



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 E. Benson Blvd.
P.O. Box 196660
Anchorage, AK 99519

Re: CPF No. 5-2006-5018

Dear Mr. Joynor:

Enclosed is the Final Order issued in the above-referenced case. It makes findings of violation, assesses a reduced civil penalty of \$263,000, and specifies actions to be taken by Alyeska 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 completed, as determined by the Director, Western Region, this enforcement action will be closed. Service of this document is in accordance with 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: Chris Hoidal, Director, Western Region, PHMSA

Sheila Doody Bishop, Counsel, Alyeska Pipeline Service Co.
900 E. Benson Blvd., P.O. Box 196660, Anchorage, AK 99519

CERTIFIED MAIL – RETURN RECEIPT REQUESTED [7005.0390 0005 6162 5296]

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

_____)
In the Matter of)
)
Alyeska Pipeline Service Company,)
)
Respondent.)
_____)

CPF No. 5-2006-5018

FINAL ORDER

On August 15–18, 2005, 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 integrity management program of Alyeska Pipeline Service Company (Alyeska or Respondent) in Fairbanks, Alaska. Respondent operates the 800-mile crude oil Trans-Alaska Pipeline System (TAPS) from the North Slope, Alaska, to Valdez. As a result of the inspection, the Director, Western Region, OPS (Director), issued to Respondent, by letter dated April 19, 2006, 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 committed violations of 49 C.F.R. Part 195 and proposed assessing a civil penalty of \$350,000 for the alleged violations. The Notice also proposed ordering Respondent to take certain measures to comply with the pipeline safety regulations.

After requesting and receiving an extension of time, Respondent responded to the Notice by letter dated July 18, 2006 (Response). Respondent contested the allegations and requested a hearing. In accordance with 49 C.F.R. § 190.211, a hearing was held on January 18, 2007, in Lakewood, Colorado, with an attorney from the Office of Chief Counsel, PHMSA, presiding. After the hearing, Respondent provided a Closing Statement dated March 16, 2007.

FINDINGS OF VIOLATION

The Notice alleged that Respondent committed two violations of 49 C.F.R. Part 195, as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.452(h)(2), which states:

- § 195.452 Pipeline integrity management in high consequence areas.**
(a) *Which pipelines are covered by this section?* This section applies to each hazardous liquid pipeline and carbon dioxide pipeline that could affect a high consequence area

(h) *What actions must an operator take to address integrity issues?—*

(1) *General requirements.* An operator must take prompt action to address all anomalous conditions the operator discovers through the integrity assessment or information analysis. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity

(2) *Discovery of condition.* Discovery of a condition occurs when an operator has adequate information about the condition to determine that the condition presents a potential threat to the integrity of the pipeline. An operator must promptly, but no later than 180 days after an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator can demonstrate that the 180-day period is impracticable.

The Notice alleged that Respondent violated § 195.452(h)(2) by failing to obtain, within 180 days of an integrity assessment, sufficient information about anomalous conditions on TAPS to determine if they presented a potential threat to the integrity of the pipeline. Specifically, the Notice alleged that Alyeska completed an inline inspection (ILI) integrity assessment on May 26, 2004, but failed to obtain the ILI vendor's report in its entirety until April 20, 2005, approximately 330 days after the assessment. The Notice further alleged that the final report contained inadequate information to enable Respondent to determine if the conditions presented a potential threat to integrity. Respondent allegedly could not demonstrate that it had adequate information about anomalous conditions on the pipeline until January 2006, approximately 600 days after the integrity assessment.¹

In its written submissions and at the hearing, Respondent acknowledged that it had completed a magnetic flux leakage (MFL) tool run on May 26, 2004. Alyeska also acknowledged that it had sent a letter to the Director on November 30, 2004, stating that the company could not meet the 180-day deadline in § 195.452(h)(2) due to some "technical difficulties."² Despite this apparent acknowledgement of non-compliance, Alyeska contended in its Response that "Alyeska had preliminary information from the vendor about potential integrity threats within the 180 day requirement," and requested that PHMSA "find that the pig vendor's preliminary information enabled Alyeska to obtain sufficient and adequate information within 180 days . . . as required under 49 CFR §195.452(h)(2)."³

