Woodard, Marina (UTC)

From: Lykken, David (UTC)
Sent: Friday, October 02, 2009 2:28 PM
To: Zuehlke, Stephanie (UTC)
Cc: Woodard, Marina (UTC)
Subject: FW: PG-080109 Kennewick Inspection Response
Attachments: PG 080109 Cover Letter.doc; PG 080109 Response Body.doc

CNG's response. I have proposed alternative dates for them to consider

10/23, 10/27 & 10/29

Dave

From: Meissner, Keith [mailto:Keith.Meissner@cngc.com]
Sent: Friday, October 02, 2009 1:39 PM
To: Soiza, Anne (UTC)
Cc: Lykken, David (UTC); BOOK, ELDON; Marek, Chanda
Subject: PG-080109 Kennewick Inspection Response

Attached are the cover letter and response document for the subject inspection. Signed copies on CNGC letterhead were placed into US mail today.

We would like to schedule a meeting with you, and Dave Lykken to discuss our response, and the concerns that we describe in the cover letter. Eldon Book, Chanda Marek, and I would attend that meeting. We offer 2 prospective dates, but understand if you would like to propose alternatives: October 13th, or October 15th. We are ready to schedule those days entirely if needed to cover our concerns and further explain our response to you. Please indicate the length of meeting you would like to schedule.

Keith A. Meissner, PE
Manager, Safety and Compliance
Cascade Natural Gas Corporation
(206) 381-6734

October 2, 2009

Anne Soiza
Director, Pipeline Safety
Washington Utilities and Transportation Commission
P.O. Box 47250
1300 S. Evergreen Park Dr. SW
Olympia, WA 98504

Subject: Docket PG-080109 - 2008 Tri-Cities Natural Gas Pipeline Safety Inspection

Dear Ms. Soiza:

Attached is our response to the subject inspection report of July 31, 2009, regarding the autumn 2008 inspection of our Kennewick operations.

Cascade and WUTC Pipeline Safety Staff have maintained a cooperative approach toward compliance with pipeline safety codes. We are concerned the tone of this report and other recent inspections communicate a change compared to our past interactions. We want to continue our cooperative efforts toward our shared goal of pipeline safety. We would like meet with you and reach mutual understanding about Staff's intentions for this report and future inspections, discuss our response, and our compliance programs. As such, we have three primary topics we want to discuss at that meeting.

First, your cover letter stated concern over repeat violations and Cascade's address of previous findings company-wide. We have limited understanding of the basis for your concerns. We believe Staff has misunderstood our efforts regarding past inspection reports and carrying results from one inspection unit to the whole company. We do not believe that Staff's findings in this report constitute a failure to meet the April 5, 2005 order. We would like to discuss our programs with you so that these findings and your concerns can be placed into context of our entire pipeline safety effort.

Secondly, we believe that many of the findings presented as probable violations in the report are not probable violations. The findings appear to contain opinions of how Cascade should conduct its business beyond Washington and federal code requirements. Some of the report findings indicate that Staff drew conclusions without inspecting available records. The findings also contain interpretations of the codes inconsistent with the codes and prior enforcement. Several of the findings presented in this report are duplicative and do not provide any new information, which is confusing when attempting to understand the concepts that Staff is trying

to explain. We would like to fully discuss these perceptions with you so that we can attain a fuller understanding and avoid confusions.

Thirdly, some of the findings demonstrate incomplete records, difficulty in displaying compliance, and management that can be improved. The repetitive and lengthy nature of the report makes it all too easy for us to take away an incorrect impression of Staff's concerns. We want to meet to discuss the factors that you consider key for Cascade to improve so that we can mutually work toward mitigating those problems.

Sincerely,
CASCADE NATURAL GAS CORP.

Eldon N. Book
Executive Vice President and Chief Operating Officer

Cc: Tim Clark
Chanda Marek
Keith Meissner

Cascade Natural Gas
2008 Tri-Cities Natural Gas Pipeline Safety Inspection
UTC Docket PG-080109

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

Each meter has been corrected so that it has a sticker with our name on it.

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.

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. 6th Ave, Kennewick	11.16.07	Not mapped
g.	224 Bear Dr., Richland	10.31.07	Not mapped
h.	6511 W. 5th 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

Please refer to our response to Finding 3.3.

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. 35th, Kennewick	O-3
e.	01.02.08	Grunderson, Finley	O-1
f.	09.08.08	2901 Commercial Ave., Pasco	O-05

WAC 480-93-015 does not require that sniff test records contain sniff test instrument data. The finding does not demonstrate that a probable violation exists.

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. 35th, Kennewick	O-3
e.	01.02.08	Grunderson, Finley	O-1
f.	09.08.08	2901 Commercial Ave., Pasco	O-05

Sniff test instrument calibration records show that all instruments used by the Kennewick employees during the specified period were calibrated as required. This is in compliance with 480-93-015(4). These calibration records were reviewed by Staff at the time of inspection.

