



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

**NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 9, 2008

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

CPF 5-2008-5014

Dear Mr. Joynor:

Between October 15 and 19, 2007, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected the Alyeska-operated Trans Alaska Pipeline System (TAPS) between Milepost 496 and Milepost 647, including Pump Stations 9 and 10. PHMSA also inspected Alyeska records regarding the effects of a 2006 flood on TAPS near Milepost (MP) 761.

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. § 195.401 General requirements.

(b)Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it shall correct it within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.

In October 2006, severe flooding affected the TAPS right-of-way at numerous stream crossings along the southernmost 80 miles of the pipeline. As part of our October 2007 inspection, we reviewed Alyeska's Civil Monitoring and ROW Maintenance Audit (#07-07), dated October 8, 2007. Alyeska's audit included information pertaining to flooding at stream crossings. Our review indicates that Alyeska did not address potentially adverse conditions caused by this flooding within a reasonable time.

Alyeska's internal audit identified an Authorization for Expenditure (AFE D400-40X) approved on February 1, 2007, that had not been completed per its original scope. The scope of the AFE stated,

"5 below ground pipeline scours locations will be investigated and the pipeline will be repaired as required. One location PLMP 761.7, determined to be the location of the most severe scour, was investigated in 2006. It was found that during the flood, the pipeline was washed clear of overburden and minor damage was found to have occurred to the tape coating. Investigation determined that repairs were not immediately required and were scheduled for 2007 due to pumping safety conditions."

Alyeska's audit also reported that near MP 761.7,

"The preliminary investigation work completed in November 2006 excavated two separate areas of approximately 8 feet each in length for performing the visual inspections (total scour affected area of stream was approximately 80 feet)."

Our inspection revealed that the five identified scour locations were never investigated in 2007. The sixth at MP 761.7 was only partially investigated in 2006. Our inspections were unable to find sufficient justification for cancellation of the planned 2007 investigations at the six sites. Alyeska's internal audit similarly found insufficient justification for cancellation of the planned 2007 investigations at the six sites.

In an April 25, 2008 letter to the Joint Pipe Office (JPO) entitled Cancellation of Investigations at Six Identified 2006 Flood Locations, Alyeska stated,

"As a result of a significant flood event in October 2006, Alyeska Pipeline Service Company (APSC) identified six locations (MP 745.26, MP 745.67, MP 748.05, MP 752.18, MP 761.74 (near 761.7), and MP 766.78) for investigation of the mainline pipe for possible flood related damage."

However, based on the information (mostly MFL pig results) obtained subsequent to the two exploratory excavations, Alyeska canceled the pipeline excavations for the six identified sites.

PHMSA believes Alyeska did not adequately investigate and where needed, correct adverse conditions as the six scour areas in a reasonable time (initial investigation in

2006, deferred/cancelled in 2007, and rescheduled for 2008). Alyeska only excavated 16 feet of an estimated 80 feet of scour area at MP 761.73 (near MP 761.7) during 2006. Further, Alyeska did not repair pipe or coating damage, uncovered at MP 761.73.

Alyeska has indicated that it plans to re-excavate and repair coating/cathodic protection system damage at MP 761.73 during the summer of 2008. Alyeska also recently committed to provide PHMSA and the JPO with justification for not investigating the other five scour areas including: how the depth of cover was determined, risk associated from another flood event, undisturbed depth of cover, and potential for rock and snow slides.

Evidence:

1. Photographs of damage pipe and coating.
2. Pipe investigation Report MP 761.73, North excavation.
3. Pipe investigation Report MP 761.73, South excavation.
4. OM-1, section 6 Pipeline Repairs, pages 6-1 and 6-2.
5. MR-48, Table 2.1 Permissible Permanent Repair Methods, page 2-10.
6. MR-48, section 2.6.1.5.2 Repair of Pipe Surface Damage, pages 2-16 and 2-17.
7. MR-48, section 9.8.7 Repair of Damage, pages 9-30 and 9-31.
8. Civil Monitoring and ROW Maintenance Audit #07-07, Pages 1-3 of 14.
9. Cancellation of 2006 Flood digs, pages 1 and 2.
10. MR-48 Section 9.2 Bedding and Padding Material pages 32-39.
11. MR-48 Section 18 Pipe Coating Repairs, Pages 18-1 through 18-5.
12. Alyeska's response to JPO's letter regarding Cancellation of Investigations at Six Identified 2006 Flood Locations.
13. Alyeska's "Milepost 761.7 Excavation Risk Assessment Summary."

2. § 195.571 What criteria must I use to determine the adequacy of cathodic protection?

Cathodic protection required by this subpart must comply with one or more of the applicable criteria and other considerations for cathodic protection contained in paragraphs 6.2 and 6.3 of NACE Standard RP0169-96.

Five areas (MP 567.66, 574.16, 574.33, 578.95, and 579.18) of the pipeline were found to have inadequate Cathodic Protection (CP). These areas of low CP readings were confirmed by Over-the-Line Surveys conducted each year from 2003 to 2007. These five areas of the pipeline did not meet criteria set forth in section 195.571.

Evidence:

1. Alyeska's CIS data for 2003, 1 sheet.
2. Alyeska's CIS data for 2004, 2 sheets.
3. Alyeska's CIS data for 2006, 4 sheets.
4. Alyeska's CIS data for 2007, 4 sheets.

2. Alyeska's CIS data for 2004, 2 sheets.
3. Alyeska's CIS data for 2006, 4 sheets.
4. Alyeska's CIS data for 2007, 4 sheets.
5. PHMSA spread sheet of low areas, 1 sheet.

