503 Wright, Richland
- c. 648 Cottonwood Dr., Richland
- d. 3184 Willow Point Dr., Richland
- e. 202 Kranichwood Ct., Richland
- f. 7325 W. Deschutes #B, Kennewick
- g. 5307 Texada Ln., Pasco
- h. 30 S. Vancouver St., Kennewick
- i. 6307 W. Rio Grande Ave., Kennewick
- j. 404 S. Dawes St., Kennewick

15. **Finding(s):**

CNG Leak Survey and Leak Investigation Procedures CP 725 and 730 were not followed in that the company did not provide or was unable to provide clear and accurate records for the gas leak at Sycamore and Lewis Streets, Pasco, in accordance with their procedures.

- a. No records or documentation were provided at the time of inspection indicating that *leak grade procedures* were followed.
- b. No records or documentation were provided at the time of inspection indicating equipment *calibration* on 11.14.07 for FI units 48101 and 48240.
- c. CNG *FI Unit check/calibration process/procedures* were not followed.
 - 1. The two FI units used for this Grade 2 leak were not checked/calibrated prior to their use.

2. The two FI units calibration/accuracy check date was not indicated on either of the leak survey form (CNG 286) or a copy of the FI unit log attached to the leak survey form.
- d. Form CNG 295 *Leak Survey Detection Log records* for Business District Section 1, Kennewick District, Town of Pasco dated 11.07.07 and 11.26.07 contain incongruities in chronological record keeping.
 1. The 11.14.07 leak is documented as having been found after 11.20.07.
 2. Form CNG 295 identifies that this survey was performed and completed all on 11.26.07. However, Form CNG 286 identifies that the survey was completed on 11.07.07 and 11.26.07.
 - e. Leak Survey Detection Log (CNG 295) records indicate *conflicting leak grade information* for the same day. Form CNG 293 identifies that the General Manager rated the leak on 11.14.07 as a Grade 2 Leak but on Form CNG 295 on 11.14.07 the General Manager identified that the leak is rated as a Grade 3 Leak.
 - f. *Leak investigation and leak downgrade documentation* is consistently conflicting and insufficient. Form CNG 293 on 11.14.07 is identified as a deferred Grade 2 leak but on Form CNG 295 on 11.14.07 as a Grade 3 leak. But, on 03.12.08 leak is again identified as a Grade 2 and in conflict with the earlier Grade 3 determination.
 - g. *The form appears to have been completed after-the-fact by the General Manager on 12.18.07 and not by field personnel* as leaks were detected/graded/repared, etc. Additionally, the employee signature block states: "Survey Performed and Form Completed by" – again, this form appears to have been completed by the General Manager.
 - h. Form CNG 293 Substructure Damage/Leak Report indicate that the leak was:
 1. *First investigation* report identifies leak as Grade 2 on 11.14.07.
 - i. Leak deferment information provided does not include sufficient reasons for deferment of this Grade 2 Leak, as identified in CNG procedures.
 - ii. Leak read and deferment appears to have been based upon reads from an un-calibrated FI unit.
 - iii. Form 293 identifies that 19% gas was found at the main but no bar hole reads were taken. CNG procedures require that bar holes shall be created to test underground levels of gas with a CGI.
 - iv. No CGI equipment was identified on this form.
 - v. Form shows incident number 6158 assigned on 03.12.08 and work order number DD012954 assigned on 03.11.08 on a form that was by all accounts, completed on 11.14.07.
 2. *Second investigation* report identifies leak as Grade 3 on an unidentified date:
 - i. Form undated so site visit date unknown. Checked by General Manager on 03.10.08.

- ii. Form indicates that nothing is new in leak. However, bar hole reads on map indicate that gas has migrated to locations not previously identified as having residual reads.
 - iii. Unknown date so unknown whether calibration complete.
 - iv. Leak investigation procedures not followed. FI reads ppm but CGI is required to report %/ppm. No CGI equipment or SN identified as being used – no calibration records for CGI indicated.
3. *O&M Request Forms* for this leak
- i. Dated 11.14.07 forms do not contain instrument/equipment or calibration information.
 - ii. Dated 11.14.07 forms do not identify a leak grade. The gas read is illegible.
 - iii. Dated 06.16.08 forms do not contain instrument/equipment or calibration information.
 - iv. Dated 06.16.08 forms do not identify a leak grade.
 - v. Dated 06.16.08 forms do not sufficiently describe location/city information.
- i. Form 286 System Surveillance Record is incompatible with other leak records and is signed by employees and General Manager as correct. (Form incorrectly indicates no leaks: “completed survey all appeared ok.”)
 - j. Gas leak records do not contain sufficient data and information to assess the adequacy of the operator’s leakage program. The records do not contain the minimum information as required per WAC 480-93-187.
 - k. Based upon records provided, the present status of leak is indeterminate. Original leak form was re-used creating confusion and lack of information to document whether repaired on 11.07.08.