The finding specifies sniff test documents as missing instrument calibration information. WAC 480-93-015 does not require that sniff test documents contain instrument calibration data. The finding does not demonstrate that a probable violation exists.

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, contains 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

a. The walking survey using the FI units was finished on August 9, 2007. The August 10 to 15 activities were leak investigation and repair, which is separate from leak survey. Employees listed the completion date as the August 15 date, when the correct date for survey completion is August 9, 2007.

b. The leak log on the survey documents show one detected date for each leak. There is no conflict.

c. The leak log attached to the survey document does not show the correct leak repair date. The leak record demonstrates that the leak was repaired on August 28, 2007. Reviewing this finding, and other findings related to this form, it appears our employees were entering dates onto this leak survey form that were not repair dates.
   1. We do not have sufficient records to demonstrate that this leak was probed and graded when it was discovered on August 9, 2007. The first investigation we have documented is August 13, 2007. (See next item.) We did not record a specific leak grade as a Grade 2 or Grade 3 until August 21, 2007.
   2. The investigation document shows the work we did on August 13 to investigate and excavate the leak. The notation indicates that our

employees could not find the specific source of the leak and no repairs were completed.

i. No map of bar hole locations was on the document.
ii. The critieria are the bar hole readings, and the map of their locations. This is repetitive of (i) and (iii).
iii. No bar hole readings were identified.
iv. No equipment was identified as being used for this investigation.
v. Pipe condition was reported on the form as good. This is a requirement of 480-93-110 because we excavated the pipe, and not a leak investigation requirement.
vi. Pipe type and size is required for the leak record, but not for leak investigations.

3. The record does not indicate the instrument used by our employee. Our calibration records for CGIs show that all instruments available for that investigation were calibrated.

d. The leak investigation and repair documentation demonstrates that the leak was repaired on November 6, 2008. The date written on the survey record is incorrect.
1. The first record of investigation is August 14, 2007. The leak was discovered on August 9, 2007.
2. The drawing created by our employees on August 14, 2007 was not stapled to the work order. The forms do not indicate the instrument used by our employee. Our calibration records for CGIs show that all instruments available for that investigation were calibrated.
i. The sheet was found and is now attached.
ii. The map of readings was completed.
iii. The critieria are the bar hole readings, and the map of their locations. This is repetitive of (ii) and (iv).
iv. Bar hole readings are identified on the drawing.
v. No equipment was identified as being used for this investigation.
vi. The pipe was not excavated on August 13, 2007. No pipe inspection was required.
vii. Pipe type and size is required for the leak record, but not for leak investigations.

e. Please see the attached calibration information for both FI instruments used for the survey showing calibration dates for August 8 and 9, 2007. Those instruments were not used after those dates because the walking survey had been completed. See item (a).

f. 1527 Thayer was repaired on 8-28-07, and a follow-up was performed on 9-5-07. This document has all the required elements for leak investigations except identification of the instrument used. 1503 Wright was repaired on 11-6-08. The follow-up was performed on 11-12-08. This record has all the required elements for leak investigation documents.

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.

a. The survey documented on the specified form is designated Pasco, Section 1 leak survey, completed on November 26, 2007. The Form 286 and Form 295 are attached to each other. The Form 295 is used to record leaks found during the leak survey. Staff's conclusion is disproven by the fact our employees investigated and repaired the leaks listed on the Form 295.
b. The present status is determinable. The repair record shows the leak was repaired on November 7, 2008. The repair record shows 0% gas found after the repair.
   1. The leak was graded as Grade 2 as of November 14, 2007. The leak was re-evaluated on March 10, 2008 and June 16, 2008. The leak was repaired on November 7, 2008. We don't understand what Staff means by stating the grade of the leak remains a Grade 2 when records indicate the leak was repaired.
   2. Residual reads would be taken after the repair was completed. The repair document indicates that 0% gas was found in the ground November 7, 2008 after the repair. The location of the readings are not recorded.
   3. The perimeter of the readings taken are not recorded on the post repair investigation.
   4. Repair notation indicates that a loose service tee cap was found and tightened.
   5. The post repair investigation does not record the instrument used.
   6. This information is not required to be on leak records by WAC 480-93-187.
   7. The pipe is not specifically identified as distribution or transmission line, but this can be determined by inspecting the record.
   8. This is not recorded on the repair document.
   9. This is not recorded on the repair document.
   10. This is not recorded on the repair document.

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.

We could not find an altered service card for 1527 Thayer. A copy of an unaltered service card is still on file. Staff does not explain why this finding would be a probable violation.

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. 5th 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. 6th 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

Pressure testing equipment calibration records show that all equipment used by the Kennewick employees and contractors during the specified period were calibrated as required. This is in compliance with WAC 480-93-170(10).

The finding specifies pressure testing documents. WAC 480-93-170(7) does not require that pressure testing documents include pressure testing equipment and equipment calibration information. The finding does not demonstrate that a probable violation exists.

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.

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.

The rule specifies requirements for construction documents and maps of pipe in the ground. The marker survey location map specified in the finding is not required by this rule. The finding does not demonstrate that a probable violation exists.