¹ Item 1 in the Notice also alleged that Respondent did not take adequate steps to mitigate adverse operational conditions on TAPS, in order to ensure that the inspection data would be obtained in a timely manner. In its Response, Alyeska acknowledged that certain operating conditions, including additional wax in the oil stream, had made it more challenging to obtain complete and accurate data; however, the company contended that it had taken adequate steps to mitigate those challenges. This final order does not make a finding as to the adequacy of Respondent's mitigation efforts because it is not essential to the finding of whether Respondent violated § 195.452(h)(2) by failing to obtain adequate information within 180 days of the March 2004 assessment.

² Pipeline Safety Violation Report (Violation Report), dated Apr. 13, 2006, Item 1, Attachment 1. In the same letter, Alyeska stated that it believed "[t]he 180-day time period from the end of the last 2004 Magnetic Flux Leakage (MFL) pig run ended November 26, 2004." As discussed below, the 180-day time period actually ended November 22, 2004.

³ Response at 2 and 4.

Alyeska received this “preliminary information,” also referred to as a “top ten list,” from its MFL tool vendor on November 29, 2004.⁴ The report identified the ten most notable penetration (i.e., metal loss) anomalies and the ten most notable pressure (i.e., remaining strength) anomalies on each of the four TAPS segments. Respondent explained in its Response that the company had correlated this data with existing information from Alyeska’s Engineering Data Management (EDM) System database, which consisted of information from previous ILI assessments, digs, investigations, close-interval surveys, coupons, rectifiers, and historical knowledge regarding the condition of TAPS.

Based on the company’s correlation of data from the preliminary report and its EDM System, Alyeska contended that it had determined the top anomalies identified by the vendor had either already been addressed or did not meet the regulatory repair criteria. With regard to the pressure anomalies in particular, Respondent had performed two additional calculations to arrive at its conclusion. First, Respondent applied an “aggressive corrosion growth rate” by assuming the pipeline corroded faster than it actually did.⁵ Second, the company applied a conservative forecast to determine when an anomaly would need to be physically examined. These two calculations, according to Respondent, “added a 5% margin of safety” to the requirement for remediation of pressure anomalies.⁶

Alyeska’s analysis of the preliminary ILI data, its EDM System information, and other calculations led the company to determine there were no actionable anomalies on the pipeline. Alyeska did not provide, nor could it document, a date certain by which it had made this determination; rather the company contended generally that adequate information had been received and analyses performed “within the 180 day requirement.”⁷ According to Respondent, the ILI vendor’s final report, which Alyeska received on April 20, 2005, validated the company’s determinations with respect to the penetration and pressure anomalies.

At the hearing, Respondent acknowledged that the vendor’s final report contained inaccuracies about maximum operator pressure (MOP) on TAPS, but downplayed its significance, claiming that the error did not affect the company’s determination about conditions on the pipeline. With regard to anomalies that might constitute immediate repair conditions under § 195.452(h)(4)(i), Respondent indicated the company could have identified those conditions despite the incorrect MOP reported by the vendor. With respect to anomalies that might be 180-day repair conditions under § 195.452(h)(4)(iii), Respondent explained that it had compensated for the inaccurate MOP through the application of an aggressive corrosion growth-rate calculation, also known as “years to dig.”⁸

After reviewing all of the evidence in the record, I find that Respondent completed an MFL integrity assessment of TAPS, a pipeline that could affect a high consequence area, on May 26, 2004. In accordance with § 195.452(h)(2), Respondent was required to obtain sufficient

⁴ Response Exhibit 2 at 1.

⁵ Response at 3.

⁶ Response at 3.

