

U.S. Department of Transportation
Research and Special Programs Administration
400 Seventh Street S.W.
Washington, D.C. 20590

JAN 28 2003

Douglas Kilpatrick, P.E.
Pipeline Safety Director
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Dr., S. W.
Olympia, Washington 98504-7250

Dear Mr. Kilpatrick:

We have considered your letter of December 19, 2002, notifying us that the Washington Utilities and Transportation Commission (WUTC) has granted the Avista Utilities Corporation (Avista) a waiver from compliance with 49 CFR 192.321(a).

The waiver will permit the installation of 6-inch nominal diameter, SDR 11.5, PE plastic carrier pipe into a 10 -inch nominal diameter steel casing on the underside of the Argonne Road Bridge over the Spokane River located in Spokane, Washington. Approximately 339 feet of the plastic piping will not meet the burial requirements of 192.321(a). The steel-encased plastic pipe will be protected against mechanical damage and ultraviolet radiation, and meet all stress limits applicable to plastic pipe. Avista has also agreed to additional requirements imposed by the Commission, as recommended by the WUTC Pipeline Safety Staff.

We have no objection to the waiver. The circumstances are comparable to those of previous waivers we have approved permitting the installation of plastic pipe above ground on bridges.

Sincerely,
Stacey L. Gerard
Associate Administrator for Pipeline Safety

Reynolds, James

From: Hoidal, Chris (OPSDNVR)
Sent: Wednesday, January 08, 2003 11:41 AM
To: Stahoviak, Jeff (OPSDNVR); Reynolds, James
Cc: Finch, Thomas (OPSDNVR)
Subject: RE: Wahington State Waiver

We have granted similar waivers in the past. I have no objections to the waiver.

-----Original Message-----

From: Stahoviak, Jeff (OPSDNVR)
Sent: Wednesday, January 08, 2003 8:36 AM To: Reynolds, James
Cc: chris hoidal; Thomas Finch
Subject: RE: Wahington State Waiver

James,

I requested that future waiver requests be addressed directly to Stacey Gerard, but that the WUTC should also send a copy to Chris. The Guidelines for States Participating in the Pipeline Safety Program are not this specific on the subject of waivers; my intent was to reduce the potential for delay or confusion during the waiver process. If I have erred, please let me know, and I'll correct my instructions to the WUTC.

I do not know of any reason to oppose the waiver request, but Chris will have the final word. Thank you for your help!

Jeff

-----Original Message-----

From: Reynolds, James
Sent: Wednesday, January 08, 2003 8:11 AM To: Hoidal, Chris (OPSDNVR)
Cc: OPS Western Region
Subject: Wahington State Waiver

Chris,

I have received the waiver request from your office of behalf of the Washington Utilities and Transportation Commission (WUTC) dated December 19, 2002. The WUTC has approved Avista Utilities Corporation's (Avista) request for waiver from 192.321(a) to install approximately 339 feet of 6-inch PE plastic pipe in 10-inch steel casing on a bridge located in Spokane, Washington.

This waiver request is similar to many past waivers approved by the Massachusetts Department of Telecommunications and Energy and concurred with by OPS. If the Western Region does not have any oppositions to the Order approved by the WUTC, I will prepare the OPS response concurring with Avista's waiver request.

James

STATE OF WASHINGTON
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
1300 S. Evergreen Park Dr. S.W.,
P.O. Box 47250
Olympia, Washington 98504-7250

Ref. No. Docket PG-021399

December 19, 2002

Chris Hoidal, Director
Office of Pipeline Safety Western Regional Office
12600 West Colfax Avenue, Suite A-250
Lakewood, Colorado 80215

Dear Mr. Hoidal:

Subject: Request for Waiver of 49 CFR 192.321(a) to Allow a Steel Encased PE Bridge Crossing

The Washington Utilities and Transportation Commission (WUTC) has reviewed and approved the following request by Avista Utilities Corporation (Avista) for a waiver of compliance with 49 CFR 192.321(a). The request involves the installation of approximately 339 feet of 6-inch polyethylene (PE) pipe in a 10-inch steel casing on the underside of the Argonne Road Bridge over the Spokane River located in Spokane, Washington. The PE will be protected from ultraviolet light, mechanical damage and stress limits for plastic pipe as required by Part 192. The attached request from Avista outlines the construction requirements to be followed during the installation. In addition, Avista has agreed to the following additional requirements imposed by the Commission, as recommended by the WUTC Pipeline Safety Staff

1. Conduct quarterly leak surveys with an approved Combustible Gas Indicator for 2 years.
2. After 2 years, conduct leak surveys during patrols.
3. Conduct daily temperature readings during the high and low yearly temperatures to establish a baseline for the maximum amount of expansion and contraction the PE pipe will experience.
4. Ensure that the temperature baselines will be commensurate with the design limitations of the PE pipe.
5. Add the following to Avista's Operations and Maintenance Procedures Manual:
 - a. Details of any record keeping requirements specific to the installation.
 - b. Details of any special record keeping requirements specific to the installation.

WUTC staff is forwarding this request to you for your review and approval. If you have any questions or if staff may be of any assistance, please contact Scott Rukke, Pipeline Safety Engineer at (360) 664-1241.

