



U.S. Department of Transportation  
Pipeline and Hazardous Materials  
Safety Administration

1200 New Jersey Ave, S.E.  
Washington, D.C. 20590

**JAN 13 2010**

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

**Re: CPF No. 5-2008-5014**

Dear Mr. Joynor:

Enclosed is the Final Order issued in the above-referenced case. It makes findings of violation and assesses a civil penalty of \$56,000. The Final Order also specifies actions that need to be taken by Alyeska Pipeline Service Company to comply with the pipeline safety regulations. The penalty payment terms are set forth in the Final Order. When the civil penalty has been paid and the terms of the compliance order are completed, as determined by the Director, Western Region, this enforcement action will be closed. Your receipt of the Final Order constitutes service of that document under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

Enclosure

cc: Mr. Chris Hoidal, Director, Western Region, PHMSA

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED [7005 0390 0005 6162 5258]**

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, D.C. 20590**

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<b>In the Matter of</b>	)	
	)	
<b>Alyeska Pipeline Service Company,</b>	)	<b>CPF No. 5-2008-5014</b>
	)	
<b>Respondent.</b>	)	
	)	

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**FINAL ORDER**

From October 15 to 19, 2007, pursuant to 49 U.S.C. § 60117, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Alyeska Pipeline Service Company (Alyeska or Respondent) in Anchorage, Alaska. Alyeska is the operator of the Trans Alaska Pipeline System (TAPS), an 800-mile-long pipeline that transports crude oil from Prudhoe Bay to Valdez, Alaska.<sup>1</sup> This inspection covered those portions of the TAPS that lie between Milepost 496 and Milepost 647, including Pump Stations 9 and 10, along with the company's records of a 2006 flood that occurred near Milepost 761.

As a result of the inspection, the Director, Western Region, OPS (Director), issued to Alyeska, by letter dated June 9, 2008, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that Respondent had violated 49 C.F.R. §§ 195.571, 195.402, and 195.404, and assessing the company a civil penalty of \$56,000 for the alleged violations. The Notice also proposed finding that Alyeska had committed a probable violation of 49 C.F.R. § 195.401, and warned Respondent to take appropriate corrective actions or be subject to future enforcement action.

Alyeska responded to the Notice by letter dated July 14, 2008 (Response). Respondent contested the allegations, offered information in response to the allegations, and requested that the proposed civil penalty be reduced. Respondent did not request a hearing and therefore has waived its right to one.

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<sup>1</sup> <http://www.alyeska-pipe.com/pipelinefacts.html> (accessed Oct. 20, 2009).

## FINDINGS OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195, as follows:

**Item 2:** The Notice alleged that Respondent violated 49 C.F.R. § 195.571 which states:

**§ 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 RP 0169 (incorporated by reference, see Sec. 195.3).

The Notice alleged that Respondent violated 49 C.F.R. § 195.571 by failing to have adequate cathodic protection (CP) on the TAPS. Specifically, Respondent's records revealed low CP readings at Mileposts 567.66, 574.16, 574.33, 578.95, and 579.18 during close interval surveys (CIS) conducted between 2003 and 2007.

Alyeska has not disputed this allegation. Accordingly, after considering all the evidence, I find Respondent violated 49 C.F.R. § 195.571 by failing to have adequate CP on the TAPS at the cited locations.

**Item 4:** The Notice alleged that Respondent violated 49 C.F.R. § 195.404 which states:

**§ 195.404 – Maps and records.**

(a) . . . .

(b) . . . .

(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.

The Notice alleged that Respondent violated 49 C.F.R. § 195.404 by failing to maintain records of repairs and alterations made to the TAPS. Specifically, Respondent was unable to provide records of wall thickness and grade for the DRA Sleeves installed at Pump Stations 9 and 10. Additionally, Respondent's Alignment sheets (G-100 drawings) did not show the DRA injection ring for Pump Station 9. OPS also noted that a record of such repairs and alterations must be maintained according to Respondent's MR-48 "Trans-Alaska Pipeline Maintenance and Repair Manual."

Respondent has not disputed this allegation. Accordingly, after considering all the evidence, I find Respondent violated 49 C.F.R. § 195.404 by failing to maintain records of repairs and alterations made to the pipeline.

These findings of violation will be considered a prior offense in any subsequent enforcement action taken against Respondent.