16. **Finding(s):**
CNG procedures 750.072 and 950.074 provide contradictory leak grading information.
17. **Finding(s):**
CNG calibration procedures were not followed. See Probable Violation(s) 2, 15, and 30.
18. **Finding(s):**
CNG valve procedure(s) CP 740.071 was not followed. CNG’s operational valves are not shown and numbered on the Operating Maps, High Pressure Line Sheets and District area maps for each town and line in each district. The following locations do not meet CNG procedural requirements:
- a. Pasco,
 - b. Kennewick, and
 - c. Richland.

- c. 220 E. Columbia Dr., Kennewick Access issues were identified by GM
No remediation action taken

24. **Finding(s):**
CNG did not follow their procedures by exceeding allowable remediation timeframes. See Probable Violation(s) 5 and 27.

12. **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 or grade leaks in accordance with the rule.

1. **Finding(s):**

Records indicate that CNG responders did not utilize a *combustible gas indicator* (CGI). Examples follow:

- a. 1527 Thayer, Richland
- b. 1503 Wright, Richland
- c. 648 Cottonwood Dr., Richland
- d. 3184 Willow Point Dr., Richland
- e. 202 Kranichwood Ct., Richland
- f. 7325 W. Deschutes #B, Kennewick
- g. 5307 Texada Ln., Pasco
- h. 30 S. Vancouver St., Kennewick
- i. 6307 W. Rio Grande Ave., Kennewick
- j. 404 S. Dawes St., Kennewick
- k. Sycamore & Lewis, Pasco

2. **Finding(s):**
 Leaks have not been assigned a grade in the field by personnel completing the leak evaluation. Leaks should be graded as soon as possible by personnel that have intimate knowledge of the leak. Leak grading has been incorrectly “deferred” to area General Manager by those field personnel who have discovered and/or investigated a leak. The potential for information to become misconstrued or corrupted during translation of details to offsite supervisory personnel exists. Underground leaks were discovered but were not immediately graded. The following leaks were discovered during *system surveillance [Leak Survey]* on 08.15.07.
- a. 1527 Thayer, Richland
 - b. 1503 Wright, Richland

3. **Finding(s):**
 Leak grading was not completed at the time of detection. Leak repair documentation is ambiguous. Also see Probable Violation 12, Finding 2 above. Examples follow:

Leak Survey for Kennewick Section 5:

	<u>Date leak Detected</u>	<u>Location/Address</u>	<u>Date ID'd as Repaired</u>	<u>Date Graded & Deferred by GM</u>
a.	08.09.07	1527 Thayer	08.13.07	08.21.07 Grade 2
b.	08.09.07	1503 Wright	08.14.07	08.21.07 Grade 2

4. **Finding (s):**
 Leak Investigation is a covered task: field personnel are not grading their found leaks. The practice of field staff deferring leak grading to the General Manager is inconsistent with their training. Examples follow:
- a. Sycamore & Lewis, Pasco
 - b. 1503 Wright Ave., Richland
 - c. 1527 Thayer, Richland

13. **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 person 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 Docket PG-030438 WAC 480-93-187(2) due to not properly recording CGI readings.

Repeat Probable Violation:

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

Charge(s):

Gas leak records are inadequate and do not contain information required under this rule. Oversight for purposes of correcting a noticed problem or inconsistency with leak records has not been conducted.

Finding(s):

Gas leak records identified below are missing one or more of the minimum requirements:

- a. 1527 Thayer, Richland
- b. 1503 Wright, Richland
- c. 648 Cottonwood Dr., Richland
- d. 3184 Willow Point Dr., Richland
- e. 202 Kranichwood Ct., Richland
- f. 7325 W. Deschutes #B, Kennewick
- g. 5307 Texada Ln., Pasco
- h. 30 S. Vancouver St., Kennewick
- i. 6307 W. Rio Grande Ave., Kennewick
- j. 404 S. Dawes St., Kennewick
- k. Sycamore & Lewis, Pasco
- l. 1845 Leslie Rd., Richland
- m. Rd. 27 & Warehouse Rd., Pasco
- n. Stearman Rd., Pasco (07.16.08)
- o. 1225 Fuji, Richland
- p. 8612 Massey, Pasco

14. **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;*

Repeat Probable Violation:

Repeat Probable Violation under Dockets UG-010113 and PG-081306 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 Tri-Cities 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.

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. Leak surveys have been completed utilizing maps which contain serious mapping errors and omissions, are outdated and are devoid or nearly devoid of dimension/location detail. Examples follow:

- a. Leak survey maps (2-C & 3-C) utilized to survey Section 1 business district in 2007 included hand-drawn mains and services but leak survey maps for the same area used in 2008 omitted these hand drawn mains and services. Additionally, CNG oversight of leak surveying is inadequate.
- b. The special leak survey completed 05.29.08 at Road 84, utilized two variations of the same map and each dated 05.01.08. No documentation provided or no documentation available to identify exactly what was leak surveyed, including the project limits, for the special leak survey on Road 84.

