



STATE OF WASHINGTON

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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Ref. No. Docket PG-100051

**CERTIFIED MAIL**

July 19, 2010

Grant M. Yoshihara  
Vice President of Utility Operations  
Northwest Natural  
220 Northwest Second Avenue  
One Pacific Square  
Portland, OR 97209

Dear Mr. Yoshihara:

**Re: 2010 Standard Inspection of Clark County, Washington Distribution System**

The Pipeline Safety Section of the Washington Utilities and Transportation Commission (Commission) conducted a natural gas inspection of Northwest Natural's (NWN) Clark County, Washington distribution system from June 14 to 18, 2010. The inspection included a review of maintenance records and field inspection of the pipeline facilities. The maintenance records were provided on a CD in advance of the inspection for staff review which expedited the review process in verifying NWN's compliance with state and federal requirements. Field inspection was coordinated with NWN's staff with time to review field procedures and areas of concerns. In general, the inspection was productive, positive, and NWN's staff was pro-active in identifying and addressing areas related to safety.

Clark County continues to expand from light industries and high technology companies plus residential growth of employees commuting to Portland, Oregon. NWN continues to make improvements to increase gas flow capacity and safety by replacing the bolts on two PBV valves, bare steel distribution piping, and high pressure gas lines on bridge crossings. All of the regulators stations inspected were single regulator design with an overpressure protection relief valve. Many of the regulators and relief valves were operating near the maximum operating pressure (MAOP). Two relief valves did not allow for build up pressure and were reset below the MAOP.



Northwest Natural-Clark County

Docket PG-100051

July 19, 2010

Page 2

No apparent probable violation was noted as a result of this inspection. Five areas of concern were noted and included in this letter.

**Your response needed**

Please review the attached report and respond in writing to the areas of concern by August 23, 2010.

We thank NWN personnel for their cooperation and assistance during the inspection. If you have any question, please contact Al Jones, Pipeline Safety Engineer at (360) 664-1321. Please refer to docket number PG-100051 in any future correspondence regarding this inspection.

Thank you for your cooperation and interest in pipeline safety.

Sincerely,



David D. Lykken  
Pipeline safety Director

Enclosure

cc: Jon G. Huddleston, Director Deliver Gas Process  
Darlene T. Maurer, Pipeline Safety, Code Compliance Engineering Services  
Roy F. Rogers, P.E., Integrity Management Engineer, Engineering Services  
Cari Colton, Northwest Natural

**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**  
**2010 Natural Gas Pipeline Standard Inspection Report**  
**Northwest Natural – Clark County Unit Inspection**  
**Docket No. PG-100051**

**AREAS OF CONCERN**

The following areas of concern of Title 49, CFR Part 192 and WAC 480-93 were noted as a result of the inspection of Northwest Natural Clark County District. The inspection included a random selection of records, operation and maintenance, emergency response, inventory and field inspection of the pipeline facilities. Areas of concern, which left uncorrected, could lead to future violations of state or federal pipeline safety rules if not addressed.

**1. Title 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:*

<i>If the pipeline is located:</i>	<i>Then the frequency of inspection is:</i>
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

(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.*

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

**Finding(s):**

Inspections for atmospheric corrosion under pipe supports had not been conducted at concrete pipe supports for the aboveground water crossing at NE 11<sup>th</sup> Ave & NE Division; located in Camas. The 8-inch, high pressure main (250 psig) was constructed in 1956. The pipe under the supports need to be evaluated for atmospheric corrosion or modifications made to prevent the formation of a corrosion cell.

**2. Title 49 CFR §192.201 Required capacity of pressure relieving and limiting stations.**

(a) *Each pressure relief station or pressure limiting station or group of those stations installed to protect a pipeline must have enough capacity, and must be set to operate, to insure the following:*

(2) *In pipelines other than a low pressure distribution system:*

(ii) *If the maximum allowable operating pressure is 12 psi gage or more, but less than 60 psi gage, the pressure may not exceed the maximum allowable operating pressure plus 6 psig gage; ...*

**Finding(s):**

The overpressure protection valves at regulator stations at 'C' Street in Washougal (1-022-061) and East Reserve St and 4<sup>th</sup> Plain Rd in Vancouver (1-014-032) were set two to three psig above the MAOP of the system. The relief valves were reset to allow for build-up pressure to occur below the MAOP of the system. NWN is reminded that operation above the MAOP is not allowed. Pressure control equipment must be designed and configured to prevent operation above the MAOP.

3. **Title 49 CFR §192.721 Distribution systems: Patrolling.**

(a) *The frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or leakage, and the consequent hazards to public safety.*

**Finding(s):**

At the Washougal River crossing in Camas, the 1958 pipe supports on the bridge should be evaluated for structural integrity.

4. **Title 49 CFR §192.465 External corrosion control: Monitoring.**

(b) *Each cathodic protection rectifier or other impressed current power source must be inspected six times each calendar year, but with intervals not exceeding 2.5 months, to insure that it is operating.*

**Finding(s):**

The rectifier at East Mill Plain and Missoula Way is in compliance with inspection requirements. However, the data from this rectifier indicates that it is failing. The rectifier is providing protection to about one mile of bare main.

5. **Title 49 CFR §192.625 Odorization of gas**

(a) *A combustible gas in a distribution line must contain a natural odorant or be odorized so the concentration in air of one-fifth of the lower explosive limit, the gas is readily detectable by a person with a normal sense of smell.*

**Finding(s):**

NWN need to periodically review their "sniff" test sites and determine if and when the sites many need to be relocated. The south extremities of the Vancouver distribution system near Interstate -205 were not identified with a test site. Staff recommends that this area be considered for a test site.