



U.S. Department  
of Transportation

Pipeline and Hazardous Materials  
Safety Administration

12300 W. Dakota Ave., Suite 110  
Lakewood, CO 80228

## WARNING LETTER

### **CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

November 5, 2010

Mr. Mike Joynor  
Pipeline Vice President  
Alyeska Pipeline Service Company  
900 East Benson Blvd.  
P.O. Box 196660  
Anchorage, AK 99519-6660

**CPF 5-2010-5030W**

Dear Mr. Joynor:

On August 25-29, and September 11-19, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected Alyeska Pipeline Service Company's (Alyeska) pipeline segment between Pump Station 4 (Milepost 126) and Pump Station 6 (Milepost 397), and between Pump Station 9 (Milepost 496) and Pump Station 10 (Milepost 647), in Fairbanks, Alaska.

As a result of the inspection, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

1. **§ 195.404 Maps and Records.**
  - (a) **Each operator shall maintain current maps and records of its pipeline systems that include at least the following information;**
  - (4) **The diameter, grade, type and nominal wall thickness of all pipe.**

Alyeska failed to maintain current maps and records of certain pressure relief piping at Pump Station 5 (PS05). During the inspection, PHMSA asked Alyeska to provide maps and records for the PS05 manifold building relief piping. In response, Alyeska provided "Pump

Station 05, Drawing D35 M102.” This drawing does not reflect the modifications made to the relief piping in the mid-1990s, and therefore does not reflect the current configuration of the pipeline system.

In addition, Alyeska failed to maintain current maps and records for 48 inch diameter fittings installed on the mainline pipe at RGV 39, (approximate stationing 11475+89-11477+54). During the inspection, PHMSA asked to see the pipeline as-built records that would show these fittings. Alyeska informed PHMSA that the as built records had not been updated to reflect the fittings.

The probable violation is based on photographs and Drawing D35 M102.

**2. §195.579 What must I do to mitigate internal corrosion?**

**(a) General. If you transport any hazardous liquid or carbon dioxide that would corrode the pipeline, you must investigate the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and take adequate steps to mitigate internal corrosion.**

Alyeska does not investigate the corrosive effect of the hazardous liquid on all portions of the pipeline. Specifically, Alyeska has not included known bottom-of-pipe fittings or appurtenances at Mile Post 200 in its internal corrosion program. Alyeska did not provide any record that they had investigated corrosive effects on these appurtenances. During the inspection, PHMSA observed the bottom-of-pipe appurtenances at Mile Post 200. PHMSA requested that Alyeska provide a list of all bottom-of-pipe fittings on the mainline. In response, Alyeska informed PHMSA that its In-Line Inspection (ILI) contractor does not report such appurtenances.

Bottom-of-pipe appurtenances must be investigated for corrosion. These appurtenances present a corrosion risk because water and solids may accumulate inside of them. Such water and solids may contribute to internal corrosion, particularly, because they may not be removed during maintenance pigging operations. In addition, ILI tools cannot typically detect corrosion damage inside appurtenances. Given the corrosion risks, Alyeska should include all appurtenances in their internal corrosion control program

The probable violation is based on photographs and conversation with Alyeska’s corrosion control personnel.

**3. § 195.579 What must I do to mitigate internal corrosion?**

**(a) ...**

**(b) Inhibitors. If you use corrosion inhibitors to mitigate internal corrosion, you must-**

- (1) Use inhibitors in sufficient quantity to protect the entire part of the pipeline system that the inhibitors are designed to protect;**
- (2) Use coupons or other monitoring equipment to determine the effectiveness of the inhibitors in mitigating internal corrosion; and**
- (3) ...**

Alyeska uses corrosion inhibitors in the 36-inch diameter relief piping at Pump Stations 06 and 10. These sections of crude piping are known as a "dead legs," because they are part of the pipeline system that experiences low or no flow. Dead legs may be susceptible to internal corrosion. Alyeska's 2008 inhibitor injection records indicate that inhibitor is injected into these dead legs. However, during the inspection, PHMSA observed that coupons used to monitor corrosion were only installed on high points in the relief piping. The coupons installed at the high points of the relief piping are not exposed to conditions which are representative of the below ground segments because of gravity segregation of fluids and accumulation of wax and solid on the bottom of the pipe. The amount of corrosion inhibitor required to adequately protect the high points is substantially different from the amount and type of corrosion inhibitor required to protect the below ground segments. Alyeska has no coupons for determining the effectiveness of the inhibitor in the below-ground segment.

Alyeska presented information on June 24, 2010 that Alyeska would take the following steps to mitigate internal corrosion in the dead legs:

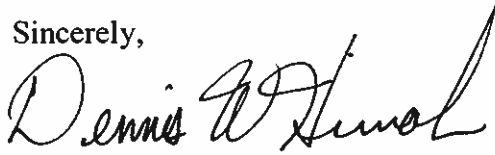
- Change inhibitor
- Flush dead legs and treat annually
- Install coupon in the lower portion of the dead legs by the end of 2011
- Remove dead legs at Pump Stations 6, 10 and 11 by 2013

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$100,000 for each violation for each day the violation persists up to a maximum of \$1,000,000 for any related series of violations. We have reviewed the circumstances and supporting documents involved in this case, and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to correct the items identified in this letter. Failure to do so will result in Alyeska Pipeline Service Company being subject to additional enforcement action.

No reply to this letter is required. If you choose to reply, please send your response to 188 W. Northern Lights Blvd. Suite 520, Anchorage, Alaska 99503, and in your correspondence please refer to **CPF 5-2010-5030W**. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an

explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis Hinnah". The signature is written in a cursive style with a large, prominent initial "D".

Dennis Hinnah  
Deputy Director, Western Region  
Pipeline and Hazardous Materials Safety Administration

cc: PHP60 – Compliance Registry  
B. Flanders (#120662, 120658)