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

(2) *Each gas pipeline company must maintain, test for accuracy, calibrate and operate gas detection instruments in accordance with the manufacturer's recommendations. If there are no written manufacturer's recommendations or schedules, then the gas pipeline company must test such instruments for accuracy at least monthly, but not to exceed forty-five days between testing, and at least twelve times per year. The gas pipeline company must recalibrate or remove from*

service any such instrument that does not meet applicable tolerances. Records of accuracy checks, calibration and other maintenance performed must be maintained for five years.

Repeat Violation:

Repeat violation by Commission Order under Docket PG-030438 WAC 480-93-188.

Repeat Probable Violation:

Repeat Probable Violation under Dockets UG-011161, UG-011305, and PG-030435 WAC 480-93-188.

Charge(s):

Company did not properly calibrate instruments and did not keep proper calibration records.

1. **Finding(s):**

Leak records are incomplete. Records (CNG 332 Work Orders) do not indicate that *calibrated FI units* were used to complete leak investigations. Examples follow:

- a. 2620 W. Deschutes Ave., Kennewick – 05.20.08
- b. 2720 University Dr., Richland – 05.20.08

2. **Finding(s):**

CNG did not provide or was unable to provide calibration records for FI & CGI equipment used for leaks at the following locations:

- a. Sycamore & Lewis, Pasco
- b. 1503 Wright Ave., Richland
- c. 1527 Thayer, Richland

3. **Finding(s):**

CNG did not provide or was unable to provide calibration records/documentation for FI & CGI equipment used to complete HO leak surveys. Tri-Cities General Manager identified that they do not include SN for equipment used during their HO leak surveys and if piece of equipment was “down”, employees would just use another employees assigned FI or CGI. General Manager stated they do not track this equipment used for leak surveys because all equipment is calibrated monthly.

4. **Finding(s):**

It is inconclusive as to whether high pressure mains were surveyed with calibrated FI units on 10.22.07 FI calibration records are problematic for the leak surveys conducted on the Richland Lateral (228-240 psig) and Burbank Heights (290 psig) on 10.22.07 for FI unit 48101 and 48240. Flame unit calibration records for these surveys contain an atypical original signature on what should be only a copy

of the original calibration records kept with the survey. The original date and signature calibration records are kept with the FI unit itself. These original calibration records do not contain the same date or accompanying signature for 10.22.07.

16. **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 Dockets UG-010113, PG-060216, and UG-020706 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.

Finding(s):

CNG has incorrectly applied the persons and time requirements to be consecutive under the definition for “High occupancy structure or area”. As of 01.18.08 (2007 inspection cycle) CNG has removed the following HO structures from their public building inspection records list and no HO survey was completed in 2008. The following examples provide a credible indication that other HO structures may have been incorrectly purged from Tri-Cities HO leak survey list:

- a. 321 N. Columbia Center Blvd. #C, Kennewick – Batteries Plus – Active
- b. 321 N. Columbia Center Blvd. #B, Kennewick – Crosspointe Assoc/Windermere
- c. 321 N. Columbia Center Blvd. #A, Kennewick – Fusion Café/dba Express Grill
- d. 2500 W. 4th Ave., Kennewick – Grace United Reformed Church

17. **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 excavation 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):

Records and documentation insufficient to determine whether surveyed from point of damage to the service tie-in.

Finding(s):

Records and documentation insufficient to determine whether surveyed from point of damage to the service tie-in. Examples follow:

- a. 1845 Leslie Rd., Richland
- b. Rd. 27 & Warehouse Rd., Pasco
- c. Stearman Rd., Pasco
- d. 1225 Fuji, Richland
- e. 8612 Massey, Pasco

18. **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 record or document one or more of the above minimum requirements in their HO structure leak surveys for Tri-Cities during the following frequency cycles:

- a. 2007
- b. 2008

2. **Finding(s):**

CNG records did not provide sufficient leak survey documentation to assure that the Tri-Cities leak survey had taken into account all main and services.

- a. 2007
- b. 2008

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

(6) *Each gas pipeline company must perform self audits of the effectiveness of its leak detection and recordkeeping programs. Each gas pipeline company must*

maintain records of the self audits for five years. Self audits must be performed as frequently as necessary, but not to exceed three years between audits. At a minimum, self audits should ensure that:

- (a) Leak survey schedules meet the minimum federal and state safety requirements for gas pipelines;*
- (b) Consistent evaluations of leaks are being made throughout the system;*
- (c) Repairs are made within the time frame allowed;*
- (d) Repairs are effective; and*
- (e) Records are accurate and complete.*

Repeat Probable Violation:

Repeat Probable Violation under Docket PG-070004 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."

Charge(s):

CNG did not perform effective leak survey self audits.