Regarding our October 23, 2006 Letter of Intent, please refer to Finding 6.1.

2. **Finding(s):**
Accurate records were not available to operations personnel. Examples follow:

a. 224 Bear Dr., Richland
    i. On svc. Card, not on hanging grid maps, not on CAD map
b. 6501 W 6th Ave., Kennewick
    i. On svc card, not on hanging grid maps, not on CAD map
c. 4525 Road 68 Bldg. Unit A, Pascoe
    i. On svc card, not on hanging grid maps, not on CAD map
d. 4525 Convention Pl., Pasco
    i. On svc card, not on hanging grid maps, is on CAD map
e. Kennewick Grid Sheet 3-F
    i. 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
    ii. 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.

a-d These records were not posted to the operating maps, but asbuilt records were available within 6 months as required by WAC 480-93-018(5). See also response to 3.3.
e.i. This project is posted on our grid sheet. We cannot confirm this finding.
e.ii. The mains are not connected. The ends of the mains are close enough to appear connected on the printed sheet. This is not a probable violation.

f. Operating personnel find the records they need by using the street name. The grid map numbering change is not a probable violation.

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. 6th Ave, Kennewick	11.16.07	Not mapped
g. 224 Bear Dr., Richland	10.31.07	Not mapped
h. 6511 W. 5th 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

In general, records (ie. asbuilts) of these facilities were available within 6 months as required by WAC 480-93-018(5). They may not have been posted to our operating maps. We are in the process of converting all our maps to an electronic/GIS format. At the completion of this project, our operating maps will be improved.

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).

Cascade procedure 604 System Design has our procedure for monitoring and maintaining valves (604.023), and our procedure that addresses (a) through (j) (604.021).

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.

Cascade procedure 604 System Design has the valve location requirements for transmission lines, mains, and services.

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.

Our CP 740 was updated in November 21, 2008 to require that curb valve tees be operated. That CP was updated again on February 2, 2009. CP 740.024 contains our current requirements for these valves.

4. **Finding(s):**
CNG has not fully implemented the requirements of this section within one year of the adoption of this rule.

We respond to the issue that our procedures do not address WAC 480-93-100(1), (2), and (3) in findings 4.1, 4.2, and 4.3. Our procedures are sufficient for compliance with the rule. These procedures were in place within one year of the adoption of the rule and have been found acceptable by Staff in past inspections.

5. **WAC 480-93-110(2) 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 operator's control it is not possible to 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 operators to exceed the ninety-day time frame include right of way permitting issues, availability of repair materials, or unusually long investigation or repair requirements.)

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.

Our investigation records indicate that our initial reading was taken on October 9, 2008. The resolution was completed by October 10, 2008. The investigation found the location meets the

CFR 192 Appendix D criteria for 100 mV polarization. The remediation interval meets the 90 day requirement.

Reviewing our records, we do not find that low readings were left unremediated. These cathodic protection records were available during the field inspection, but were not requested or reviewed by Staff. Staff makes an unsubstantiated charge.

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.

Charge(s):
Cascade is unable to provide records or documentation verifying that they are in compliance with this rule.

1. **Finding(s):**
   Cascade 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.

Survey records showing pipeline marker placement were used by employees before June 5, 2007. These records were difficult to find during the inspection, and we may not have presented these maps to Staff. These records have been located, and are available for Staff review.

2. **Finding(s):**
   Cascade 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.

The purpose of periodically surveying line markers is to find locations where they are missing and replace them. Missing pipeline markers are not probable violations.

The locations noted have had markers replaced on August 10, 2009.

3. **Finding(s):**
Cascade 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.

The purpose of periodically surveying line markers is to find locations where they are missing and replace them. Missing pipeline markers are not probable violations.

The locations noted have had markers replaced on August 10, 2009.

4. **Finding(s):**
Cascade was unable to provide adequate or reliable documentation verifying that they are able to identify the placement or location of pipeline markers.
Cascade 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. Cascade 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.

Please refer to our response for Finding 6.1.

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:
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

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

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

This finding does not demonstrate that a probable violation exists.

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

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. 1225Fuji, Richland
b. 1211 Fuji, Richland

The repair record shows the company name, employee name, test medium, test pressure, test duration, line pipe size, date and time of the test, and the test result. The element required by 480-93-170(7) that is missing is the length of pipe tested.

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.

Charge(s):

Gas pipeline company 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:

	Project/Address	Omitted Data
a.	7115 W. 6th 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. 5th 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. 6th 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

CNG procedures state air will be used as the test medium unless otherwise noted. Air was used as the test medium during the activities listed above. Upon reviewing the remainder of the records, we agree they are missing the required data listed above.

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):
Gas pipeline company 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

Our study for this project does not specify whether the terrain, class location, and present condition of the pipeline might cause an unsafe condition during lowering. These factors were considered during the study, but omitted from the study documentation because it was known at that time they were not going to result in an unsafe condition because of lowering. We agree that we should include all required elements in our future lowering study documentation so that we can demonstrate compliance.