⁷ *E.g.*, Response at 2. At the hearing, the presiding official asked Alyeska representatives if the company could document actions that had been taken within the 180-day time period. Alyeska’s Closing Statement describes the actions taken, but, again, only states that the actions were taken “in November 2004.” Closing Statement at 1.

⁸ Response at 3.

information from this assessment to determine if anomalous conditions discovered on the pipeline presented a potential threat to its integrity. The information was required to be obtained promptly, but no later than 180 days from May 26, 2004, or November 22, 2004.⁹ On November 29, 2004, seven days after the deadline, Respondent received the preliminary “top ten list” conditions from the vendor. Respondent compared this preliminary information with data it already had about conditions on the pipeline to determine if any of the anomalies identified on the preliminary list could threaten the line’s integrity. Respondent concluded, based on this review, that no anomalies required repair. There is no date certain by which Respondent made this determination.

I further find that Respondent subsequently received the ILI vendor’s final report on April 20, 2005, approximately five months after the deadline. The list of features in the final report was predicated on two important data inaccuracies. First, the list indicated a constant MOP of 850 pounds per square inch gauge (psig) everywhere on TAPS, even though sections of the pipeline had a different MOP. Second, the features list indicated a constant specified minimum yield strength (SMYS) of 65,000 psig everywhere on TAPS, even though the pipeline consisted of pipe with varying SMYS.

These inaccuracies are material because MOP and SMYS play a key role in determining whether an identified anomaly constitutes a potential threat to integrity under § 195.452(h)(4). Pursuant to that regulation, Respondent had to calculate the remaining strength of the pipe at the point of the anomaly. To determine the remaining strength, Respondent had to calculate burst pressure and maximum safe operating pressure at those particular locations.¹⁰ Inaccurate data concerning SMYS would have led to erroneous calculations of burst pressure and maximum safe operating pressure.¹¹ In turn, since immediate repair conditions and 180-day repair conditions are both defined in terms of their relationship to MOP, inaccurate data concerning MOP would have further impacted the validity of Respondent’s overall determination as to whether conditions were a threat to integrity.¹² In fact, Respondent acknowledged in its Closing Statement that “[t]he pipeline condition reports may not have included anomalies that might have been reported if the correct maximum operating pressure for the section had been used.”¹³

Respondent performed additional analyses after receiving the vendor’s final report to compensate for these inaccuracies, as explained above, but § 195.452(h)(2) required that Respondent complete all necessary analyses to determine if conditions on the pipeline threatened integrity no later than November 22, 2004. Even though § 195.452(h)(2) did not require

⁹ Respondent did not contend in its written submissions or at the hearing that the 180-day period was impracticable.

¹⁰ Section 195.452(h)(4)(i)(B) defines an “immediate repair condition” as a condition where a “calculation of the remaining strength of the pipe shows a predicted burst pressure less than the established maximum operating pressure at the location of the anomaly.” Section 195.452(h)(4)(iii)(D) defines a “180-day condition” as a condition where a “calculation of the remaining strength of the pipe shows an operating pressure that is less than the current established maximum operating pressure at the location of the anomaly.”

¹¹ See also Frequently Asked Question (FAQ) 7.18, which states, “Burst pressure of corroded pipe is determined by calculation, considering the flow stress and the dimensions of the metal loss (depth and length). For liquid pipelines, the maximum safe operating pressure of corroded pipe is equivalent to 72% of the pipe’s calculated, predicted burst pressure.” (Revised Jul. 9, 2002). PHMSA publishes answers to FAQs concerning compliance with the integrity management regulations at: <http://primis.phmsa.dot.gov/iim/faqs.htm>.

¹² See § 195.452(h)(4)(i)(B) and (h)(4)(iii)(D).

¹³ Closing Statement at 2.