Finding(s):

CNG did not provide or was unable to provide sufficient documentation to verify that they properly reviewed HO leak survey, special leak surveys, pipelines over/equal to 250 psig, and business area leak survey records for Tri-Cities meeting the above self evaluation requirements for the following:

- a. 2007
- b. 2008

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

(7) Each gas pipeline company must file with the commission the following annual reports no later than March 15 for the proceeding calendar year:

- (c) A report detailing all construction defects and material failure resulting in leakage. Each gas pipeline company must categorize the different types of construction defects and material failures anticipated for their system. The report must include the following:*
 - (i) Types and numbers of construction defects; and*
 - (ii) Types and numbers of material failures.*

Charge(s):

CNG has not provided incident and hazardous failure and defect information for preventative and self audit purposes.

Finding(s):

CNG has not provided incident and hazardous failure and defect information for preventative and self audit purposes. Examples follow:

- a. The 2006 report was not filed in a timely manner.
- b. The submitted reports are not sufficiently detailed and do not separate the number of construction defects from the number of material failures.
- c. Construction defect types are not identified.
- d. Type of material failure was not identified.

21. **49 CFR §199.119 Reporting of anti-drug testing results**

- (f) *A service agent (e.g., Consortia/Third Party Administrator as defined in 49 CFR Part 40) may prepare the MIS report on behalf of an operator. However, each report shall be certified by the operator's anti-drug manager or designated representative for accuracy and completeness.*

Charge(s):

MIS report data contains inaccuracies.

Finding(s):

The 2006 US DOT Drug and Alcohol Testing MIS Data Collection form received by the commission on March 16, 2007, has summary errors under Section III, Drug Testing Data.

22. **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.

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. Riser E. of 128 W. Kennewick Ave., Kennewick
- b. 3001 W. Kennewick Ave., Kennewick
- c. 13 E. Main St., Walla Walla

23. **49 CFR §192.365 Service lines: Location of valves**

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

Repeat Probable Violation:

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

Charge(s):

Required service line shutoff valves were not readily accessible.

Finding(s):

Required service line shutoff valves were not readily accessible. Examples follow:

- a. 113 W. Kennewick, Kennewick Stub/meterless riser in tree stump
- b. 220 E. Columbia, Kennewick Buried
- c. 222604 E. Game Farm Rd., Finley Buried

24. **49 CFR §192.463 External corrosion control: Cathodic protection**

- (a) *Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.*

Repeat Probable Violation:

Repeat Probable Violation under Dockets PG-031597, PG-031598, PG-041788, 49 CFR §192.463.

Repeat Probable Violation under Docket PG-050001 49 CFR 192.481 due to facility access issues by obstructions or inability to gain access from customer. This Probable Violation includes details from Docket PG-030438 wherein CNG committed to conduct a comprehensive O&M Review and revision.

Charge(s):

CNG did not provide a cathodic protection pipe-to-soil read information to the commission staff as requested.

Finding(s):

The gas pipeline company is required to provide pertinent records and information to the commission. During pre-field inspection, commission staff was unable to obtain a satisfactory pipe-to-soil read at 2825 W. Kennewick Ave., Kennewick. Due to time constraints, commission staff requested that CNG complete a site visit for the purposes of providing accurate pipe-to-soil information for the service. After their site visit, CNG reported back to commission staff that they were unable to obtain a read for this location due to riser being surrounded by concrete [parking lot] and instead provided a read for the riser well to the E. of this location.

25. **49 CFR §192.481 Atmospheric corrosion control: Monitoring**

(a) *Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:*

If the pipeline is located:

Onshore

Offshore

Then the frequency of inspection is:

At least once every 3 calendar years, but with intervals not exceeding 39 months

At least once each calendar year, but with intervals not exceeding 15 months

Repeat Violation:

Repeat Violation by Commission Order under Docket PG-060217 49 CFR §192.481. Lack of inspection of pipe supports was also noted under Dockets PG-041532, PG-030438 and PG-030435. Each time, we requested that the support straps be removed to check for corrosion. In two cases, surface rust with minor corrosion was found. In one case the pipeline coating was flaking off under the support straps. CNG removed the support straps and inspected, cleaned and re-coated the pipeline. CNG's letter of intent dated June 18, 2004, committed to incorporate inspections of pipelines under supports, straps or other places where moisture accumulation is possible and could cause corrosion.

Repeat Probable Violation:

Repeat Probable Violation under Dockets UG-011161, PG-021132, PG-021297 and PG-021601 CFR 49 §192.481. Staff noted that under Dockets PG-021297 and PG-021601 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 Docket UG-010113 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." Repeat Probable Violation under Dockets PG-031597 and PG-031598 49 CFR §192.491 Records but details that CNG did not meet requirements under §192.481 due to not meeting the 3 calendar year interval for AC.

Noted Area of Concern:

Noted Area of Concern by Commission Order under Dockets UG-010113, and UG-011305 49 CFR §192.481.