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.

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).

Cascade CP 760.09 includes requirements for visual inspection of welds. This update was completed prior to September 1, 2007. The procedure was updated again on May 2, 2008.

2. Finding(s):
Cascade 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

Staff is on our procedure mailing list, so we would have sent copies. Cascade is not responsible for UTC's copies after we mail them. We sent additional copies of these procedures on August 11, 2009.

3. **Finding(s):**
Cascade 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 Cascade would update their procedures by September 30, 2007.

Please refer to our response for Finding 11.1.

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

a. Cascade Procedure #760 – Welding Standards

WAC 480-93-180 and Part 192.605 do not require that we maintain a copy of the procedure in the operations office. This finding does not demonstrate that a probable violation exists.

5. **Finding(s):**
Cascade 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.
   i. Cascade 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.
   ii. 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. Cascade Procedure #760 – 2008 updates to visual inspection of welds.

a. A copy of CP 925 is provided in each company vehicle. CP 925.05 has sufficient details to perform the emergency shutdown and startup tasks on-site as required by 480-93-180. These copies were available for review at the time of the original inspection. Cascade does have maps that we call our "shutdown plan", which is a map of valve locations showing distribution system isolation areas. We keep one copy of that map in the operations office. The map does not describe procedures performed on the pipeline, for example a valve operation procedure. WAC 480-93-180(2) does not require the map to be on-site. This finding does not demonstrate that a probable violation exists.
   i. The WAC 480-93-180(2) requirement that applicable portions of an O&M procedure be on-site does not require that every such procedure restate WAC 480-93-180(2). This finding does not demonstrate that a probable violation exists.
   ii. 480-93-180 does not require that we identify "outage information" in our plans and procedures. Part 192.615 *Emergency Plans* does not require that we identify "outage information" in our emergency procedures. Our letter dated August 28, 2008 for Docket PG-081306 regarded leak survey and investigation, not written emergency procedures. This finding does not demonstrate that a probable violation exists.
b. Copies of that procedure are stored on the welding trucks in order for the procedure to be on-site where the work is performed. The Kennewick vehicle inspected did not have the February 2, 2008 version of the welding procedure that incorporated the visual inspection requirements. We have placed the current version on all the Kennewick trucks, and have confirmed that all other trucks have the correct copy.

6. **Finding(s):**
Cascade Natural Gas did 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. 6th Ave, Kennewick	11.16.07	Not mapped

g.	224 Bear Dr., Richland	10.31.07	Not mapped
h.	6511 W. 5th 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

Item (b) was not completed until April 13, 2009. It was not required to be posted until October 13, 2009. It is currently posted to our map as completed.

In general, the remainder of the records (ie asbuilts) of these facilities were available within 6 months as required by WAC 480-93-018(5). They may not have been posted to our operating maps. We are in the process of converting all our maps to an electronic/GIS format. At the completion of this project, our operating maps will be improved.

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

Staff does not explain how we did not follow our construction installation records procedures so we cannot respond. This finding probably refers to the record deficiencies of Findings 9 and 11.6 as the records cited are nearly identical. Please refer to those responses.

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. Cascade did not follow their public awareness procedures Cascade Procedure CP 500.

Please refer to our response to Finding 31.

9. Finding(s):
Cascade 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.

CP 756.031 requires that odorant level testing equipment "be calibrated at regularly scheduled intervals. An instrument that has gone past the calibration date cannot be used until it has been calibrated." Our plans and procedures comply with the requirement that sniff tests use calibrated equipment.

10. Finding(s):
CNG did not follow their calibration and equipment labeling procedures.

a. Cascade 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, Cascade employees continued to utilize an instrument whose label clearly identified it had exceeded its calibration limits.

a. Cascade plans and procedures identify a calibration procedure for odorant test instruments. CP 756.032 requires that "Each instrument shall be calibrated according to the Manufacturer's instructions and/or specifications, supplied with the instrument." The specific schedule for maintenance is also specified for each type of instrument. Our plans and procedures meet the requirements.
b. The sticker should have been identified and corrected but this does not constitute a violation of code.

11. Finding(s):
Tri-Cities did not follow their pipeline marker procedures CP 610. See Probable Violation(s) 3, 6, and 30.

Please refer to our responses to Finding 6.

12. Finding(s):

a. Cascade 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:

   i. 1527 Thayer, Richland
   ii. 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.

a. Please refer to our response to Finding 2.4.
b. Please refer to our response to Finding 12.2.
c. Please refer to our response to Finding 12.2.

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

These leak investigations do not document the perimeter of the leak.

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

These leak investigations do not document the instrument used.