Respondent to receive a final report within 180 days, it did require Respondent to obtain “sufficient information,” which means enough information to allow an operator to accurately and reliably identify, locate, validate, and evaluate pipeline anomalies detected by the integrity assessment and to properly classify them for repair, if necessary, under § 195.452(h). Furthermore, I note that Respondent was required to obtain such information “promptly”—the 180-day deadline was merely the “upper limit.”¹⁴

Respondent’s receipt of even the preliminary “top ten list” was not received until November 29, 2004, seven days after the deadline. The report did not by itself provide sufficient information about conditions on the pipeline because it was not comprehensive (it listed only a select number of conditions) and because it required Respondent to correlate the data with its EDM System and apply additional calculations, such as an “aggressive corrosion growth rate,” in order to determine if conditions presented potential threats to the integrity of the pipeline. The final report, which was received approximately five months after the deadline, also required additional analyses to compensate for inaccuracies in the data. These facts demonstrate that Respondent did not obtain sufficient information about the conditions on the pipeline as required by § 195.452(h)(2).

Accordingly, I find that Respondent violated § 195.452(h)(2) by failing to promptly obtain, within 180 days after an integrity assessment, sufficient information about anomalous conditions to determine if they present a potential threat to the integrity of the pipeline.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. § 195.452(h)(3) and (h)(4)(i)(C), which states:

§ 195.452 Pipeline integrity management in high consequence areas.

(a)

(h) *What actions must an operator take to address integrity issues?—*

(1) *General requirements.* An operator must take prompt action to address all anomalous conditions the operator discovers through the integrity assessment or information analysis. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline’s integrity

(3) *Schedule for evaluation and remediation.* An operator must complete remediation of a condition according to a schedule prioritizing the conditions for evaluation and remediation. If an operator cannot meet the schedule for any condition, the operator must explain the reasons why it cannot meet the schedule and how the changed schedule will not jeopardize public safety or environmental protection.

(4) *Special requirements for scheduling remediation—*

(i) *Immediate repair conditions.* An operator’s evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formula in section 451.7 of ASME/ANSI

¹⁴ Pipeline Integrity Management in High Consequence Areas (Repair Criteria), 67 Fed. Reg. 1650, 1653 (Jan. 14, 2002).

B31.4 (incorporated by reference, *see* § 195.3). An operator must treat the following conditions as immediate repair conditions:

(A)

(C) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) that has any indication of metal loss, cracking or a stress riser

The Notice alleged that Respondent violated § 195.452(h)(3) and (h)(4)(i)(C) by failing to complete remediation of an immediate repair condition according to a schedule for evaluation and repair, and by failing to temporarily reduce operating pressure or shut down the pipeline until the repair had been made. Specifically, the Notice alleged that during the summer of 2004, Respondent discovered a dent, located on the top of the pipeline, that showed an indication of metal loss. This anomalous condition was located at Mile Post (MP) 545.79 on TAPS, a segment that could affect a high consequence area (HCA).¹⁵ Although this would automatically render the dent an “immediate repair condition” pursuant to § 195.452(h)(4)(i)(C), the Notice alleged that Respondent failed to promptly repair the condition according to a schedule prioritizing it for immediate repair, as required by § 195.452(h)(3), and that Respondent also failed to temporarily reduce operating pressure or shut down the pipeline, as required by § 195.452(h)(4)(i)(C). The Notice alleged the anomaly was not repaired until June 27, 2005.

In its Response and at the hearing, Alyeska argued the top-of-pipe dent was not an immediate repair condition pursuant to § 195.452(h)(4)(i)(C) because ILI data never reported metal loss associated with the condition. Respondent explained that it had treated the condition as having metal loss “in an excess of conservatism” based on the company’s experience finding a correlation between similar conditions and metal loss.¹⁶ Respondent also explained it was not “known” that the dent had metal loss until the condition was excavated and the metal loss confirmed.¹⁷

Alyeska acknowledged that when scheduling the condition for repair, it had not recognized MP 545.79 was a covered segment under the company’s integrity management program.¹⁸ Not realizing the segment could affect an HCA, the company scheduled the dent for excavation within one year, in accordance with its procedures for responding to conditions in non-HCA locations. Respondent argued in its Response that even if the company had recognized the segment could affect an HCA, the condition still would not have been an immediate repair condition because no data had indicated any metal loss.