### WITHDRAWAL OF ALLEGATION

**Item 3:** The Notice alleged that Respondent violated 49 C.F.R. § 195.402 which states:

**§ 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 system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

The Notice alleged that Respondent violated 49 C.F.R. § 195.402 by failing to follow its manual of written procedures for conducting normal operations and maintenance activities. Specifically, the Notice alleged that, under MP-166-3.03, "Facility Corrosion Integrity Monitoring," and MP-166-3.03-01, "Facility Corrosion Integrity Monitoring Engineering and Implementation," of Alyeska's manual, re-inspection intervals for monitoring corrosion integrity were to be determined on the basis of the corrosion rate formula set forth in American Petroleum Institute (API) 570, "Piping Inspection Code." The Notice further alleged that, according to Respondent's own records, the following three valves on bypass piping were not inspected or would not be inspected at the required intervals:

- CV84 AB – Respondent's last inspection of this valve occurred in 2006. The calculated re-inspection interval under API 570 would be 2 years based on 30 mil/yr. corrosion rate. Respondent's next scheduled re-inspection was not until 2010.
- CV90 D – Respondent's last inspection occurred in 2006. The calculated re-inspection interval under API 570 would be 3 years based on 15 mil/yr. corrosion rate. Respondent's next scheduled re-inspection was not until 2016.
- CV095 AB – Respondent's last inspection occurred in 2001. Therefore, the calculated re-inspection interval under API 570 would be 4 years based on 13 mil/yr. corrosion rate. Respondent's next scheduled re-inspection was not until 2014.

Alyeska requested in its Response that this allegation of probable violation be withdrawn. In substantiating that request, Respondent argued that it does follow its own procedures for re-inspection intervals on valve bypass piping. Specifically, Respondent stated that it calculates half-life inspection intervals based on its procedures, MP-166-3.03 and MP-166-3.03-01, which require that re-inspection interval calculations be based on a combination of RSTRENG® and

American Society of Mechanical Engineers (ASME) B31G, not API 570. Respondent further argued that PHMSA incorrectly assumed Respondent's re-inspection dates for "CV84" and "CV90 D" were based on 80% remaining wall loss, not the half-life of the bypass piping.<sup>2</sup> In other words, Respondent argued that PHMSA incorrectly assessed Respondent's corrosion rates based on API 570 and erroneously assumed Respondent's projected re-inspection intervals for the following valves:

- CV84 AB – Because Respondent used a 40 mil/yr. corrosion rate based upon data from multiple grid locations, not the API 570 30 mil/yr. corrosion rate, a re-inspection need not occur until 2010.
- CV90 D – Because Respondent used a 20 mil/yr. corrosion rate based upon data from multiple grid locations, not the API 570 15 mil/yr. corrosion rate, a re-inspection need not occur until 2012.
- CV095 AB – Because Respondent used a 10 mil/yr. corrosion rate based upon data from multiple grid locations, not the API 570 13 mil/yr. corrosion rate, a re-inspection need not occur until 2008.<sup>3</sup>

I find Respondent's arguments for withdrawing this probable violation persuasive. In its Response, Alyeska provided updated copies of its procedures, MP-166-3.03 and MP-166-3.03-01. Although Respondent made some revisions to its manual subsequent to the OPS inspection in question, Respondent's substantive procedures for re-inspection remained unchanged.<sup>4</sup> Thus, in both versions of Respondent's manual its procedure for re-inspection is stated as follows:

Facility piping is organized or segmented into unique operating environments or line segments (legs) to which inspection classifications are assigned in accordance with API 570, "Piping Inspection Code – Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems." Half-life sample inspection intervals or frequencies are based upon projected failure dates calculated for each leg using the RSTRENG method. The actual grid corrosion strings and an assumed or actual corrosion rate are used to determine the future date when the leg will be in an out-of-code condition. Actual corrosion rates may be determined from inspection history or corrosion coupon data.<sup>5</sup>

It appears that, in reviewing Respondent's records, OPS misinterpreted Alyeska's procedures by relying on incomplete documentation to calculate the re-inspection intervals for these three valves. Specifically, Respondent's records displayed re-inspection intervals for those valves based on 80% remaining wall loss, not on the half-life of the bypass piping. Respondent has

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<sup>2</sup> In 2001, the date of CV095AB's last inspection, Respondent had not yet developed MP-166-3.03-01. Thus, Alyeska concedes in its Response that PHMSA correctly presumed that the "RSTRENG PID" date of 2014 in Respondent's records was the re-inspection interval for that valve.

