



STATE OF WASHINGTON

**UTILITIES AND TRANSPORTATION COMMISSION**

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**CERTIFIED MAIL**

June 26, 2017

Heather Rosentrater  
Vice President, Energy Delivery  
Avista Utilities Corporation  
1411 East Mission  
PO Box 3727  
Spokane, WA 99220-3727

Dear Ms. Rosentrater:

**RE: 2017 Natural Gas Standard Inspection – Avista Utilities, Ritzville/Goldendale  
(Insp. No. 7260)**

Staff from the Washington Utilities and Transportation Commission (staff) conducted a Standard Natural Gas inspection from May 8 to May 17, of the Avista Utilities Corporation (Avista), Ritzville/Goldendale Unit. The inspection included a records review and inspection of the pipeline facilities.

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

**Your response needed**

Please review the attached report and respond in writing by July 28. The response should include how and when you plan to bring the probable violations into full compliance.

**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 81.04.405; or

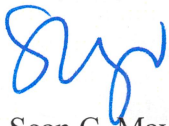
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- Issue a complaint under RCW 81.88.040, seeking monetary penalties, changes in the company's practices, or other relief authorized by law, and justified by the circumstances. Any pipeline company that violates any pipeline safety provision of any commission order, or any rule in this chapter including those rules adopted by reference, or chapter 81.88 RCW is subject to a civil penalty not to exceed two hundred thousand dollars for each violation for each day that the violation persists. The maximum civil penalty for a related series of violations is two million dollars; or
- Consider the matter resolved without further commission action.

We have not yet decided whether to pursue a penalty or complaint in this matter. Should the commission decide to assess a penalty or initiate a complaint, your company will have an opportunity to respond and formally present its position.

If you have any questions or if we may be of any assistance, please contact Scott Rukke at (360) 664-1241. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,



Sean C. Mayo  
Pipeline Safety Director

Enclosure.

cc: Mike Faulkenberry, Director of Natural Gas, Avista

**UTILITIES AND TRANSPORTATION COMMISSION  
2017 Natural Gas Pipeline Safety Inspection  
Avista Utilities Corporation – Ritzville/Goldendale Unit**

The following probable violation(s) and areas of concern/field observations of Title 49 CFR Part 192 and WAC 480-93 were noted as a result of the 2017 inspection of the Avista Ritzville/Goldendale Unit. The inspection included a random selection of records, operation and maintenance (O&M), emergency response, inventory, and field inspection of the pipeline facilities.

**PROBABLE VIOLATIONS**

**1. 49 CFR §192.619 Maximum allowable operating pressure - 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. However, for steel pipe in pipelines being converted under §192.14 or uprated under subpart K of this part, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, one of the following pressures is to be used as design pressure:*

*(i) Eighty percent of the first test pressure that produces yield under section N5 of Appendix N of ASME B31.8 (incorporated by reference, see §192.7), reduced by the appropriate factor in paragraph (a)(2)(ii) of this section; or*

*(ii) If the pipe is 12<sup>3</sup>/<sub>4</sub> inches (324 mm) or less in outside diameter and is not tested to yield under this paragraph, 200 p.s.i. (1379 kPa).*

*(2) The pressure obtained by dividing the pressure to which the segment was tested after construction as follows:*

*(i) For plastic pipe in all locations, the test pressure is divided by a factor of 1.5.*

*(ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with the following table:*

Class location	Factors <sup>1</sup> , segment—		
	Installed before (Nov. 12, 1970)	Installed after (Nov. 11, 1970)	Converted under §192.14
1	1.1	1.1	1.25
2	1.25	1.25	1.25
3	1.4	1.5	1.5
4	1.4	1.5	1.5

<sup>1</sup>For offshore segments installed, uprated or converted after July 31, 1977, that are not located on an offshore platform, the factor is 1.25. For segments installed, uprated or converted after July 31, 1977, that are located on an offshore platform or on a platform in inland navigable waters, including a pipe riser, the factor is 1.5.

(3) The highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column. This pressure restriction applies unless the segment was tested according to the requirements in paragraph (a)(2) of this section after the applicable date in the third column or the segment was uprated according to the requirements in subpart K of this part:

Pipeline segment	Pressure date	Test date
—Onshore gathering line that first became subject to this part (other than §192.612) after April 13, 2006	March 15, 2006, or date line becomes subject to this part, whichever is later	5 years preceding applicable date in second column.
—Onshore transmission line that was a gathering line not subject to this part before March 15, 2006		
Offshore gathering lines	July 1, 1976	July 1, 1971.
All other pipelines	July 1, 1970	July 1, 1965.

(4) The pressure determined by the operator to be the maximum safe pressure after considering the history of the segment, particularly known corrosion and the actual operating pressure.

(b) No person may operate a segment to which paragraph (a)(4) of this section is applicable, unless over-pressure protective devices are installed on the segment in a manner that will prevent the maximum allowable operating pressure from being exceeded, in accordance with §192.195.

(c) The requirements on pressure restrictions in this section do not apply in the following instance. An operator may operate a segment of pipeline found to be in satisfactory condition, considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column of the table in paragraph (a)(3) of this section. An operator must still comply with §192.611.

(d) The operator of a pipeline segment of steel pipeline meeting the conditions prescribed in §192.620(b) may elect to operate the segment at a maximum allowable operating pressure determined under §192.620(a).

**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 Lutcher 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. **Odesa** - Spokane-Odesa pipeline from Reg #128 in Harrington to Reg #130 in Odesa, segment 15, built in 1971
- j. **Odesa** – 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.

2. **WAC 480-93-175 Moving and lowering metallic gas pipelines.**

*(4)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.

3. **WAC 480-93-170(7)(f) 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:*  
*(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.

**AREAS OF CONCERN OR FIELD OBSERVATIONS**

1. **WAC 480-93-178(2) Protection of plastic pipe.**  
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 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.
2. **WAC 480-93-080(2) Welder and plastic joiner identification and qualification.**  
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.
3. **49 CFR Part 192.467 External corrosion control: Electrical isolation.**  
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 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.

4. **49 CFR Part 192.479(b) Atmospheric corrosion control: General**

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."*