Section 195.452(h)(3) and (h)(4)(i)(C) requires each operator to promptly address all anomalous conditions discovered through an integrity assessment or information analysis. The conditions must be addressed according to a schedule for evaluation and repair that provides for “immediate repair conditions,” such as dents located on the top of the pipeline that have any indication of metal loss. To maintain safety, an operator must also temporarily reduce operating pressure or shut down the pipeline until the repair of an immediate repair condition has been completed.

¹⁵ Hazardous liquid pipelines that can affect an HCA are “covered pipelines” under the integrity management rule. § 195.452(a), (b)(2).

¹⁶ Response at 7.

¹⁷ Response at 8.

¹⁸ Response at 8.

Respondent's 2004 annual integrity report for TAPS identified, among other things, eight sites that were to be investigated.¹⁹ Of those sites, the report stated that four, one of which was MP 545.79, "show indications of multiple bottom-of-pipe dents *or dents with metal loss*, according to ILI data."²⁰ The pipeline segment including that location was listed in Respondent's integrity management program as a segment that could affect an HCA.²¹ On June 27, 2005, Respondent completed a report that documented its investigation of the condition at MP 545.79. Handwritten notes on the investigation report indicated, "The purpose of this investigation is to evaluate a TOP [top-of-pipe] dent/gouge w[ith] metal loss."²² The investigation report also documented that the dent was on the top of the pipe and that it had an ascertainable amount of metal loss.

Additional evidence in the record shows that around 2001, Respondent had employed a pattern recognition approach to identify pipeline features, using data from an ultrasonic transducer (UT) ILI tool. Using the new algorithm, Respondent had identified 77 features affecting buried portions of TAPS to be considered for investigation. Between 2001 and 2004, Respondent physically investigated what it believed to be the more significant locations. Respondent investigated 42 locations, which contained over 400 scrapes, dents, gouges and other defects. Those investigations showed that approximately 95 percent of the features investigated, or "~95% of digs," had some degree of metal loss.²³

Although Respondent argued the condition at MP 545.79 was not an immediate repair condition because it was not "known" to contain metal loss, any indication of metal loss on a top-side dent is sufficient to render it an immediate repair condition under the regulation.²⁴ An indication of metal loss may be in the ILI data, as Respondent suggested, but it may also come from other sources, including information analysis. In this case, Respondent's information showed a correlation between similar conditions and metal loss. Based upon this known correlation, Respondent treated the condition at MP 545.79 as having metal loss.²⁵ Since Respondent reported the condition at MP 545.79 as having an indication of metal loss, § 195.452(h)(3) and (h)(4)(i)(C) required Alyeska to address the condition according to a schedule for "immediate repair conditions," and to temporarily reduce operating pressure or shut down the pipeline until the repair had been completed.

Respondent failed to temporarily reduce operating pressure or shut down the pipeline until the condition had been repaired, and further failed to schedule the dent for immediate repair, apparently because the company did not realize MP 545 was subject to the requirements of § 195.452(h). Therefore, after considering all the evidence, I find that Respondent violated 49 C.F.R. § 195.452(h)(3) and (h)(4)(i)(C) by failing to complete remediation of the condition at MP 545.79 according to a schedule for immediate repair, and by failing to temporarily reduce operating pressure or shut down the pipeline until Respondent had completed such repair.

¹⁹ Violation Report, Item 2, Attachment 2 at 10.

²⁰ Violation Report, Item 2, Attachment 2 at 10 (emphasis added).

²¹ Violation Report, Item 2, Attachment 3 at 98.

²² Violation Report, Item 2, Attachment 4 at 1.