<sup>3</sup> Respondent recalculated the re-inspection interval for this valve based on MP-166-3.03-01 and submitted a record of the results of that recalculation with its Response.

<sup>4</sup> Response, Exhibit 2.

<sup>5</sup> Section 5.1.6, MP-166-3.03, "Facility Corrosion Integrity Monitoring" (effective April 25, 2008); Section 5.1.5, MP-166-3.03, "Facility Corrosion Integrity Monitoring" (effective April 12, 2006).

submitted records showing the remaining strength and half-life re-inspection intervals, Safe Maximum Operating Pressures, and 80% wall loss of the valves. Moreover, Alyeska's use of the half-life of the bypass piping to determine re-inspection intervals was consistent with its operations and maintenance procedures.

Therefore, after considering all the evidence, I find that Respondent did not violate 49 C.F.R. § 195.402 and therefore the probable violation alleged in Item 3 of the Notice is hereby withdrawn.

### ASSESSMENT OF PENALTY

Under 49 U.S.C. § 60122, Respondent is subject to an administrative civil penalty not to exceed \$100,000 per violation for each day of the violation, up to a maximum of \$1,000,000 for any related series of violations. In determining the amount of a civil penalty under 49 U.S.C. § 60122 and 49 C.F.R. § 190.225, I must consider the following criteria: the nature, circumstances, and gravity of the violation, including adverse impact on the environment; the degree of Respondent's culpability; the history of Respondent's prior offenses; the Respondent's ability to pay the penalty and any effect that the penalty may have on its ability to continue doing business; and the good faith of Respondent in attempting to comply with the pipeline safety regulations. In addition, I may consider the economic benefit gained from the violation without any reduction because of subsequent damages, and such other matters as justice may require. The Notice proposed a total civil penalty of \$56,000 for the violations cited above.

The Notice proposed a civil penalty of \$56,000 for Item 2 of the Notice for failing to have adequate CP on the TAPS. In its Response, Alyeska requested that the civil penalty for this violation be reduced on the basis of certain mitigating circumstances. Specifically, Respondent noted that the results of its close interval surveys (CIS) show that, in recent years, two of the five cited locations met the criteria in the National Association of Corrosion Engineers (NACE) SP 0169-02. Respondent further stated that it conducted those tests utilizing CP monitoring coupons and CIS, as required by its Monitoring Procedure MP-166-3.22, *Pipeline Cathodic Protection*, a procedure that uses the criteria in NACE SP 0169-2002, Sections 6.2 and 6.3, to determine the adequacy of CP.

I do not find Respondent's arguments persuasive. First, although the two Milepost locations cited in Alyeska's Response did pass the NACE SP 0169-02 CP criteria in the most recent year tested (2007), those locations failed to meet the criteria in previous years. Specifically, Milepost 574.16 failed in 2003, 2004, and 2005 but passed in 2006 and 2007. Similarly, Milepost 574.33 failed in 2006 and passed in 2003, 2004, 2005, and 2007. Second, PHMSA already considered these mitigating circumstances identified by Alyeska in calculating the proposed civil penalty amount. Indeed, the Pipeline Safety Violation Report (Violation Report), CPF. 5-2008-5014 (signed April 4, 2008), contains the CIS data sheets for 2003, 2004, 2006, and 2007 that Respondent cites as evidence in favor of mitigation. In other words, Respondent's bases for requesting a reduction in the civil penalty are already reflected in the original amounts proposed in the Notice.

Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a total civil penalty of \$56,000.

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require this payment be made by wire transfer, through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. Detailed instructions are contained in the enclosure. Questions concerning wire transfers should be directed to: Financial Operations Division (AMZ-341), Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 269039, Oklahoma City, OK 73125; (405) 954-8893.

Failure to pay the \$56,000 civil penalty will result in accrual of interest at the current annual rate in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in a United States District Court.

### **COMPLIANCE ORDER**

The Notice proposed a compliance order with respect to Items 2, 3 and 4 for violations of 49 C.F.R. §§ 195.571 and 195.404 respectively. As discussed above I withdrew the probable violation alleged in Item 3 of the Notice. Therefore, the compliance order item associated with that allegation is also withdrawn.