Charge(s):

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

Finding(s):

CNG did not complete their atmospheric corrosion control monitoring every 3 years and exceeded the frequency interval for gas pipelines at the following locations:

- a. Kennewick
- b. Pasco

26. **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 disbanded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.*

Repeat Probable Violation:

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

Also noted under this docket were similar details previously identified under Dockets PG-041532, PG-030438, and PG-030435. 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 Docket PG-070002 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.

Finding(s):

The following are examples of locations which have atmospheric corrosion issues:

a.	11 S. Dayton, Kennewick	Damaged wrap
b.	321 W. Kennewick, Kennewick	Coating missing or damaged
c.	313 W. Kennewick, Kennewick	No interface coating
d.	213 W. Kennewick, Kennewick	Damaged wrap
e.	13 S. Cascade, Kennewick	Missing wrap
f.	205 W. Kennewick, Kennewick	Missing wrap
g.	113 W. Kennewick, Kennewick	No interface coating
		Coating missing or damaged
h.	202 E. Columbia Dr., Kennewick	Damaged wrap
i.	220 E. Columbia Dr., Kennewick	Coating missing or damaged
		Access issues ID'd by GM
		Buried valve
j.	207 E. Columbia Dr., Kennewick	Coating missing or damaged
k.	221 E. Columbia Dr., Kennewick	No Coating
		Partially buried meter
l.	2825 W. Kennewick Ave., Kennewick	No interface coating
m.	2825 W. Kennewick Ave., Kennewick	
	West End of complex	No interface coating
n.	3001 W. Kennewick Ave., Kennewick	Unable to examine pipe coating at tack- welded pipe supports
o.	2905 W. Kennewick Ave., Kennewick	Damaged wrap
p.	128 W. Kennewick Ave., Kennewick	Damaged wrap

q.	Riser E. of 128 W. Kennewick Ave., Kennewick	Damaged wrap Unable to examine pipe coating at tack-welded pipe supports
r.	43601 S. Finley Rd., Finley Odorizer	Coating missing or damaged Coating issues under supports attached to pipe No interface coating
s.	222604 E. Game Farm Rd., Finley	Coating missing or damaged
t.	222608 E. Game Farm Rd., Finley	Coating missing or damaged
u.	208 N. 2 nd Ave., Walla Walla	Damaged wrap
v.	13 E. Main St., Walla Walla	Damaged wrap
w.	Riser S. of 21 E. Main St., Walla Walla (Touch of Class S. of Darrah's)	Damaged wrap
x.	57 E. Main St., Walla Walla	Damaged wrap
y.	121 E. Main St., Walla Walla	Damaged wrap
z.	115 E. Main St., Walla Walla	Damaged wrap
aa.	1 E. Alder St., Walla Walla	No interface coating
bb.	16 E. Main St., Walla Walla	No interface coating
cc.	Riser for Meter #194891, Walla Walla	Damaged wrap

27. **49 CFR §192.481 Atmospheric corrosion control: Monitoring**

(c) *If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by §192.479.*

Repeat Probable Violation:

Repeat Probable Violation under Docket PG-050001 49 CFR §192.481 due to facility access issues particularly due to obstructions or inability to gain access. This Probable Violation details Docket PG-030438 wherein CNG committed to conduct a comprehensive O&M Review and revision under Commission Order.

Repeat Probable Violation under Docket PG-070002 49 CFR §192.479 due to lack of documentation for gaining access to inaccessible meters to conduct atmospheric corrosion inspections for 2004 through 2006.

Repeat Probable Violation under Docket PG-070002 WAC 480-93-110(9) due to no documentation for remedial action of Atmospheric corrosion in Sunnyside for 2004 through 2006.

Charge(s):

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

Finding(s):

Atmospheric corrosion issues noted by CNG field personnel did not receive corrective action. Examples follow:

a.	321 W. Kennewick Ave., Kennewick	Corrective action requested 01.03.05 No remediation action taken
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- b. 213 W. Kennewick Ave., Kennewick Corrective action requested 01.03.05
No remediation action taken
- c. 220 E. Columbia Dr., Kennewick Access issues Identified by GM
No remediation action taken

28. **49 CFR §192.605 Procedural manual for operations, maintenance, and emergencies**

(a) *Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. . . . This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. . . . Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.*

Repeat Probable Violation:

Repeat Probable Violation under Docket UG-010113 49 CFR §192.605.

Charge(s):

CNG did not update their manual of written procedures within 15 months.

Finding(s):

CNG procedure manual references a procedure that does not exist in the manual. CNG did not properly review procedure 747.012 under 2) and 3) which describes that follow-up [odorization] testing shall be conducted in accordance with paragraph .046 of this CP. Paragraph .046 does not exist.

29. **49 CFR §192.605 Procedural manual for operations, maintenance, and emergencies**

(b) *Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.*

(3) *Making construction records, maps, and operating history available to appropriate operating personnel.*

Charge(s):

Records, maps and operating history are not readily available to operating, maintenance, and emergency response personnel.