15. Finding(s):

Cascade 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.
    i. The two FI units used for this Grade 2 leak were not checked/calibrated prior to their use.
    ii. 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.
    i. The 11.14.07 leak is documented as having been found after 11.20.07.
    ii. 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/repaired, 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:
    i. *First investigation* report identifies leak as Grade 2 on 11.14.07.
        1. Leak deferment information provided does not include sufficient reasons for deferment of this Grade 2 Leak, as identified in CNG procedures.
        2. Leak read and deferment appears to have been based upon reads from an un-calibrated FI unit.
        3. 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.
        4. No CGI equipment was identified on this form.
        5. 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.
    ii. *Second investigation* report identifies leak as Grade 3 on an unidentified date:

1. Form undated so site visit date unknown. Checked by General Manager on 03.10.08.
2. 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.
3. Unknown date so unknown whether calibration complete.
4. 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.

iii. *O & M Request Forms* for this leak

1. Dated 11.14.07 forms do not contain instrument/equipment or calibration information.
2. Dated 11.14.07 forms do not identify a leak grade. The gas read is illegible.
3. Dated 06.16.08 forms do not contain instrument/equipment or calibration information.
4. Dated 06.16.08 forms do not identify a leak grade.
5. 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.

a. The leak was graded as Grade 2 as of November 14, 2007.
b. The instruments used are recorded as serial numbers 48101 and 48240.
c. There are not records of calibration for November 14, 2007 for either instrument.
d. The survey was performed between November 7 and November 26. The form does not indicate that the survey was completed on the 7th and the 26th. The survey document only has one leak detection date of 11/14/07 for this leak.
e. The leak record shows Grade 2, and the leak survey indicates a Grade 3.
f. This is not a leak downgrade. The leak grade changes between the records because of transcription error.
g. The record shows the signature of the 2 employees that performed the survey. We do not agree with Staff's assessment that the form was completed by the supervisor.
h. Review of leak records and leak investigations:
   i. *First investigation* report identifies leak as Grade 2 on 11.14.07.
      1. Record includes all elements necessary to set the grade.

2. We cannot find FI unit calibrations for November 14, 2007.
3. Investigation documents do show bar hole locations, and percentages.
4. We determined that CGI number 1907 was used for this investigation. Calibration records show that it has been calibrated as required.
5. The 293 form was written out and completed on March 11, 2008. Staff misinterprets the document.

ii. *Second investigation* report identifies leak as Grade 3 on an unidentified date:
1. The form was completed on 03.10.08. The specific date of the investigation is not noted. However, the inspection would have been completed before 03.10.08.
2. That statement indicates that the leak perimeter had not changed, as indicated on the form.
3. The instrument used is not discernable from this document.
4. We have determined from that CGI serial number 1907 was used. Calibration records for this instrument show that it has been calibrated as required.

iii. *O & M Request Forms* for this leak
1. We have determined from that CGI serial number 1907 was used. Calibration records for this instrument show that it has been calibrated as required.
2. Leak grade is not written on this form.
3. We have determined from that CGI serial number 1907 was used. Calibration records for this instrument show that it has been calibrated as required.
4. Leak grade is not written on this form.
5. The form shows the cross streets, and we can readily determine the location of work. Staff misinterprets the form.

i. All the leaks found in this survey were investigated and repaired.

j. Staff does not specify which records were deficient, and does not specify the deficiencies found. This is similar to Finding 13. Please refer to that response.

k. The leak was repaired on November 7, 2008. This was documented on a form that Staff reviewed. The status of the leak is determinable.

16. Finding(s):
Cascade procedures 750.072 and 750.074 provide contradictory leak grading information.

750.072 describes our grading process. 750.074 references the reader to the leak grading criteria (Grade 1, 2, and 3) later in the document. There is no contradiction between the 2 paragraphs.

17. Finding(s):
CNG calibration procedures were not followed. See Probable Violation(s) 2, 15, and 30

Please refer to our response to Findings 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.

Valve locations are identified on the Tri-Cities maps as our procedure requires. Records showing this were available at the time of the inspection. Staff either did not spend enough time reviewing the documents, or did not ask us to produce them. These records are available for inspection if Staff wants to inspect them in sufficient detail to determine our compliance.

19. Finding(s):
CNG High Occupancy Structure or Area Inspection procedures were not followed.

a. CNG procedures include WAC 480-93-005(14) definition for "High Occupancy structures" yet several active high occupancy structures were removed from Tri-Cities HO survey list.
b. Accuracy check dates for the FI units were not written on the CNG 332 Work Order forms, as is required by Cascade Procedure # 725.021.

a. Please see our response to Finding 16.
b. We will retrain our employees to properly record this information.

20. Finding(s):
The abnormal operating conditions (AOC's) identified on Tri-Cities quarterly Patrol Logs have not been remediated in accordance with CNG procedures. Examples follow:

	Location	Date 1st Noted	Remediated	
a.	Columbia Center- Roof Top	07.26.06	04.18.07	Paint
b.	Richland "Y" Canal Crossing	07.26.06	12.05.07	Paint & wrap
c.	Bowels Road & Collier Chemical	07.26.06	04.18.07	Paint & wrap
d.	S. Irby St. & Twilight Lane Canal	07.26.06	04.18.07	Paint
e.	5th & S. Washington Canal	11.15.06	12.06.07	Missing vent cap
f.	E. elm & S. 4th Canal Crossing	07.26.06	04.18.07	Paint

CP 716.016 requires that locations found during the patrol that require remediation be scheduled for action. Our procedure does not require a maximum interval for remediation. This finding does not demonstrate that a probable violation exists.

