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

April 1, 2008

Mr. Jim Johnson
Pipeline Vice President
Alyeska Pipeline Service Company
900 East Benson Blvd.
P.O. Box 196606
Anchorage, AK 99519

CPF 5-2008-5002

Dear Mr. Johnson:

On July 8 to 13, 2007, 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 (ASPC) pipeline segment between Pump Station 1 and Milepost 126 near Prudhoe Bay, 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. **§195.116 Valves.**

   (e) Each valve other than a check valve must be equipped with a means for clearly indicating the position of the valve (open, closed, etc.).

During the inspection, MGV 10A was found without a valve position indicator.

Evidence: Photograph of MGV 10A without valve position indicator.

2. **§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.

A structural (non-pressure containment) sleeve was installed in 1990 at Mile Post (MP) 57.785, due to internal corrosion. Alyeska is operating the pipeline with an indeterminate amount of remaining pipe wall thickness under this sleeve. Alyeska did not correct this condition within a reasonable time even though a commitment to cut out and replace was made for 2007.

A 15-foot structural (non-pressure containment) sleeve was installed in 1990 at MP 57.785 due to internal corrosion. Alyeska monitored the corrosion at this location with Ultrasonic Testing (UT) pigs to determine the depth of corrosion until 2001. At that time, Alyeska determined that wax was blocking the ability of the UT pig to accurately predict the corrosion depth. In 2004, a Magnetic flux pig was run and it also was unable to accurately assess the corrosion depth. Alyeska is operating the pipeline with an indeterminate amount of remaining pipe wall thickness under a sleeve design that cannot contain pressure. Alyeska did not correct this condition within a reasonable time. This issue was reported to Alyeska in January 2006 and APSC management committed to PHMSA they would cut out this sleeve in 2007. Alyeska has now postponed this work until 2008 or 2009. This is not correction of a condition within a reasonable time.

Evidence:

1. Safety Related Condition Report 890028 Report listing internal corrosion as the cause, with maximum pit depth. 177.
2. Alyeska as built data base, listing 15 foot structural sleeve. (Not a pressure containing sleeve. A structural sleeve will not stop crude oil from leaking onto the ground, when the internal corrosion eats through the pipe wall).
3. Alyeska repair procedure for internal corrosion requires a pressure containing sleeve or replacement of pipe.
4. UT Pig data 1994-2001. (2001 pig having trouble with wax at Station 305116.6).
5. 2003 BJ MFL Pig did not report any corrosion at sleeve, due to the additional metal thickness of the sleeve.

§195.406 Maximum operating pressure.

(b) No operator may permit the pressure in a pipeline during surges or other variations from normal operations to exceed 110 percent of the operating pressure limit established under paragraph (a) of this section. Each operator must provide adequate controls and protective equipment to control the pressure within this limit.

Alyeska's Sadlerochit meter piping at Pump Station 1 has a maximum operating pressure (MOP) of 275 psig (150 ANSI class,) and BP's incoming piping to the meter has a MOP up to 740 psig (300 ANSI class). BP's surge report stated that BP's maximum discharge pressure has been limited by pressure shutdown switches at GC-1, FS-1 and FS-3. Alyeska must provide adequate controls and protective equipment to control the pressure within the maximum operating pressure. If BP switches are utilized, they must be maintained as DOT critical safety devices. Alyeska's "OM-1, Procedural Manual for Operations, Maintenance and Emergencies," Section 7 does not indicate that Alyeska must test and maintain these pressure switches.

Evidence:

1. In Alyeska's response to request for specific information, it is stated that Alyeska meter runs WOA & EOA (Sadlerochit oil) has a MOP of 275 psig.
2. BP's surge analysis report, Executive Summary, states that the high pressure switches are DOT critical safety devices.
3. OM-1 section 2, surge pressure control, does not list high pressure switches at GC2, FS1, and FS3.

4. **§195.428 Overpressure safety devices and overfill protection systems.**

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

Alyeska's Kuparuk piping has a MOP of 1180 psig, while the Kuparuk pipeline system has a MOP of 1440 psig. Alyeska has installed a pressure transmitter (31-PT-013A) to protect the 1180 psig piping from overpressure. Alyeska's "OM-1, Procedural Manual for Operations, Maintenance and Emergencies," Section 7 does not address this pressure transmitter or list it as required for testing. Alyeska presented records at Pump Station 1 of performing calibration of this pressure transmitter, indicating that transmitters were calibrated annually.

Evidence:

1. In Alyeska's response to request for specific information, it states that Alyeska's incoming Kuparuk pipe has a MOP 1180 psig, while Kuparuk's incoming pipeline has an MOP of 1415 psig.
2. Pressure transmitter calibration sheets for 2005, 2006.
3. OM-1 Section 7, does not list 31-PT-013A as a pressure-controlling device.

5. **§195.573 What must I do to monitor external corrosion control?**

(a) Protected pipelines. You must do the following to determine whether cathodic protection required by this subpart complies with Sec. 195.571:

(1) Conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months. However, if tests at those intervals are impractical for separately protected short sections of bare or ineffectively coated pipelines, testing may be done at least once every 3 calendar years, but with intervals not exceeding 39 months.