²³ Violation Report, Item 2, Attachment 5 at 6. At the hearing, Respondent explained that the correlation between less-severe conditions and metal loss was not as high as 95 percent.

²⁴ Response at 8.

²⁵ § 195.452(h)(4)(i)(C) (emphasis added).

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

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 \$350,000 for the violations as follows:

Item 1: The Notice proposed a civil penalty of \$260,000 for the violation of § 195.452(h)(2). As discussed above, I found that Respondent violated § 195.452(h)(2) by failing to promptly obtain, no later than 180 days after an MFL tool assessment, sufficient information about anomalous conditions to determine if they presented a potential threat to the integrity of TAPS. Respondent received a preliminary "top ten list," but that report did not provide information about all conditions on the pipeline, nor was it received within 180 days of the completion of the integrity assessment. Alyeska subsequently received a final report approximately five months after the deadline, but it still contained inaccuracies for which Respondent was required to perform additional analyses.

An operator's failure to promptly obtain information about conditions on a pipeline that could affect an HCA may delay the discovery of immediate repair conditions and other anomalies that need to be remediated in order to protect the HCA. High consequence areas include commercially navigable waterways, high population areas, residential and commercial areas, and drinking water and ecological resource areas that are unusually sensitive to environmental damage. Performance of integrity assessments and the identification of conditions needing prompt repair is a vital component of the integrity management regulations, which are designed to ensure a heightened level of safety for HCAs. For this reason, I find the nature and circumstances of Respondent's failure to promptly obtain information about anomalous conditions on its pipeline justify the proposed civil penalty.

On the other hand, Respondent did receive preliminary information from the ILI vendor, albeit several days after the deadline, which indicated the most prominent anomalies on the pipeline.

Based on this preliminary report, Respondent determined, at least initially, that there were no conditions that necessitated immediate repair. While this did not comply with the regulation because the information was neither comprehensive nor received before the deadline, it leads me to believe that safety was not compromised to the extent that it might otherwise have been had Respondent failed to receive and analyze *any* information for months until the final report. Respondent affirmed that this analysis was completed in November 2004. For this reason, I find the gravity of the violation is diminished to some degree and warrants a reduction to the proposed civil penalty.

With regard to both Item 1 and Item 2, Respondent is responsible for compliance with the applicable pipeline safety regulations as the operator of TAPS and is therefore the culpable party, absent some showing that the responsibility for the violations rests with another entity. There was no such showing in this case. With regard to the company's history of prior offenses, there is evidence in the record that Respondent has been the subject of numerous enforcement actions, including at least ten cases in the six-year period prior to issuance of the Notice. These prior offenses involved civil penalties and compliance terms for violations of the pipeline safety regulations. Alyeska's history of prior offenses supports the penalties proposed in this case. Since Respondent has not provided any evidence suggesting the company is unable to pay the proposed civil penalty, I find Respondent is able to pay the penalty without adversely affecting its ability to continue in business. Finally, I have considered the extent to which Respondent was cognizant of the relevant requirements and took good faith steps to comply with the regulations. In light of the other assessment criteria, however, I find that such efforts do not warrant further reduction in the proposed penalties.

Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a reduced civil penalty of \$173,000 for the violation of 49 C.F.R. § 195.452(h)(2).

Item 2: The Notice also proposed a civil penalty of \$90,000 for the violation of § 195.452(h)(3) and (h)(4)(i)(C). As discussed above, I found that Respondent violated § 195.452(h)(3) and (h)(4)(i)(C) by failing to promptly remediate an immediate repair condition and to temporarily reduce operating pressure or shut down the pipeline until the condition had been repaired. Respondent discovered a top-of-pipe dent on a line segment that could affect an HCA.

While Respondent reported that the dent had metal loss based on the company's experience that similar conditions had metal loss, Alyeska did not treat the anomaly as an immediate repair condition because the company did not recognize the segment could affect an HCA. Upon excavating the pipe approximately one year later, Respondent confirmed that the dent had an ascertainable amount of metal loss.