21. Finding(s):
CNG did not follow their procedures in that they did not document or remediate known cathodic protection issues for 305 E. Columbia Dr., Kennewick.

Please see our response to Finding 5.

22. Finding(s):
CNG did not follow their procedures for valve installation and assignment of an operational service valve "SLV" number in accordance with CP 740.071 by showing and number operational service valves on their operating and district area maps. Two new valves were installed in 2008 that have not been assigned SLV numbers at the time of inspection. Valves are located at Chiawana High School, Rd 84 & Argent St., Pasco.

The plan and procedure requiring the numbering of service valves is CP 604.03. Our procedure does not require a maximum interval for issuing valves identifying numbers. This finding does not demonstrate that a probable violation exists.

23. Finding(s):
CNG failed to follow their atmospheric corrosion remediation procedures. 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 action taken
b. 213 W. Kennewick Ave., Kennewick	Corrective action requested 01.03.05 No action taken
c. 220 E. Columbia Dr., Kennewick	Access issues were identified by GM No remediation action taken

Please refer to our response to Finding 27.

24. Finding (s):
CNG did not follow their procedures by exceeding allowable remediation timeframes.

See Probable Violation(s) 5 and 27.

Please see our response for Findings 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 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

The documents do not indicate the instrument used.

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.

Please refer to our response to Finding 2.4 regarding our documentation of these leak investigations.

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:

Date leak detected	Location/Address	Date ID'd as Repaired	Date Graded & Deferred by GM
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

Please refer to our response to Finding 2.4 regarding our documentation of these leak investigations.

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

Please refer to our response to Findings 2.4 and 2.5 regarding our documentation of these leak investigations.

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.

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

This finding does not specify the deficiencies. These records are cited in other findings where the deficiencies are specified. (Findings 11.13, 11.14, 12.1, and 17 primarily.)

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;

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.

a. We did not update our maps to ensure that they would appear on the survey maps. Staff's statement that CNG oversight of leak surveying is inadequate is an opinion.
b. The leak survey was of a section of pipe that was lowered. The two drawings show the pipe that was surveyed. Staff misinterprets the document.

15. WAC 480-93-188(2) 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.

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

These 2 leak survey documents did not indicate which unit was used to perform the survey. WAC 480-93-188(2) does not require that calibration information be noted on the survey document, only the instrument used. Cascade has adequate records demonstrating instrument calibrations.

2. **Finding(s):**
   Company 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

This finding cites leak records that did not indicate the instruments used, not calibration records. WAC 480-93-188(2) does not require that calibration information be noted on the leak record. Cascade has adequate records demonstrating instrument calibrations.

3. **Finding(s):**
   Company 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.

Equipment calibration records show that equipment used by the Kennewick employees were calibrated as required. This is in compliance with WAC 480-93-188(2).

The finding specifies survey documents did not show calibration data. WAC 480-93-188(2) does not require that calibration information be on the survey record. The finding does not demonstrate that a probable violation exists.

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.

Our calibration logs for both instruments show that both units were calibrated on October 22, 2007. Our employees keep a main log of calibrations for the instrument. In this case they made a copy of the log before making the entries for that survey. They logged the calibrations on both copies making 2 "original" entries for the calibration. This finding does not demonstrate a probable violation.

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;

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

Locations (a) through (c) are high occupancy buildings. Staff misunderstands how we perform the survey. The service lines to (a) through (c) are surveyed annually during the business district leak survey required by WAC 480-93-188. We removed them from our list of high occupancy buildings that lie outside of the business districts.

The service line to (d) was removed from survey in 2008 because this building is not a high occupancy structure meeting the requirements of the definition in WAC 480-93-005. The building does not have more than 20 occupants frequently enough to meet the requirement.

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

The documents do not show tests from the point of damage to the service tie-in.

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

The only data missing is instrument tracking or identification number as previously stated in Finding 11.19. Please refer to our response to that finding.

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

Employees used maps of the system for leak surveys performed in 2007 and 2008. A copy of the maps used are kept with the surveys. The mains and services shown on those maps were surveyed. As stated in our response to Finding 11.6, some projects had not been posted within 6 months, meaning those projects would not have appeared on the maps used. We do not understand Staff's blanket statement that the documentation wasn't sufficient.

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.

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

WAC 480-93-188(6) requires the performance of self audits of leak detection and recordkeeping programs for their effectiveness. Self audits were performed and records were available to Staff. Staff bases the finding on Staff's opinion of our leak detection and recordkeeping programs, not the records of our self audits. The self audit is intended for us to examine our leak detection and recordkeeping programs to find such things as deficient records, and initiate corrective action. Staff finds that if a deficient record exists, then the self audit was ineffective. By this interpretation, there is no way for an operator to comply with WAC 480-93-188(6).