3. **§ 195.402 Procedural manual for operations, maintenance, and emergencies.**

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

Alyeska's manual of written operations and maintenance procedures at MP-166-3.03, "Facility Corrosion Integrity Monitoring" and MP-166-3.03-01, "Facility Corrosion Integrity Monitoring Engineering and Implementation," states that re-inspection intervals are based on the intervals set forth in API 570 "Piping Inspection Code." The "corrosion rate" referenced in API 570 is derived from measuring the difference between actual readings of wall thicknesses over time. Alyeska presented documentation that indicated that the following check valve by-passes were not or will not be inspected at the intervals prescribed by API 570, as required by Alyeska's own manual of written operations and maintenance procedures:

CV84 AB - Was last inspected by Alyeska in 2006. API 570 calculated re-inspection interval is 2 years, based on a 30 mil/yr. corrosion rate. Alyeska has scheduled the next re-inspection for 2010.

CV90 D - Was last inspected by Alyeska in 2006. API 570 calculated re-inspection interval is 3 years, based on a 15 mil/yr. corrosion rate. Alyeska has scheduled the next re-inspection for 2016.

CV095 AB - Was last inspected by Alyeska in 2001. API 570 calculated re-inspection interval is 4 years, based on a 13 mil/yr. corrosion rate. Alyeska has scheduled the next re-inspection for 2014.

Alyeska is not following their manual of written procedures for conducting normal operations and maintenance activities. Specifically, Alyeska is not following the written procedures in MP-166-3.03 or MP-166-03.03-01 for determining re-inspection intervals on valve bypass lines.

Evidence:

- 1. MP166-3.03, "Facility Corrosion Integrity Monitoring", pages 1 through 9.
- 2. API 570, "Piping Inspection Code" pages 6-1, 6-2, 6-3, 7-1, 7-3.
- 3. ASME B31.3, Table A-1, page 140.
- 4. Alyeska's spread sheet for valve bypass inspections.
- 5. PHMSA analysis of Alyeska's Re-inspection Interval based API 570.

4. § 195.404 Maps and Records.

**(c) Each operator shall maintain the following records for the periods specified;
 (1) The date, location, and description of each repair made to pipe shall be maintained for the useful life of the pipe.**

Alyeska did not provide records of the wall thickness and grade for the DRA Sleeves installed at PS 09 and PS 10. The Alignment sheets (G-100 drawings) also do not show the DRA injection ring for PS 09. These repairs and alterations are required information for Alyeska's MR-48, "Trans-Alaska Pipeline Maintenance and Repair Manual."

Evidence:

- 1. Drawing D-39-M600, "Pump Station 9 DRA Injection Annular Ring Injection Nozzle Sections & Details".
- 2. OM-1, "Procedures Manual for Operations Maintenance and Emergencies", pages 10-9 through 10-11.
- 3. Alignment sheets for PS09 & PS10.
- 4. As-built Data sheets showing DRA Sleeves at 28974+27 & 30936+74.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to an administrative 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. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violations and has recommended that you be preliminarily assessed a civil penalty of \$56,000 as follows:

<u>Item Number</u>	<u>PENALTY</u>
2	\$56,000

Proposed Compliance Order

With respect to Items 2, 3, and 4 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Alyeska Pipeline Service Company. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Items

With respect to Item 1, 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 promptly correct this item. Be advised that failure to do so may result in Alyeska Pipeline Service Company being subject to additional enforcement action.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. 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). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 5-2008-5014** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

cc: PHP-60 Compliance Registry
PHP-500 B. Flanders (#118833)

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Alyeska Pipeline Service Company a Compliance Order incorporating the following remedial requirements to ensure the compliance of Alyeska Pipeline Service Company with the pipeline safety regulations:

1. In regard to **Item Number 2** of the Notice pertaining to Low CP at MP 567.66, MP 574.16, MP574.33, MP 578.95 and MP 579.18:

Within twelve (12) months of receipt of the Final Order, Alyeska shall take appropriate action to bring the cathodic protection levels at the above-listed locations into compliance with one or more of the applicable criteria and other considerations for cathodic protection contained in Paragraphs 6.2 and 6.3 of NACE Standard RP01169-96 (incorporated by reference, see § 195.3) as required by § 195.571. Alyeska shall conduct CIS at the above-listed locations and provide the results of such CIS by September 30, 2009.

2. In regard to **Item Number 3** of the Notice pertaining to the reinspection interval for internal corrosion based on API 570/ MP-166-3.03, "Facility Corrosion Integrity Monitoring":

Alyeska shall properly re-determine the re-inspection intervals for check-valve bypasses listed in the Notice in accord with Alyeska's written procedures and specifications (API 570) and submit to PHMSA a revised inspection plan which will ensure that Alyeska re-inspects internal corrosion in check valve bypasses in a timely manner.

3. In regard to **Item Number 4** of the Notice pertaining to "As-built" information of DRA Injection Rings at PS09 & PS10:

Alyeska shall determine the wall thickness and grade of material used for the DRA injection rings at PS09 & PS10, include this information in their "As-built" records, and maintain these records for the life of the pipeline. Alyeska shall provide these updated records within 180 days.

5. Unless another time frame is indicated, Alyeska shall conduct the activities in the above-listed items and submit documentation of compliance within sixty (60) days of receipt of the Final Order.

6. Alyeska Pipeline Service Company shall maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Chris Hoidal, Director, Western, Pipeline and Hazardous Materials Safety Administration. Costs shall be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.