1. **Finding(s):**

CNG does not have readily available, clear, accurate, or useable records regarding the location and characteristics of pipeline elements for use in emergency response, pipe location, and marking. The most recent grid map update has been identified as 02.28.08, but some of the maps have not been updated since 1990 and the grid information provided on mapping documents is erroneous.

- a. Making emergency area shutdown information ineffectual,
- b. Pipeline maps contain little or no dimension information,
- c. Maps do not contain marker locations,

- d. Maps do not contain valve location/information,
- e. General Manager identified that due to large amount of growth and expansion in the Tri-Cities area it forced CNG to rename/adjust their map grid area identification.
 - 1. All documents with grid change name have not been updated to reflect new grid making it very difficult to find as built maps,
 - 2. No key has been provided to translate or tie-in old grid map location names with the new grid location names.
- f. Mapping issues are compounded due to utilizing the same deficient [not updated] maps to meet the interval monitoring requirements of separate rules such as, leak surveys and patrolling.
 - 1. The maps that should convey up-to-date (within six months) as-built information for use by field personnel, are the same [not updated] maps repurposed for the separate functions of conducting leak surveys, locating and patrolling.
 - 2. It appears that Leak Survey and Patrolling documentation added in the field and identified on a particular map by CNG field personnel has not been reviewed and then translated to the next survey or patrol interval map. For example, in an effort to update their leak survey map, field personnel hand drew two main extensions and several services on their 2007 Leak Survey Map in Kennewick for Grids 2-C & 3-C. These main extensions and services no not appear on 2008 Leak Survey map Kennewick for Grids 2-C and 3-C.
- g. Gas Pipeline *Construction Mapping Records*. CNG has not updated construction mapping records. Examples follow:

Project #/Address	Completion Date	Issue
1. D0082088	04.18.07	Not mapped
2. D0084099	03.08.08	Not mapped
3. D0083742	03.08.08	Not mapped
		Proj. # on distr. line rpt. = D0083742
		Proj. # on as built/dsgn. = D0083743
4. D0080845	11.21.06	Not mapped
5. 4525 Rd. 68, Kennewick	01.25.07	Not mapped
6. 6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
7. 224 Bear Dr., Richland	10.31.07	Not mapped
8. 6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
9. 9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
10. 9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped
11. 3914 Road 104, Pasco	12.24.07	Not mapped

12.	3910 Road 104, Pasco	10.06.06	Not mapped
13.	1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
14.	5109 Road 68, Pasco	03.26.08	Not mapped
15.	2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
16.	2885 Duportail Dr., Richland	09.28.07	Not mapped
17.	3065 Bluffs Dr., Richland	11.27.06	Not mapped
18.	3059 Bluffs Dr., Richland	02.05.07	Not mapped

h. *Leak Survey Mapping Records.* CNG has not updated mapping records used to complete leak surveys. Examples follow:

<u>Project/Map No.</u>	<u>Completion Date</u>	<u>Issue</u>
1. D0082088	04.18.07	Not mapped
2. D0084099	03.08.08	Not mapped
3. D0083742	03.08.08	Not mapped Proj. # on distr. line rpt. = D0083742 Proj. # on as built/dsgn. = D0083743
4. D0080845	11.21.06	Not mapped
5. 4525 Rd. 68, Kennewick	01.25.07	Not mapped
6. 6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
7. 224 Bear Dr., Richland	10.31.07	Not mapped
8. 6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
9. 9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
10. 9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped
11. 3914 Road 104, Pasco	12.24.07	Not mapped
12. 3910 Road 104, Pasco	10.06.06	Not mapped
13. 1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
14. 5109 Road 68, Pasco	03.26.08	Not mapped
15. 2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
16. 2885 Duportail Dr., Richland	09.28.07	Not mapped
17. 3065 Bluffs Dr., Richland	11.27.06	Not mapped
18. 3059 Bluffs Dr., Richland	02.05.07	Not mapped

- i. *Patrolling Mapping Records.* CNG has not updated mapping records used for patrolling. Examples follow:

<u>Project #/Map No.</u>	<u>Completion Date</u>	<u>Issue</u>
1. D0082088.	04.18.07	Not mapped
2. D0084099	03.08.08	Not mapped
3. D0083742	03.08.08	Not mapped Proj. # on distr. line rpt. = D0083742 Proj. # on as built/dsgn. = D0083743
4. D0080845	11.21.06	Not mapped
5. 4525 Rd. 68, Kennewick	01.25.07	Not mapped
6. 6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
7. 224 Bear Dr., Richland	10.31.07	Not mapped
8. 6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
9. 9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
10. 9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped
11. 3914 Road 104, Pasco	12.24.07	Not mapped
12. 3910 Road 104, Pasco	10.06.06	Not mapped
13. 1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
14. 5109 Road 68, Pasco	03.26.08	Not mapped
15. 2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
16. 2885 Duportail Dr., Richland	09.28.07	Not mapped
17. 3065 Bluffs Dr., Richland	11.27.06	Not mapped
18. 3059 Bluffs Dr., Richland	02.05.07	Not mapped

2. **Finding(s):**

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).