The integrity management regulations classify certain pipeline conditions by risk and prescribe the amount of time an operator has to remediate them. "Immediate repair conditions" are pipeline anomalies that warrant the highest level of concern due to their risk of failure. The regulations specify not only that immediate repair conditions must be repaired promptly to protect the HCA, but that an operator must immediately reduce operating pressure (or shut down the pipeline) until the condition has been repaired. Respondent's failure to repair the dent and to reduce operating pressure for a full year posed an unacceptable risk to public safety. For that reason, I find the nature, circumstances, and gravity of the violation warrant assessment of the proposed civil penalty.

Alyeska argued that PHMSA should not penalize the company for being overly conservative, since it reported the condition as having metal loss even though ILI data did not indicate that metal loss was present. In response to this argument, I note that Respondent's 2004 integrity report stated that four anomalies, one of which was MP 545.79, "show indications of multiple bottom-of-pipe dents *or dents with metal loss, according to ILI data.*"²⁶ More importantly, however, I remind Respondent that pipeline operators are expected to make sound engineering judgments concerning the integrity of their pipelines based on available data. Particularly when judgments concern the integrity of a pipeline that could affect an HCA, responsible operators will often make conservative judgments. In this case, Alyeska *did the right thing* by assuming the anomalous condition had metal loss (which it did) based on data gathered over a three- to four-year period showing a rather strong correlation ("~95%") between similar conditions and metal loss. Unfortunately, Respondent erred by failing to recognize that the pipeline segment could affect an HCA and therefore failed to realize that the requirements for immediate repair conditions applied under § 195.452(h). While I commend Alyeska's appropriate conservatism in reporting the condition at MP 545.79, I find Respondent has not presented information to warrant a reduction in the civil penalty.

Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$90,000 for the violation of 49 C.F.R. § 195.452(h)(3) and (h)(4)(i)(C).

In summary, having reviewed the record and considered the assessment criteria for each of the Items cited above, I assess Respondent a total civil penalty of **\$263,000**.

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 \$263,000 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 **Item 1** in the Notice for violation of 49 C.F.R. § 195.452(h)(2). Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids by pipeline or who owns or operates a hazardous liquid pipeline facility is required to comply with the applicable safety standards established under chapter 601.

²⁶ Violation Report, Item 2, Attachment 2 at 10 (emphasis added).

In response to the proposed compliance order (PCO), Alyeska contended that the terms were unnecessary, particularly since Alyeska had completed the actions proposed. In regard to Paragraph 1.1 of the PCO, which proposed that Alyeska identify the root cause of the failure of ILI tools to function properly, Alyeska contended that it “already understands the root cause(s),” which is “the increase of wax in the crude oil delivered to TAPS at Pump Station 1 from the North Slope oil fields.”²⁷ In regard to Paragraph 1.2, which proposed that Respondent identify factors that contributed to the company’s “failure to perform data analyses,” the company argued that it did perform data analyses in accordance with the regulation. In regard to Paragraph 1.3, which proposed that Alyeska identify factors that might impact the company’s ability to comply with the integrity management regulations, Alyeska explained that, among other things, it was “in the midst of a conceptual engineering analysis to evaluate possible future issues that may arise for smart pigs when they travel over Atigun Pass.”²⁸

In regard to Paragraph 2 of the PCO, which proposed that Respondent develop and implement a mitigation plan, Alyeska contended that each of the enumerated steps had already been taken by the company. Specifically, Respondent was already evaluating the adequacy of, and improvements to, the pipeline infrastructure, such as installation of a new pig-launch facility at Pump Station 9. The company also contended that it was already evaluating improvements to ILI technology, methodology, and testing procedures by working with the UT pig vendor to develop methods for an improved tool that would achieve greater accuracy. In addition, Respondent contended that it had evaluated its analytical procedures and determined that they did not require any changes.