Staff does not specify the record deficiencies that lead to these opinions, but we assume they refer to the more specific leak survey record accuracy and completeness findings of this report. We refer you to our responses to those findings.

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.

Staff has never before mentioned that these reports were not adequate. We will update our practices with this guidance for the next report.

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.

Staff has never before mentioned that these reports were not adequate. We will update our practices with this guidance for the next report.

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

The specified locations were inspected, and were found acceptable. There is sufficient expansion and contraction capability for these pipes.

23. **49 CFR 192.365 Service lines: Location of valves.**
(b) Outside valves. Each service line must have a shutoff valve in a readily accessible location that, if feasible, is outside of the building.

Charge(s):
Required service line shutoff 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

Part 192.365 is a construction requirement. These locations were installed in a manner that complied with the code. Conditions at any location can change, and in these cases did change. The specified locations have been corrected as needed.

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.

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.

Staff does not indicate how the pipe to soil reading provided was insufficient to determine our compliance with cathodic protection requirements. This finding does not demonstrate that a probable violation of 192.463(a) exists.

The location that commission staff requested CNG obtain a read would have necessitated excavation through concrete. CNG obtained a reading at a nearby location at which the level of cathodic protection in the area could be verified to avoid an unnecessary expense solely for Staff's field inspection. A reading at 2825 W Kennewick Ave was not necessary to demonstrate compliance with cathodic protection requirements. Staff never questioned the provided reading prior to this letter.

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:	*Then the frequency of inspection is:*
Onshore	*At least once every 3 calendar years, but with intervals not exceeding 39 months*
Offshore	*At least once each calendar year, but with intervals not exceeding 15 months*

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

We did perform atmospheric corrosion monitoring for Kennewick and Pasco according to the code requirements. Records of performance were available at the time of the inspection. Staff either did not spend enough time reviewing the documents, or did not ask us to produce them. These records are available for inspection if Staff wants to inspect them in sufficient detail to determine our compliance.

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 disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.

Charge(s):

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

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. 2nd 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

These inspections were performed by Staff and reported to CNG. Each location has been visited, and evaluated to our standards by our personnel. Locations requiring correction have been scheduled for repair. This finding does not demonstrate that a probable violation exists.

Address	Inspection Result
11 S. Dayton, Kennewick	No problems found
321 W. Kennewick, Kennewick	No problems found
313 W. Kennewick, Kennewick	Scheduled for repair
213 W. Kennewick, Kennewick	No problems found
13 S. Cascade, Kennewick	Scheduled for repair
205 W. Kennewick, Kennewick	Scheduled for repair
113 W. Kennewick, Kennewick	Scheduled for repair
202 E. Columbia Dr., Kennewick	Scheduled for repair
220 E. Columbia Dr., Kennewick	Scheduled for repair
207 E. Columbia Dr., Kennewick	No such address
221 E. Columbia Dr., Kennewick	Scheduled for repair
2825 W. Kennewick Ave., Kennewick	No problems found
2825 W. Kennewick Ave., Kennewick, West End of Complex	No problems found
3001 W. Kennewick Ave., Kennewick	No problems found
2905 W. Kennewick Ave., Kennewick	Scheduled for repair

Address	Inspection Result
128 W. Kennewick Ave., Kennewick	No such address, No problems found nearby
Riser E. of 128 W. Kennewick Ave., Kennewick	No problems found
43601 S. Finley Rd., Finley Odorizer	Scheduled for repair
222604 E. Game Farm Rd., Finley	Scheduled for repair
222608 E. Game Farm Rd., Finley	Scheduled for repair
208 N. 2nd Ave., Walla Walla	No problems found
13 E. Main St., Walla Walla	No problems found
Riser S. of 21 E. Main St., Walla Walla	No problems found
57 E. Main St., Walla Walla	No problems found
121 E. Main St., Walla Walla	No problems found
115 E. Main St., Walla Walla	No problems found
1 E. Alder St., Walla Walla	No problems found
16 E. Main St., Walla Walla	No problems found
Riser for Meter #194891, Walla Walla	No meter with that number

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 Sec. 192.479.

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

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

Employees did not record the action taken for these items. We have revisited each location, and re-evaluated them. The actions taken are as follows

a. No atmospheric corrosion. Needs paint. Painted it to complete corrective action.
b. No corrective action needed.
c. No correction needed. Meter is easily inspectible through chain fence. Access issue is that you must ask the customer to open their fence to maintain the meter.

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.

Charge(s):
Cascade 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.

This finding is an inconsequential typo. By the context of the procedure a reader can determine they should turn to the follow-up testing requirements of CP 747.056. The finding does not demonstrate that a probable violation exists.