30. **49 CFR §192.605 Procedural manual for operations, maintenance, and emergencies**

(b) *Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.*

(8) *Periodically reviewing the work done by operator personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance and modifying the procedure when deficiencies are found.*

Repeat Probable Violation:

Repeat Probable Violation under Docket UG-020640 49 CFR §192.605(b)(8).

Charge(s):

CNG has not properly reviewed the work completed by personnel to determine effectiveness.

1. **Finding(s):**
Pipeline markers: The work completed by company personnel in this regard has not been properly reviewed for effectiveness. See Probable Violation 3, 6, and 11.
2. **Finding(s):**
Leak surveys: CNG has not properly reviewed the day-to-day work completed by company personnel to determine its effectiveness. See Probable Violation 2, 6, 11, 12, 14, 15, 16, 17, 18, 19, and 29.
3. **Finding(s):**
Gas leak records are inadequate and do not contain the required information. Oversight for purposes of correcting a noticed problem or inconsistency with leak records has not been conducted. See Probable Violation 2, 11, 13, 14, and 15.
4. **Finding(s):**
Maps: CNG has not properly reviewed and corrected deficiencies of maps utilized by company personnel. See Probable Violation 2, 3, 6, 11, 14, 29, and 32.
5. **Finding(s):**
Leak survey maps: CNG has failed comply with a previously identified area of concern [Docket PG-060216] by not incorporating all HO structures into the leak survey program. UTC staff identified an area of concern regarding HO requirements in an August 2006 letter stating that operators have until June 5, 2007, to fully implement these requirements. On October 25, 2006, CNG responded that this project was in work and further identified that they would incorporate these requirements into their leak survey maps by June 5, 2007. Due to the fact that staff has identified serious mapping issues elsewhere in this report and HO structures have been removed from the HO survey list, staff is not convinced that all HO structures have been identified on their leak survey maps. See Probable Violation 2, 3, 6, 11, 14, 29, and 32.
6. **Finding(s):**
Construction records: CNG has not properly reviewed the day-to-day documentation completed by company personnel to determine its adequacy and effectiveness. See Probable Violation 2, 3, 4, 8, 9, 10, and 29.

7. **Finding(s):**

Calibration: CNG has not properly reviewed the day-to-day documentation completed by company personnel to determine its adequacy and effectiveness. See Probable Violation 2, 3, 11, and 15.

31. **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 Docket UG-011161 49 CFR §192.614(c).

Charge(s):

CNG does not have a complete list of excavators for the Tri-Cities area.

Finding(s):

General Manager identified that Tri-Cities maintains a listing of those contractors that have caused damage to their system rather than maintain a list of area excavators.

32. **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's maps are not up-to-date.

1. **Finding(s):**

CNG does not have readily available, clear, accurate, and useable information regarding the location and characteristics of pipeline elements for use in emergency response, pipe location, and marking. The most recent map update was 02.28.08. However, grid location information provided is incorrect thereby making emergency shutdown area information ineffectual. Examples follow:

<u>Project #/Address</u>	<u>Completion Date</u>	<u>Issue</u>
a. D0082088	04.18.07	Not mapped
b. D0084099	03.08.08	Not mapped
c. D0083742	03.08.08	Not mapped Proj. # on distr. line rpt. = D0083742 Proj. # on as built/dsgn. = D0083743
d. D0080845	11.21.06	Not mapped

e.	4525 Rd. 68, Kennewick	01.25.07	Not mapped
f.	6501 W. 6 th Ave, Kennewick	11.16.07	Not mapped
g.	224 Bear Dr., Richland	10.31.07	Not mapped
h.	6511 W. 5 th Ave, Kennewick	02.01.08	Not mapped
i.	9120 W. Clearwater Ave., Kennewick	03.27.07	Not mapped
j.	9115 W. Clearwater Ave., Kennewick	11.16.06	Not mapped
k.	3914 Road 104, Pasco	12.24.07	Not mapped
l.	3910 Road 104, Pasco	10.06.06	Not mapped
m.	1915 Road 84, Pasco	11.28.06	Not mapped at location ID'd on svc. card
n.	5109 Road 68, Pasco	03.26.08	Not mapped
o.	2855 Duportail St., Richland	11.08.06	Not mapped at location ID'd on svc. card
p.	2885 Duportail Dr., Richland	09.28.07	Not mapped
q.	3065 Bluffs Dr., Richland	11.27.06	Not mapped
r.	3059 Bluffs Dr., Richland	02.05.07	Not mapped

2. **Finding(s):**
Emergency shut-down information/plan is not provided at the sites where shut down activity is being performed.

3. **Finding(s):**
Valve locations are not identified on the Tri-Cities maps.

33. **49 CFR §192.747 Valve maintenance: distribution system**

(a) *Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year.*

Repeat Violation:

Repeat Violation by Commission Order under Docket PG-030438 49 CFR §192.747.