Respondent explained that it had also taken steps to mitigate challenges to obtaining complete and accurate smart pig data. These included changing the specifications for pig runs “to require 95% coverage for each mile of the line”; working with the UT pig vendor to develop methods for greater accuracy; ensuring the line was as “tight” as possible (i.e., full of oil) during pig runs to maintain a better travel speed for the pig; storing a volume of the least waxy oil to be used for pigging operations; and replacing cleaning pigs (which Alyeska runs several hours before the smart pigs) with ones that were more aggressive.²⁹ In summary, Alyeska requested that PHMSA find that “Alyeska has taken adequate steps to mitigate the adverse operational conditions affecting ILI data acquisition; and [PHMSA’s] proposed compliance order is not needed in light of these mitigation efforts.”³⁰

Respondent has provided numerous examples of actions taken by the company to identify and mitigate the effects of operational challenges in support of its claim that the proposed compliance terms are not necessary. Unfortunately, the record lacks adequate documentation demonstrating the details of those efforts. In particular, Respondent has not submitted documentation demonstrating compliance with the proposed compliance terms. It is difficult, if not impossible, to evaluate the extent to which Respondent’s efforts have met the proposed compliance terms or mitigated the need for such terms without being able to review the actual analyses, findings, and implementation of those corrective actions. Without more than the operator’s claims that it has taken appropriate corrective actions, I cannot verify the compliance terms have already been

²⁷ Response at 6.

²⁸ Response at 6.

²⁹ Response at 4–5.

³⁰ Response at 7.

satisfied and are no longer necessary. Therefore, I do not find that Respondent has taken sufficient action to warrant withdrawing the PCO. I do find, however, that certain terms of the PCO were overly broad, given the violations upon which they were based. Therefore I have made appropriate adjustments to limit the scope of certain terms and have provided clarification where Alyeska argued that the terms were unclear.

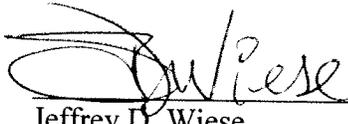
Accordingly, pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations. Alyeska must—

1. In accordance with § 195.452(h)(2), conduct a study that includes the following:
 - 1.1 An analysis of the reasons (root cause) why any ILI tools used by Alyeska on TAPS did not function as intended or did not collect complete and accurate information, which affected Alyeska's ability to obtain adequate information about anomalous conditions promptly, but no later than 180 days after an integrity assessment.
 - 1.2 An analysis of the factors that impact Alyeska's ability to perform timely information analyses to determine if anomalous conditions present a potential threat to the integrity of the pipeline; and
 - 1.3 An analysis of any other factor that could impact Alyeska's ability to timely discover anomalous conditions on TAPS in accordance with § 195.452(h)(2).
2. Develop a written plan to mitigate the potential impacts identified by the study conducted pursuant to Paragraph 1 of this Compliance Order. Include in the plan a schedule for implementing mitigative actions. The plan must provide for the following, as necessary, to mitigate the potential impacts:
 - 2.1 Determining the adequacy of and making necessary improvements to ILI testing procedures and equipment, including the pipeline infrastructure;
 - 2.2 Improvements to ILI technology and methodology; and
 - 2.3 Revisions to analytical procedures.
3. Maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and report the total cost as follows: (a) total cost associated with preparation and revision of plans and procedures, and performance of studies and analyses; and (b) total cost associated with physical changes, if any, to the pipeline infrastructure, including replacements and additions.
4. Complete each of the above items and submit documentation demonstrating compliance within 90 days of receipt of this Final Order. Documentation shall be submitted to the Director, Western Region, Office of Pipeline Safety, 12300 W. Dakota Ave. #110, Lakewood, CO 80228.

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.

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 received within 20 days of Respondent's receipt of this Final Order and must contain a brief statement of the issue(s). 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 are effective upon service of this document in accordance with 49 C.F.R. § 190.5.



Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

JAN 13 2010

Date Issued