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Submitted to Denise Crawford via electronic mail at [dcrawfor@utc.wa.gov](mailto:dcrawfor@utc.wa.gov)

July 27, 2017

Mr. Sean Mayo  
Pipeline Safety Director  
Washington Utility and Transportation Commission  
1300 S. Evergreen Park Dr. S.W.  
PO Box 47250  
Olympia, WA 98504-7250

**RECEIVED**  
State of Washington  
**JUL 27 2017**  
UTC  
Pipeline Safety Program

Re: WUTC Ritzville/Goldendale Standard Inspection No. 7260, Avista Response

Dear Mr. Mayo:

In your letter of June 26, 2017, you documented three probable violations and four areas of concern discovered during the Ritzville/Goldendale Standard Audit that was conducted in May 2017. Please find herein restatements of the probable violations / areas of concern and Avista's responses.

**Probable Violation #1 Reference:**

49 CFR §192.619 Maximum Allowable Operating Pressure – Steel or Plastic Pipelines

**Description of Probable Violation (NOPV):**

The entirety of 49 CFR §192.619 was cited in the WUTC letter.

**Finding(s):**

Avista was unable to produce records indicating that the Maximum Allowable Operating Pressure (MAOP) was established for the following segments of pipeline:

- a. **Connell** – Two of the three segments between the Connell gate station #142 and reg #140A.
- b. **Connell** – Old school boiler room, no address. Near meter 203729. Possibly 590 E. Adams St. (Service line and main feeding the service)
- c. **Connell** – Bridge crossing over flume at W. Adams and N. 2<sup>nd</sup>.
- d. **Lind** - Main on SW 1<sup>st</sup> St between S. Van Marter Rd and St Clair Ave.
- e. **Lind** - Main on W. Main St between Lucher Ave. and St Clair Ave.
- f. **Harrington** – Pipeline between the Spokane-Odesa pipeline and D.R. 128.
- g. **Harrington** - Pipeline between the Harrington regulator station and the CP test site at 314 N. 3<sup>rd</sup> St.
- h. **Odesa** – PE system fed by D.R. 1001. (14114 Airway Dr.)

- i. **Odessa** - Spokane-Odessa pipeline from Reg #128 in Harrington to Reg #130 in Odessa, segment 15, built in 1971.
- j. **Odessa** – Reg #130 to tie in with PE system.

Note:

For pipelines installed and tested prior to July 1, 1965, Avista should verify that their designated MAOP is correct even if test records are available. Records appear to indicate that some designated MAOP's may actually be lower due to the restriction found in Part 192.619(a)(3) which restricts the MAOP to the highest pressure operated in the 5 year window prior to July 1, 1970.

**Avista Response to NOPV #1:**

Avista operations and engineering personnel conducted a preliminary search for records to demonstrate that MAOPs were established for the applicable segments prior to the inspection. Although Avista was not able to produce records indicating that the MAOP was established for certain segments of Avista's pipeline at the time of the inspection, an exhaustive file search of the local offices and headquarters (Spokane) has not been completed. Avista requests until September 29, 2017, to complete this search and to supplement the records provided at the time of the inspection.

Avista intends to work with the WUTC to create a Stipulated Agreement to develop a systematic process designed to provide MAOP records for Avista's high pressure pipeline system.

**Probable Violation #2 Reference:**

WAC 480-93-175(4) Moving and lowering metallic gas pipelines.

**Description of Probable Violation (NOPV):**

The gas pipeline company must conduct a leak survey within thirty days from the date the company moves or lowers any gas pipeline under the provisions of subsection (2) of this section.

**Finding(s):**

Avista conducted an engineering study on September 30th 2015, and then lowered in place, an operational 1-1/4" steel main in Warden WA (date not specified). Avista was unable to produce a record indicating that a leak survey was conducted within 30 days as required.

**Avista Response to NOPV #2:**

Avista concurs that the required leak survey following a lowering of 1-1/4" steel main was not completed. Avista's Gas Standards require the leak survey to occur in Specification 3.12, Sheet 12 but this was not completed. The individual responsible to have initiated this task has been retrained regarding this Standard. On June 8, 2017, the operations managers were informed of this NOPV and were requested to reinforce the specifications to their field personnel. In addition, a company-wide electronic training document will be circulated in August 2017 to remind all individuals of this requirement. The line was leak surveyed on July 26, 2017 and no leaks were found.

**Probable Violation #3 Reference:**

WAC 480-93-170(7)(f) Tests and reports for gas pipelines

**Description of Probable Violation (NOPV):**

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

(f) Line pipe size and length;

**Finding(s):**

Records indicate that Avista does not record the length of the pipelines that are pressure tested after third party damage. A record of the pipeline length is necessary to ensure that the pressure test is conducted for the proper timeframe based on size and length of pipe.

**Avista Response to NOPV #3:**

Avista concurs that, in the past, the documentation of pipeline length pressure tested after a third party damage repair was not recorded. Avista has directed its field personnel to begin capturing the "Length of Pressure Tested Pipe" as a comment on the work order/service request as an immediate interim solution. Once the applicable computer systems can be updated (Service Suite and Maximo), an appropriate field will be available to capture this required information. In the less common instances where a paper form is being utilized to capture field repairs, processes have been instituted to begin capturing the length of the pressure test for the damage repair.

**Area of Concern / Field Observation (AOC/FO) #1 Reference:**

WAC 480-93-178(2) Protection of plastic pipe.