In its Response, Alyeska requested that the proposed compliance order for Item 2 be withdrawn. Respondent argued that it has developed a broad mitigation plan for known low CP areas, which was discussed with PHMSA at a meeting conducted on May 1, 2008. Moreover, Respondent contends that it has developed an action plan to add continuous anodes powered by a remote wind/solar generator in 2009 at the five locations.<sup>6</sup> While Respondent has developed an action plan for reaching compliance of this item, it has not fully implemented this plan to achieve compliance. Therefore, I do not find Respondent's argument for withdrawal of Item 2 to be persuasive.

Respondent also objected to the proposed completion date for this item. I have taken into account factors, such as project season and weather, in setting the completion date required by this Order.

Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

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<sup>6</sup> I note that Respondent has installed wind generators to correct low CP levels in the past, but those generators did not provide enough power to maintain CP levels. Use of such unsuccessful methods could fail to meet the objective of the compliance order for this item.

1. With respect to the violation of § 195.571 (**Item 2**), Respondent must, within 12 months of receipt of the Final Order, take appropriate action to bring the cathodic protection (CP) levels at Milepost 567.66, Milepost 574.16, Milepost 574.33, Milepost 578.95, and Milepost 579.18, into compliance with one or more of the applicable criteria and other considerations for CP contained in Paragraphs 6.2 and 6.3 of the NACE Standard RP01169-96 as required by § 195.571. Respondent must conduct a Close Interval Survey (CIS) at the above-listed locations and provide the results of such CIS by September 30, 2010.
2. With respect to the violation of § 195.404 (**Item 4**), Respondent must determine the wall thickness and grade of material used for the DRA Injection Rings at PS09 and PS10, include this information in its “As-built” records, and maintain these records for the life of the pipeline. Respondent must provide these updated records within 180 days of receipt of the final order.
3. Respondent must maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Chris Hoidal, Director, Western Region, Office of Pipeline Safety, 12300 W. Dakota Ave. #110, Lakewood, CO 80228. Costs must 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. The documentation of the costs must be submitted within 60 days of completion of Compliance Order Item #1.

The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent demonstrating good cause for an extension.

Failure to comply with this Order may result in administrative assessment of civil penalties not to exceed \$100,000 for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

### **WARNING ITEM**

With respect to Item 1, the Notice alleged probable violations of Part 195 but did not propose a civil penalty or compliance order for these items. Therefore, these are considered to be warning items. The warning was for:

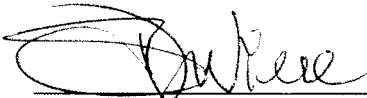
49 C.F.R. § 195.401 (**Notice Item 1**) – Respondent’s alleged failure to adequately investigate and where needed, correct adverse conditions of six scour areas in a reasonable time. Specifically, in October 2006, severe flooding affected the TAPS right-of-way (ROW) at numerous stream crossings along the southernmost 80 miles of the pipeline. During the October 2007 inspection, PHMSA’s inspectors reviewed Respondent’s Civil Monitoring and ROW Maintenance Audit (Audit), dated October 8, 2007. PHMSA’s inspection revealed that five scour locations identified in the Audit were never investigated in 2007 due to cancellation of the investigations by Respondent.



Moreover, a sixth scour location identified in the Audit was only partially investigated in 2006. PHMSA's inspectors were unable to find sufficient justification for Respondent's cancellation of the planned 2007 investigations of the six sites. Respondent's Audit similarly found insufficient justification. At the time of inspection, Respondent had excavated only 16 feet of an estimated 80 feet scour area at Milepost 761.73 (near Milepost 761.7) during 2006. Further, Respondent did not repair pipe or coating damage, uncovered at Milepost 761.73. Respondent indicated it planned to re-excavate and repair coating/cathodic protection system damage at Milepost 761.73 during the summer of 2008.

Having considered such information, I find, pursuant to 49 C.F.R. § 190.205, that a probable violation of 49 C.F.R. § 195.401 (Notice Item 1) has occurred. Alyeska presented information in its Response showing that it had taken certain actions to address the cited items. If OPS finds a violation for this item in a subsequent inspection, Respondent may be subject to future enforcement action.

Under 49 C.F.R. § 190.215, Respondent has a right to submit a Petition for Reconsideration of this Final Order. The petition must be sent to: Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2<sup>nd</sup> Floor, Washington, DC 20590. The petition must be received within 20 days of Respondent's receipt of this Final Order and must contain a brief statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.215. The filing of the petition automatically stays the payment of any civil penalty assessed. All other terms of the order, including any required corrective action, shall remain in full force and effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order shall be effective upon receipt.



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Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

**JAN 13 2010**

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Date Issued