



STATE OF WASHINGTON
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 • Olympia, Washington 98504-7250
(360) 664-1160 • TTY (360) 586-8203

CERTIFIED MAIL

April 11, 2013

Mr. Eric Martuscelli
Vice President-Operations
Cascade Natural Gas Corporation
8113 W. Grandridge Blvd.
Kennewick, WA 99336

Dear Mr. Martuscelli:

RE: 2013 Natural Gas Standard Inspection – Cascade Natural Gas (CNG) - Longview District

Staff from the Washington Utilities and Transportation Commission (staff) conducted a standard inspection from March 25-28, 2013, of Cascade Natural Gas Corporation's (CNG) Longview District gas system. The inspection included a review of district records and inspection of selected pipeline facilities.

Our inspection indicates two probable violations as noted in the enclosed report. We also noted four areas of concern, which unless corrected, could potentially lead to future violation of state and/or federal pipeline safety rules.

Your response needed

Please review the attached report and respond in writing by May 13, 2013. The response should include how and when you plan to bring the probable violations into full compliance. We also request your response to our areas of concern.

What happens after you respond to this letter?

The attached report presents staff's decision on probable violations and does not constitute a finding of violation by the commission at this time.

After you respond in writing to this letter, there are several possible actions the commission, in its discretion, may take with respect to this matter. For example, the commission may:

- Issue an administrative penalty under RCW 81.88.040, or
- Institute a complaint, seeking monetary penalties, changes in the company's practices, or other relief authorized by law, and justified by the circumstances, or
- Consider the matter resolved without further commission action.



Cascade Natural Gas
2013 Natural Gas Standard Inspection – Longview District
April 11, 2013
Page 2

If you have any questions, or if we may be of any assistance, please contact Dennis Ritter at (360) 664-1159. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,



David D. Lykken
Pipeline Safety Director

Enclosure

cc: Steve Kessie, Manager-Operations Services, CNG
Tina Beach, Manager of Standards & Compliance, CNG
Patti Chartrey, Pipeline Safety Specialist, CNG

Enclosure

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2013 Natural Gas Pipeline Safety Inspection
Cascade Natural Gas Corporation-Longview District

The following probable violations and areas of concern of Title 49 CFR Part 192 and WAC 480-93 were noted as a result of the 2013 inspection of the Cascade Natural Gas Corporation Longview District. The inspection included a random selection of records (operation and maintenance, emergency response, damage prevention) and field inspection of the pipeline facilities.

PROBABLE VIOLATIONS

1. 49 CFR §192.619 Maximum allowable operating pressure (MAOP) - Steel or plastic pipelines

- (a) *No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:*
- (1) *The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part.*

Finding(s):

During the records review to confirm MAOP of HP lines, the 6" Kalama HP replacement project constructed in 1995 was evaluated. As part of the record review, as-builts, invoices, bills of lading and other information from the job file were reviewed. The pipe used in this project was FBE coated, 6-inch steel. What strength pipe was actually put in the ground is unclear. CNG procures their own materials for construction. They order materials based on CNG part numbers identified in their CNG Parts Catalogue. For the Kalama project, one record, "Cost Analysis Sheet for Expenditure Requisition", identified the pipe as part No. PXW-650X42. According to the CNG Part Numbering system, this would be X42 (42000 psi yield strength) pipe. However on all "Material Transfer Records" and as-built records it's listed as PXW-650, without the X42 designation. This is significant as CNG has several pipe specifications listed in their part numbering system, each with different designations for pipe strength. For example, if listed as PXW-650, its class B pipe, with 35,000 for yield strength. If listed as PXW-650X42, then pipe strength is 42,000. The actual construction related documents-Material Transfer Records and as-builts do not have the X42 designation shown. CNG is searching their records for any additional information on this project, however, the records available during this inspection are inconsistent and do not allow confirmation of MAOP according to this subpart.

Whether the pipe is X42 or Class B, CNG's current MAOP would be satisfactory. However, CNG is not sure what pipe specification is in the ground in Kalama, and therefore, not sure of what the MAOP should be. Records (and their management), especially of MAOP confirming documents, must be complete, accurate and readily available. CNG must confirm the MAOP of the 6" Kalama HP line. If pipe material cannot be ascertained, then 49 CFR 192.105 requires using 24,000 as the pipe strength in the design pressure formula to calculate MAOP.

2. **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;

Finding(s):

CNG CP 716 has the following definition: **High Occupancy Structure or Area (HOS/A)**- A building or an outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by twenty or more persons on at least five days a week for ten weeks in any twelve-month period. (The days and weeks need not be consecutive.). Additionally, CNG CP 715 defines the following: **Public Building or Area (PB/A)**- Washington - A building or an outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by twenty or more persons on at least five days a week for ten weeks in any twelve-month period. (The days and weeks need not be consecutive.). WAC, 480-93-005(14) also uses this same language to define "High occupancy structures or areas".

CNG CP 716.04 gives the survey type and schedule for these areas as:

Public Building Inspection (PBI)	At least once each calendar year, but at intervals not exceeding 15 months
----------------------------------	--

During the records review, CNG attempted to locate annual leak survey records for several Public Buildings/Areas identified by WUTC prior to the inspection. These were the Woodland Intermediate School, Castle Rock Community Church and St. Mark's Episcopal Church (both in Castle Rock). CNG could not locate annual survey records for these areas. According to the leak survey, these areas were in fact surveyed on a 3 year basis, typical of non-business district surveys done in this district. This might be indicative of a larger CNG issue.