Sincerely,
Douglas Kilpatrick, P.E.
Pipeline Safety Director

Arista Utilities
1411 East Mission P.O.Box3727
Spokane, Washington 99220-3727

October 21, 2002

Mr. Douglas Kilpatrick
WA Utilities and Transportation Commission
P.O. Box 47250
Olympia, WA 98504-7250

Re: Waiver for above ground plastic pipe in steel casing DOT § 192.321 (a)

Dear Mr. Kilpatrick:

Avista Corporation is requesting a waiver for an above ground 6-inch PE pipe in steel casing. The pipe will be installed in the May 2003 timeframe across the Spokane River at Argonne Road Bridge in Spokane County at the city limits to Millwood, Washington. The design of the pipe will be as follows:

- The MAOP of this line is 60 PSIG.
- The 10-inch steel casing will terminate below ground level.
- The casing will be suspended from a new 339-foot, 3-span concrete bridge (Post tensioned, cast in place box girder type with drop-in, pre-cast, pre-stressed concrete girders in the center span)
- A thermal well will be installed on the casing to allow for temperature monitoring.
- A boot-type end seal will be used at both ends of the casing.
- Thinsulators will be installed and spaced at a minimum of 5 feet.
- The computed design pressure for PE pipe (SDR 11.5) at 120 degrees F is 61 PSIG; the highest recorded temperature for the area is 108 degrees F.
- Continuous coil pipe will be used to eliminate fusions inside the casing.
- The maximum thermal contraction is calculated to be 32.1 inches. Since the ends of the pipe are "fixed" by the burying of the facility at the ends of the bridge, this contraction will be exhibited as internal stresses. The internal stress is calculated to be 737 psi which is less than the 1250 psi HDB rating of the PE pipe.

If you have any questions, please contact my Project Engineer, Randy K. Bareither at (509) 495-8716.

Respectfully yours,
Michael J. Faulkenberry
Chief gas Engineer
Acista Utilities

***MISSING SEVERAL PAGES OF ORIGINAL

BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of)	
)	
AVISTA UTILITIES)	
Washington Water Power Division,)	
)	DOCKET PG-021399
Petitioner,)	
)	
For a Waiver of WAC 480-93-010)	
to install an above-ground polyethylene)	ORDER GRANTING PETITION
gas main in steel casing above)	
the Spokane River in Spokane)	
Washington.)	
.....))	

BACKGROUND

- 1 On October 21, 2002, Avista Utilities, a Washington corporation, filed a petition, the effect of which would be to waive 49 CFR 192.321(a). Title 49, Part 192 of the Code of Federal Regulations is incorporated into the Washington Administrative Code as WAC 480-93-010. The waiver would allow Avista to install a 6-inch polyethylene (PE) natural gas pipelines inside a 10-inch steel casing across the Spokane River at Argonne Road in Spokane, Washington. Avista intends to install the pipe during May of 2003.

- 2 This matter was brought before the Commission at its regularly scheduled open meeting on November 27, 2002. The Commissioners, having determined that granting the petition is consistent with the public interest, directed the Secretary to enter this order.

8 (4)

Avista proposes the following additional safety measures:

- The Maximum Allowable Operating Pressure of this pipeline will be 60 psig.
- All above-ground pipe will be encased in a 10-inch steel casing which will terminate below ground level.
- The 10-inch steel casing will be installed inside the box girder of the bridge away from direct sunlight.
- A thermal well will be installed on the casing to allow for the monitoring of temperature fluctuations.
- Avista will conduct temperature readings during the highest and lowest temperatures of the year and after one year will review the information to ensure that the design limitation of the PE pipe is not exceeded. This review must be documented and kept for the life of the pipeline.
- A boot-type end seal will be used at both ends of the casing.
- Thinsulators will be spaced a maximum of 5 feet apart.
- Continuous coil pipe will be used to eliminate any fusion joints inside the casing.
- Quarterly leak surveys will be conducted with an approved combustible gas indicator or hydrogen flame ionization unit for two years following completion of the installation.

- 13 (3) Avista requests a waiver of WAC 480-93-010, to the extent it adopts 49 CFR 192.321(a), and seeks permission to install a 6-inch polyethylene (PE) natural gas pipeline inside a 10-inch steel casing across the Spokane River at Argonne Road in Spokane, Washington. Because the federal regulation is incorporated in WAC 480-93-010, this is a request for a waiver of the state regulation.
- 14 (4) Avista's request is consistent with the public interest.
- 15 (5) Pursuant to WAV 481-93-230, the Commission grants the waiver of WAC 480-93-010, to the extent it adopts 49 CFR 192.321(a) on the terms and conditions stated in Finding of Fact number 4 above and directs the Secretary to issue the following Order.

ORDER

THE COMMISSION ORDERS:

- 16 (1) The request by Avista Utilities for a waiver of WAC 480-93-010, to the extent it adopts Title 49, Part 192.321(a) be granted to allow the installation of an above ground, encased, 6-inch PE bridge crossing across the Spokane river at Argonne Road in Spokane Washington.
- 17 (2) As a condition of the grant of the waiver, Avista must implement the additional safety measures listed in Finding of Fact Number 4.