Repeat Probable Violation:

Repeat Probable Violation under Docket PG-060216 WAC 480-93-018. Repeat Probable Violation under Dockets PG-030435, UG-010113 and UG-011305 49 CFR §192.747.

Recommendation Noted:

Repeat Recommendation under Docket PG-021132 CFR §192.747 for inconsistent valve maintenance records documentation.

Charge(s):

CNG did not provide or was unable to provide sufficient valve maintenance documentation in accordance with this rule.

Finding(s):

CNG did not provide or was unable to provide sufficient valve maintenance documentation for the gas pipeline at the following locations:

- a. Pasco
- b. Kennewick
- c. Richland

AREAS OF CONCERN OR FIELD OBSERVATIONS

1. **WAC 480-93-015(1) Odorization of gas**
CNG's procedures do not clearly identify an engineering based method for choosing the location to conduct sniff tests. The General Manager identified that the method utilized to determine Tri-Cities sniff test locations are based solely upon the following criteria: 1) large customer; 2) easy access; and 3) high usage.
Documentation indicates that monthly sniff tests are conducted at 33 rotational locations in those Tri-Cities systems served by 9 odorizers. However, it is unclear whether these test locations adequately represent those locations where odorant levels are most likely to be the weakest or are continually reviewed and adjusted for factors such as system growth.
2. **WAC 480-93-015(2) Odorization of gas**
CNG did not have available at the time of inspection or was unable to provide calibration records for instruments utilized in Tri-Cities to perform sniff tests from December 2006 through December 2007. The instruments were not identified on test records and it was verbally identified that more than one instrument had been utilized to conduct sniff tests in this area.
3. **WAC 480-93-018(1) Records**
Records supporting CNG employee qualifications reported in the Energy World database (which is used to track and maintain operator qualification records) did not match the actual CNG test records.
CNG should strongly consider devising a method to audit and monitor Energy World database records in concert with CNG's actual test records to ensure accuracy in reporting.
4. **WAC 480-93-175(3) Moving and lowering metallic gas pipelines**
Complete study information for Road 84, Pascoe was not completed or was unavailable at time of inspection. It is unclear how pipeline study information regarding the lowering of the pipeline, such as deflection angle excavation, for Road 84 in Pascoe was communicated to field personnel for the construction phase.
5. **WAC 480-93-180(1) Plans and procedures**
CNG procedure 750.082 contains conflicting language. The first sentence of this procedure appears to require that Grade 2 leak repair deferral approval is needed from

only *one* of the listed authorities. However, the second sentence appears to require that leak repair deferral approval is needed from *all* listed authorities.

6. **49 CFR §192.383 Excess flow valve customer notification.**

The gas pipeline company should revise their procedures to become compatible with their present choice of EFV installation and training. CNG identified that they had discontinued their voluntary EFV program and had begun mandatory EFV installation effective June 3, 2008. CNG further identified that they had adjusted their training to reflect the mandatory EFV installation choice. However, CNG's present procedure CP780 still identifies a voluntary program.

Staff acknowledges that CNG presently exceeds the EFV notification requirements.

7. **WAC 480-93-180(3) Plans and procedures**

The remediation procedure utilized by a CNG employee at 105 W. Kennewick was not in accordance with CNG procedures. A plastic pop bottle top had been installed to maintain a separation between a meter casing and underground customer piping. A CNG employee was observed remediating this impingement/concentrated stress/potential CP problem by removing the pop bottle top and kicking the customer underground piping until a small separation existed between the two. The CNG employee did not ascertain whether customer piping contained product prior to remediation or whether any post remediation damage had been caused to that piping.

8. **WAC 480-93-185(3)(b) Gas leak investigation**

Records lack sufficient detail to indicate that CNG investigated foreign leak(s) in accordance with the rule at 1207 Canyon Lakes Dr., Kennewick.

- a. No documentation available to verify that CNG provided notification to the property owner or an adult person occupying the premises.
- b. No documentation available to verify that CNG maintained customer notification records for the foreign leak.

APPENDIX

CNG PAST LETTERS OF INTENT COMMITMENTS

1. *Docket PG-021297 49 CFR §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 Docket UG-010113 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. *Docket PG-021601 49 CFR §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 Docket UG-010113 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 Docket PG-060217 49 CFR §192.481 due to inappropriate monitoring for AC under pipe supports. Also noted under this docket were similar details previously identified under Dockets PG-041532, PG-030438, and PG-030435. 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 Docket PG-060216 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 Docket PG-060216 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 Docket PG-050001 49 CFR §192.481 due to facility access issues by obstructions or inability to gain access from customer. This Probable Violation includes details from Docket PG-030438 wherein CNG's Letter of Intent committed to conduct a comprehensive O&M Review and revision.*
7. *Under Docket PG-070004 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 Docket PG-070004 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 Docket PG-070004 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. *Docket PG-081306 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 AGREEMENTS

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