(e) Corrective action. You must correct any identified deficiency in corrosion control as required by Sec. 195.401(b).

An area (MP 12.2-13.2) of the pipeline was found to have inadequate cathodic protection (CP). These low CP readings were confirmed by Close Interval Surveys conducted in 2003, 2004, 2005, and 2006. This low CP area was further confirmed by 2002-2006 coupon readings. This section of the pipeline did not meet criteria set forth in section 195.571. This area of low CP levels was reported on a 2002 inspection (see PHMSA Final Order, CPF 5-2003-5002).

Evidence:

1. 2003-2006 CIS, Below -850 mil volt.
2. 2001-2006 Coupon survey, Below -850 mil volt and -100 mv shift.
3. Final Order CPF 5-2003-5002, page 3, Item 6, First allegation.

6. **§195.573 What must I do to monitor external corrosion control?**

(c) Rectifiers and other devices. You must electrically check for proper performance each device in the first column at the frequency stated in the second column.

Device	Check frequency
Rectifier..... **Reverse current switch.** **Diode.** **Interference bond whose failure would jeopardize structural protection**	**At least six times each calendar year, but with intervals not exceeding 2 ½ months**
Other interference bond	**At least once each calendar year, but with intervals not exceeding 15 months.**

(e) Corrective action. You must correct any identified deficiency in corrosion control as required by Sec. 195.401(b).

A rectifier powered by wind (31 EE 125) was installed in October 2003 at MP 12.5. Records indicated that the rectifier was only performing correctly on 11 occasions out of the 35 scheduled readings taken between October 2003 and July 2007.

Evidence:

1. Rectifier readings 2003-2007. When operational, the output should be in the range of 5 volts and 1 amp.
2. Final Order CPF 5-2003-5002, page 3, Item 6, First allegation.

7. **§195.438 Smoking or open flames.**

Each operator shall prohibit smoking and open flames in each pump station area and each breakout tank area where there is a possibility of the leakage of a flammable hazardous liquid or of the presence of flammable vapors.

During the inspection, "No Smoking" signs were missing or faded at the following valve locations: CKV 5, 8, 9, 10, 14, 16, 17, 18, 22, and MGV 5A and10A.

8. **§195.579 What must I do to mitigate internal corrosion?**
(c) Removing pipe. Whenever you remove pipe from a pipeline, you must inspect the internal surface of the pipe for evidence of corrosion. If you find internal corrosion requiring corrective action under Sec. 195.585, you must investigate circumferentially and longitudinally beyond the removed pipe (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the removed pipe.

Alyeska has removed piping associated with the Endicott meter run. Alyeska did not provide an inspection report for this pipe for internal corrosion.

Proposed Civil Penalty

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. 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 $112,000.00 as follows:

Item Number	PENALTY
5	$56,000
6	$56,000

Warning Items

With respect to *Items 7 and 8*, 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.

Proposed Compliance Order

With respect to *Items 1, 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.

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 5-2008-5002** 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 (#118831)

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 require that the Alyeska Pipeline Service Company complies with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to the missing valve position indicator on MV 10A. Alyeska Pipeline Service Company shall install a valve position indicator on MV 10A.

2. In regard to Item Number 2 of the Notice pertaining to the structural sleeve at MP 57.785, Alyeska Pipeline Service Company shall remove and inspect the internal corrosion inside the pipe under the sleeve during the pump station # 2 pipe replacement now scheduled for 2008. PHMSA shall be notified immediately if this sleeve is not removed in 2008.

3. In regard to Item Number 3 of the Notice pertaining to the pressure shutdown switches at GC-1, FS-1 and FS-3. Alyeska shall maintain these pressure shutdown switches as DOT critical safety devices or shall install adequate pressure control equipment within its own facilities at Pump Station 1.

   Alyeska Pipeline Service Company shall revise "OM-1, Procedural Manual for Operations, Maintenance Atmospheric Corrosion and Emergencies", Section 7, to indicate that these pressure shutdown switches are DOT critical safety devices or to reflect any additional pressure control equipment Alyeska installs at its own facilities at Pump Station 1. Alyeska shall also arrange to have such pressure shutdown switches and any additional pressure control equipment tested annually and shall maintain and make available to PHMSA the records of such testing.

4. In regard to Item Number 4 of the Notice pertaining to the pressure transmitter (31-PT-013A) on the Kuparuk pipeline incoming line to Alyeska. This pressure transmitter shall be maintained as DOT critical safety devices.

   Alyeska Pipeline Service Company shall revise "OM-1, Procedural Manual for Operations, Maintenance and Emergencies", Section 7, to indicate that these pressure shutdown switches are DOT critical safety devices. Alyeska shall also conduct annual tests of these pressure shutdown switches and shall maintain and make available to PHMSA the records of such testing.

5. Alyeska Pipeline Service Company shall complete the above-listed requirements, and submit documentation of such completion within 180 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.