According to Tina Beach, when CNG changed from a paper based work order system to a new computer based system in 2010, some of the public building inspections (PBIs) which CNG checked annually did not make it into the new system. CNG attempted to go back and rectify this by hand, but according to Tina Beach and Tom Wilson, some were missed. Exactly how many is unknown, in this district or all of CNG's service area districts. As such, UTC will require CNG to evaluate, for each of their districts, how many of these structures/areas are in each district and compare this with what is actually being surveyed on an annual basis. A listing of these structures/areas, by district with addresses, will be sent to UTC after completion of this evaluation. Any structure/areas identified which are not on the current listing of such facilities in CNG's system will be immediately surveyed and added to the annual survey. These "new" facilities will be noted on the listing to be sent to WUTC as newly identified. Please identify when these tasks will be completed.

Note during the inspection there was some confusion regarding non-customers whose property fronts a street which has a buried gas main. UTC's position is there is no difference between non-customers and customers in the definition of HOS/PBs. CNG is to survey the right-of-way fronting these areas on an annual basis, regardless of whether they are a customer or not. If there is a service to the property, CNG is to survey the service to the building wall per 480-93-188 (1) (d).

AREAS OF CONCERN

1. **WAC 480-93-170-Tests and Reports for 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.*

Finding(s):

CNG's 2012, 12" V90 Replacement Project included a pressure test of the installation after completion. After inspecting the data sheet from the pressure testing, it was noted that CNG failed to identify the test medium used on the record document per procedure CP 665.036. In response, CNG pointed out that CP 665 also states that valve installations may only use nitrogen for the test medium. CNG also produced an Airgas invoice for nitrogen supplied for the test dated 8/7/2012-which is the date of the first test.

The issue, however, is not whether nitrogen was used, as it appears that it was, but rather the record document for a critical component of the distribution system which confirms MAOP was incomplete. Given the series of recent catastrophic events relating to pipelines and the subsequent investigation noting that records management of these critical MAOP confirming documents was less than satisfactory, it is surprising to find these records for a very recent construction project to be compromised. The WUTC and PHMSA believe this to be a critical issue which must be emphasized at all levels of CNG's organization. Records (and their management), especially of MAOP confirming documents, must be complete, accurate and readily available. Please ensure that CNG places the appropriate level of scrutiny on this situation so that a future violation, incident or loss of life or property does not occur.

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

- (4) *Each gas pipeline company must conduct special leak surveys under the following circumstances:*
- (c) *Unstable soil areas where active gas pipelines could be affected;*

Finding(s):

During a pre-inspection site visit, it was noted that a section of Mt. Brynion Road near the intersection of Williams Finney Road appeared to have recent pavement work completed. It appeared that Mt. Brynion Road was moving downhill due to movement of the underlying land-i.e. a landslide. When CNG staff was asked about this situation, they did not know of any landslide issues in this area and said all landslide issues are handled by CNG's engineering department. The District Manager also added that they currently do a special leak survey on a portion of the high pressure 12-inch line that feeds Longview Fibre whenever they get a "heavy rain". This location was located on UTC's mapping system which has historic landslides plotted. The location corresponds to a historic landslide area near the pipeline. CNG staff indicated that landslide training is not part of the OQ program and that landslide occurrences are handled on a case by case basis by CNG's engineering department.

UTC is concerned that in areas, such as Longview, where known and potentially still active, historic landslide areas could affect CNG's pipelines, that a program is not in place to alert CNG's personnel of potential dangers. UTC believes CNG should train their staff to be cognizant of potential landslide indicators to identify and potentially prevent future catastrophic incidents from occurring. Procedures should be developed to identify and manage this threat.

3. **49 CFR §192.805 Qualification program**

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) *Identify covered tasks;*
- (b) *Ensure through evaluation that individuals performing covered tasks are qualified;*
- (g) *Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed.*
- (h) *After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities; and*

Finding(s):

During the field OQ evaluation, an employee was asked to take rectifier reads at GB02 Kalama. The employee responded that he was not "comfortable" performing this covered task as he does not perform it routinely—one other employee routinely performs this task. According to CNG OQ records, this employee is qualified to perform this task. If the employee is properly qualified per CNG's OQ qualification program, they should not be "uncomfortable" in performing covered tasks. CNG needs to "*ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities*". CNG needs to determine what additional training or other appropriate methodology needs to be employed to ensure its employees are qualified and competent to perform OQ covered tasks.

4. **49 CFR §192.616 Public Awareness**

- (e) *The program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations.*
- (f) *The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas.*

Finding(s):

In their Public Awareness plan, CNG identified, “Affected public-non customers” as a stakeholder audience but did not send them targeted information as required. As noted in the 2012 PA Plan effectiveness review, they failed to use targeted brochures, pamphlets etc. to inform this group. Instead, they used TV, radio etc. CNG needs to ensure the PA plan (CNG plans on updating its plan by April, 2012) reaches its intended audience by targeting its identified stakeholders with specific information for that group.