**Finding(s):**

During the field portion of this inspection a visit was made to Avista's contractor storage yard in Goldendale WA. We observed a large amount of 4-inch PE pipe that had manufacturer date codes in the 2005 – 2006 range. This would exceed the maximum UV exposure time limit if this pipe were to be used. Avista personnel indicated that this pipe was scrap pipe and not for use. Avista should ensure that this pipe is properly disposed of or clearly marked not for use in the gas distribution system.

**Avista Response to AOC/FO #1:**

Avista's Goldendale Operations District Local Gas Representative has ensured that all outdated PE pipe at the contractor's storage yard has been cut up and delivered to the local refuse transfer station. The operations managers were informed of the NOPV and were requested to reinforce the specifications to their field personnel. In addition, the importance to clearly mark or dispose of outdated PE pipe will be communicated to gas employees and contractors in a company-wide electronic training document that will be circulated in August 2017.

**Area of Concern / Field Observation (AOC/FO) #2 Reference:**

WAC 480-93-080(2) Welder and plastic joiner identification and qualification.

**Finding(s):**

During a review of fusion/joiner qualification records it was noted that some of the forms being used to record the employee qualifications were obsolete and incorrectly identified the type of joining procedure employees were performing. Form number N-2596 (09-07) is obsolete but was still being used in some areas. Avista needs to ensure that the proper form identifying the correct type of joining process is being used as the permanent record of employee qualification. Form N-2596 (11/11) appears to be the correct form.

**Avista Response to AOC/FO #2:**

Avista concurs that an outdated 2007 form was being used in some instances by field personnel to document their PE Pipe Joining Qualifications as required by WAC 480-93-080(2). The noted form, has since been refreshed (June 2017) and has been sent to all Washington Construction Offices for use starting in 2017. In addition, a company-wide reminder will be circulated in 4Q 2017 to remind all individuals of the requirement to be using the new form.

**Area of Concern / Field Observation (AOC/FO) #3 Reference:**

49 CFR Part §192.467 - External corrosion control: Electrical isolation.

**Finding(s):**

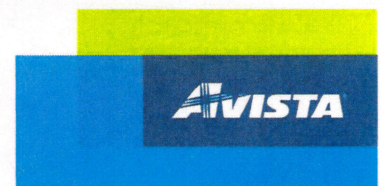
During a pre-audit field inspection of the Connell City Gate station #142, it was noted that the piping appeared to sit directly on the pipe support without any insulating materials. Avista personnel verified that there was no electrical isolation between the pipe and support. Direct contact should be avoided since in certain circumstances, it could potentially affect cathodic protection on the buried portion of the piping, cause bimetallic corrosion in the presence of an electrolyte, or in this case make it difficult to inspect or coat since the pipe was lying flat on the support and in direct contact with the support which was ridged and non-removable.

Avista promptly removed the support and modified it to better support the pipe with a saddle type adjustable bracket. Avista should include support inspections either as part of their atmospheric corrosion surveys or station maintenance activities.

NACE RP0169, suggests that piping be electrically isolated from supporting pipe stanchions where it may adversely affect the cathodic protection, cause coating issues or otherwise damage the piping.

**Avista Response to AOC/FO #3:**

As noted above, Avista promptly remediated the non-insulated pipe support when it was brought to the company's attention by the WUTC. As a matter of record, the above-ground gate station piping was not



being adversely affected by the direct contact with the pipe support. Avista will continue to design new facilities with insulated supports and remediate (as applicable) existing ones that are found.

**Area of Concern / Field Observation (AOC/FO) #4 Reference:**

49 CFR Part 192.479(b) Atmospheric corrosion control: General

**Finding(s):**

During field inspections it was noted that X-TRU coated steel pipe is being used for above ground installations. The outer coating on X-TRU coated pipe has a tendency to crack when exposed to UV light and temperature swings which then allows water to become trapped between the inner and outer layers of the coating which can lead to external corrosion. During a review of Avista's documentation of atmospheric corrosion surveys, the first two samples randomly picked with the worst corrosion ratings mentioned that the coating was X-TRU coat. It is our opinion that this type of coating is not suitable for above ground installations without additional protective measures. In addition, Avista's O&M manual does not identify this type of coating as being suitable to prevent atmospheric corrosion. Avista should verify through the manufacturer the acceptability of above ground installations, recoat this type of coating with a suitable above ground approved coating, or take additional measures where applicable.

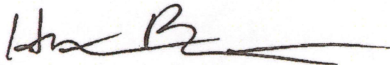
Please note the requirement found in WAC 480-93-017(1) which requires that:

"...all procedures must detail the acceptable types of materials, fittings, and components for the different types of facilities in the gas pipeline company's system".

**Avista Response to AOC/FO #4:**

Avista concurs that X-TRU coated steel pipe was found to exist at some pressure regulating stations at the pipe-to-soil interface in the Ritzville District and that the coating is not a preferred above ground pipe coating without additional protective UV resistant coating being applied over the X-TRU coating. Avista will update its Gas Standards Manual, Specification 3.12, in 2018 to disallow X-TRU coating on above ground piping without a supplementary overcoating being installed. When X-TRU coating is found in the field, it will be remediated immediately if the person has the materials and training to perform the work. If the recoating needs to be referred to another qualified person, it will be completed within (90) days.

Respectfully Submitted,



Heather Rosentrater  
Vice President, Energy Delivery  
HR/rkb

Cc: Mike Faulkenberry, Director, Natural Gas  
Karen Cash, Compliance Manager  
Tim Mair, Goldendale/Ritzville District Operations Manager  
WUTC Correspondence File