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):**
Cascade 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.
      i. All documents with grid change name have not been updated to reflect new grid making it very difficult to find as built maps,
      ii. 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.
      i. 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.
      ii. 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. 6th Ave, Kennewick	11.16.07	Not mapped
7. 224 Bear Dr., Richland	10.31.07	Not mapped
8. 6511 W. 5th 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. c
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. c
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:

Project/Map No.	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. 6th Ave, Kennewick	11.16.07	Not mapped
7. 224 Bear Dr., Richland	10.31.07	Not mapped
8. 6511 W. 5th 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:

Project #/Map No.	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. 6th Ave, Kennewick	11.16.07	Not mapped
7.	224 Bear Dr., Richland	10.31.07	Not mapped
8.	6511 W. 5th 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

This code requires that Cascade's operating and maintenance manual provide that construction records, maps, and operating history be made available to appropriate operating personnel. Staff makes a charge based on their evaluation of the speed of availability, clarity, accuracy, and usability of our maps and records. These elements are not specified in the code.

a. Cascade's emergency shutdown maps are available to appropriate operating personnel.
b. Cascade maps are available to appropriate operating personnel.
c. Marker location placement procedures and survey maps are available to appropriate operating personnel.
d. Valve location information is available to appropriate operating personnel.
e. Appropriate operating personnel have access to grid map records.
f. Maps and records used for locating, leak survey, and patrolling are available to appropriate operating personnel.
g. Please refer to our response for Finding 3.3 regarding the posting of construction activity to operating maps. We do note that Part 192 does not specify a posting interval for construction activity as WAC code does. It is not correct to apply WAC requirements to a Part 192 code.
h. Staff repeats the same charge as (g) above. See our answer for the same.
i. Staff repeats the same charge as (g) above. See our answer for the same.

2. **Finding(s):**
Cascade 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).

Please refer to our response to Finding 11.5.

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.

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.

Part 192.605(b)(8) requires operators to perform evaluations of written procedures for their effective and adequate performance, and modify the procedure when deficiencies are found. The findings are about record deficiencies Staff believes we failed to find and correct, not procedure reviews and updates. These findings do not demonstrate a probable violation of Part 192.605(b)(8) exists.

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.

Charge(s):
Company 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.

The list of excavators is intended for communicating damage prevention messages with those excavators. With the advent of the enhanced public awareness rules, we implemented our CP 500 Public Awareness Program. We shifted our excavator damage prevention communication activities to that program, but did not update CP 835 yet. We will update our CP 835 to clarify this.

The list of excavators that we communicate with is kept in our central public awareness program documents, and not stored in the district. The document is available for review if Staff wishes to inspect it.

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):

Company maps are not up-to-date.

1. **Finding(s):**

Cascade 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:

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. 6th Ave, Kennewick	11.16.07	Not mapped
g. 224 Bear Dr., Richland	10.31.07	Not mapped
h. 6511 W. 5th 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. c
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. c
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.

Part 192.615(a)(4) requires that our written emergency procedures state the availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency. The finding specifies maps. Maps are not specified by the rule. These findings do not demonstrate that a probable violation of Part 192.615(a)(4) exists.

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.

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

Records of performance were available at the time of the inspection. Staff either did not spend enough time reviewing the documents, or did not ask us to produce them. These records are available for inspection if Staff wants to inspect them in sufficient detail to determine our compliance.

AREAS OF CONCERN OR FIELD OBSERVATIONS

1. **WAC 480-93-015(1) Odorization of gas.**
Cascade'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.

The criteria we use exceeds WAC 480-93-015, and Part 192.625. Our sniff test locations are acceptable.

2. **WAC 480-93-015(2) Odorization of gas.**
Cascade 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.

Please refer to our response to Finding 2.2.

3. **WAC 480-93-018(1) Records.**
Records supporting gas company employee qualifications reported in the Energy World database (which is used to track and maintain operator qualification records) did not match the actual gas pipeline company 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.

Staff does not specify what discrepancies exist. We will consider Staff's general advice that we should perform audits of database data entry.

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 Pasco was communicated to field personnel for the construction phase.

Please refer to our response to Finding 10 regarding the incomplete study data.

The study is a review to determine whether the lowering will be safe. The study is not a field document. The design for lowering the pipe, including the final ditch profile, was emailed to the area supervisor. The area supervisor supervised the project to meet that design.

5.	**WAC 480-93-180(1) Plans and procedures.** Cascade 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.

We disagree with that interpretation of our procedure.

6.	**WAC 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, Cascade's present procedure CP780 still identifies a voluntary program. Staff acknowledges that CNG presently exceeds the EFV notification requirements.

We will update our procedures.

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.

Staff does not report that the pipe was damaged or hazards created by the actions taken. We are confused why Staff claims our employee damaged the piping but Staff failed to inspect the piping and report its condition before now. We revisited the site and re-inspected the piping, and there is no damage or hazardous condition found on this piping.

8.	**WAC 480-93-185(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.

This was an inside odor call. The call was at 10 pm at night. The customer was home at the time of the investigation, and was notified of the findings. This conversation was not recorded on the investigation document. If a letter needed to be mailed, our employee would have written that on the document. WAC 480-93-185(b) requires that we keep records of the letters sent, not records of the contemporary notification of an available adult person.