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June 29, 2015

Mr. David Lykken  
Pipeline Safety Director  
Washington Utilities and Transportation Commission  
1300 South Evergreen Park Drive SW  
P.O. Box 47250  
Olympia, WA 98504-7250

RECEIVED  
JUN 29 2015  
State of Washington  
UTC  
Pipeline Safety Program

Re: NW Natural Response to Inspection of Clark County (#6182)

Dear Mr. Lykken:

The Washington Utilities and Transportation Commission (WUTC) Staff conducted a pipeline safety inspection of NW Natural's Clark County service area from March 30-April 10, 2015. This letter is in response to the findings of Inspection Report #6182, dated May 29, 2015.

**Probable Violation:**

1. *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 as follows:*

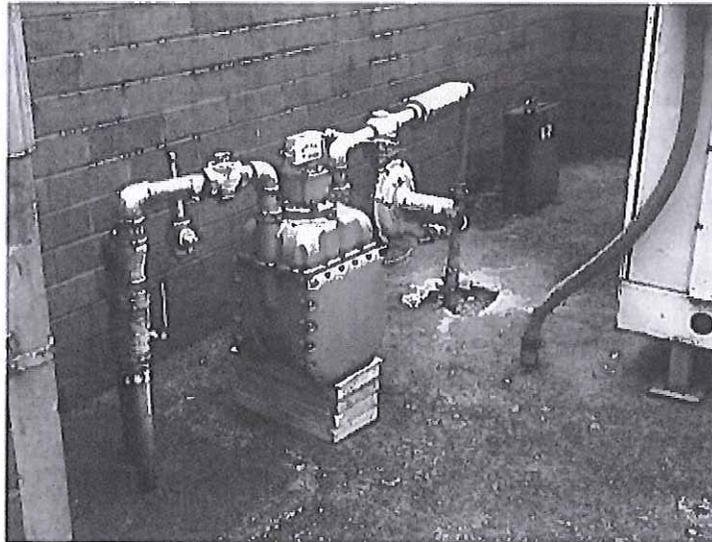
- 1) Free expansion and contraction of the pipeline between supports or anchors may not be restricted.*
- 2) Provision must be made for the service conditions involved.*
- 3) Movement of the pipeline may not cause disengagement of the support equipment.*

**Finding(s):**

*During the field verification portion of the inspection, random annual pipe-to-soil (P/S) reads were taken at NWN test sites. One of those sites in Washougal, WA is the Jemtegaard Middle School meter set. During this read, it was also noted the Jemtegaard Middle School meter set was supported with wood 2x6 material. This material is combustible. This is a NOPV as combustible materials are prohibited. As finding this situation was a coincidence, it does bring up the question, Are there any other meters which are supported by combustible materials and, if so, NWN will need to find them and ensure they are remediated.*

**NWN Response:**

The location identified above was remediated the week following the inspection by replacing the wood blocks with concrete blocks separated from the meter by fiberglass sheets. Please see photo below:



NW Natural wishes to assure Staff that having flammable materials under above ground equipment is an Abnormal Operating Condition (NWN Operator Qualifications Procedures #AOC-Q-09 for Customer Field Services; similar numbers for other work groups) and when these are identified, they are to be remediated. NW Natural acknowledges that wooden blocks were occasionally used for meter support many years ago and it is possible there may be other locations with wooden supports that have not yet been replaced with an acceptable alternative.

The company's plan to identify and remediate these locations is two-fold. The first part will be a refresher training of impacted workgroups to remind them of the AOC and proper remediation. The second part is to include checking for any wooden supports under meter sets during the regularly scheduled service leakage surveys. Any meters supported by wooden blocks that are found would be reported and a work order initiated to ensure remediation. NWN performs the service leakage survey on an accelerated schedule of once every three years not to exceed 39 months.

**Probable Violation:**

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

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

**Finding(s):**

*A records review of NWN's "Completed Pipe Inspection Report" (exposed pipe condition report) from 11/30/12 had a CP read of -0.56 VDC which is below NWN's protective criteria established at -0.85 VDC. NWN could not document remedial action was taken within 90 days as required by code.*

*NWN notes that 11/30/2012 appears to be a typo in the Findings. The original page of Pipe Inspection report reflecting the date of 10/30/2012 is attached.)*

**NWN Response:**

NW Natural acknowledges that at the time of inspection, documentation regarding the low P/S read could not be located. Further research has revealed that the Pipe Inspection that was done on 10/30/2012 was done in conjunction with a project that resulted in the replacement of the steel pipe at this location with poly pipe. Attached please find the as-built drawing that documents the abandonment of the steel pipe and installation of poly pipe with a completion date of 11/30/2012, well within the 90 days required for remediation of the low read. The address where the low read was taken and the pipe replaced has been circled in red, as has been the date of completion.

Additionally, NW Natural is currently improving its process for documenting all low reads by slightly modifying and clarifying the duties of each department involved in mitigation and documentation of a CP issue. In addition, any time a low read is recorded into the system, an automatic alert will be sent to the corrosion supervisor so that he can assure that the proper follow-up and documentation is taking place.

**Areas of Concern:**

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

*(5) Each gas pipeline company must replace markers that are reported damaged or missing within forty-five days.*

**Finding(s):**

*NWN has recently updated their process to collect actual data when replacing missing/damaged markers. In NWN's old system, crews replaced markers as they found them without paperwork. The new system requires they populate a form to capture the data.*

*As NWN has already found and remediated this issue, this finding is an AOC. It will be revisited during the next standard inspection to ensure compliance.*

**NWN Response:**

NWN acknowledges this finding and agrees that the new system will capture the data required to prove that reported damaged or missing pipeline markers are remediated within 45 days.

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

*(8) On all cathodically protected pipelines, the gas pipeline company must take a cathodic protection test reading each time an employee or representative of the gas pipeline company exposes the facility and the protective coating is removed.*

**Finding(s):**

*A review of NWN's Completed Pipe Inspection Reports (exposed pipe condition reports) from 2012 to early 2015 showed many instances where steel pipeline was unearthed and a cathodic protection (CP) reading was left blank. There is no documentation as to whether a CP reading was taken or not. NWN's procedures allow for not taking a read if the coating is not removed, however in these instances, it could not be substantiated with the information in the record. NWN believes these instances are times when coating was not removed as leaving this blank on the form was the typical practice by field personnel. However, there are occasions in the same time period where forms did state, "coating not removed." NWN's SPW 459, Inspection of Exposed Pipe, Section 3.4, Records, does not give clear direction on whether the field technician is to document when the coating is not removed. The technician is to document all "required" inspections and tests.*

*In early 2014, NWN began an internal process to change this practice. This resulted in a change to the form to require this field be filled in - either the coating was removed and a CP read taken or it was not. The form cannot be completed until it's entered.*

*As NWN has already found and remediated this issue, this finding is an AOC. It will be revisited during the next standard inspection to ensure compliance.*

**NWN Response:**

NWN acknowledges this finding and agrees that improvements have been implemented that will require the input of whether or not coating was removed, and therefore the Pipe Inspection report will be much more clear in the future.

3. *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.*
- (c) If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by §192.479.*

**Finding(s):**

*During the field verification portion of the inspection, a 4-inch steel main was inspected hanging on a bridge (1-002-026-B-01-B-A) located in the Felida area of Vancouver over Salmon Creek. Corrosion was observed under a plastic collar used to protect pipe from the hanger (most southern hanger). Scaling and pits were visible. Also, it was noted that there was no tape or "powercrete" on north end at soil-to-air interface. This line was installed in 1988. NWN states these conditions were already found by NWN in previous inspections resulting in a project scheduled for this summer (2015) to replace all hangers and repair and recoat as necessary.*

*As NWN has already found this issue and is remediating this summer (2015), this finding is an AOC. It will be revisited during the next standard inspection to ensure compliance.*

**NWN Response:**

NWN acknowledges this finding and agrees that this bridge crossing will be repaired as indicated above during the summer of 2015.

This report summarizes NW Natural's activities in response to the pipeline safety inspection for the Clark County service area. If you would like to discuss this response in greater detail, please contact us at your convenience.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. S. Karney', with a stylized flourish at the end.

Joe S. Karney, P.E.  
Senior Manager, Code Compliance

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