



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

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

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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 21, 2019

Jim Musselman
President and CEO
Caelus Natural Resources Alaska, LLC
3700 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

CPF 5-2019-7002

Dear Mr. Musselman:

From April 9 through April 20, 2018, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected your 2-inch diesel and base oil pipeline (the "diesel pipeline") that services the Oooguruk field located on the Alaska North Slope. Associated pipeline operations and maintenance procedures and records were reviewed in Anchorage, Alaska.

Based on our inspection findings, PHMSA determined that you committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The deficiencies noted and probable violations noted are:

1. **§ 195.260 Valves: Location.**
A valve must be installed at each of the following locations:
(a)

(e) On each side of a water crossing that is more than 100 feet (30 meters) wide from high-water mark to high-water mark unless the Administrator finds in a particular case that valves are not justified.

Caelus did not install a valve on each side of a water crossing greater than 100 feet wide. The diesel pipeline traverses the the Beaufort Sea between the mainland and an offshore artificial drilling island. The underwater portion of the diesel pipeline is approximately 5.7 miles. There are shutoff valves located at the artificial drilling island side of the water crossing. However, the pipeline does not have the required shutoff valve at the mainland side of the water crossing. The nearest valve to the mainland side of the water crossing is at the pumping and pigging module at the upstream end of the diesel pipeline, which is approximately 2.3 miles from the water.

2. § 195.412 Inspection of rights-of-way and crossings under navigable waters.

(a) Each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.

Caelus did not to inspect the surface conditions on or adjacent to the diesel pipeline at intervals not exceeding 3 weeks, but at least 26 times each calendar year. Caelus conducted monthly patrols prior to 2016 and bi-weekly patrols since then. Caelus conducted only 24 patrols in 2017. Caelus exceeded the maximum 3-week interval in March 2018 (patrols were conducted on March 2, 2018 and March 27, 2018).

3. § 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 7 1/2 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.

Caelus failed to test each overpressure safety device on the diesel pipeline at least once each calendar year, with intervals not to exceed 15 months. The overpressure safety devices the exceeded the testing time intervals and specific regulatory deviations are outlined below:

- Caelus did not test Pressure Safety Valves (PSVs) PSV-61711A and PSV-62725 at the required intervals. Caelus shop-tested these valves in 2017, 2014, and 2011.

- Caelus shop-tested PSV-61711B in 2017 but either did not test, or failed to retain records of testing of PSV-61711B prior to 2017.
- Caelus did not adequately test the high pressure-showdown system on Pumps P-61701 A and B. Records indicate that Caelus calibrated the Pressure Indicator/Transmitters (PITs) associated with the high-pressure shutdown system. However, Caelus' records did not demonstrate that other components of the shutdown system are tested on an annual basis.

4. **§ 195.440 Public awareness.**

(a)

(c) **The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.**

Caelus did not follow the general program recommendations of API RP 1162. Caelus did not review their Public Awareness Plan on an annual basis consistent with API RP 1162. The Public Awareness Plan has not been updated since its release in July 2016. Caelus's task tracking software shows the Public Awareness plan to incorrectly be on a 2-year review cycle.

5. **§ 195.452 Pipeline integrity management in high consequence areas.**

(a)

(b) *What program and practices must operators use to manage pipeline integrity?*

Each operator of a pipeline covered by this section must:

(1) **Develop a written integrity management program that addresses the risks on each segment of pipeline in the first column of the following table not later than the date in the second column:**

Pipeline	Date
Category 1	March 31, 2002.
Category 2	February 18, 2003.
Category 3	1 year after the date the pipeline begins operation.

Caelus did not develop a written integrity management program that addresses the risks on each segment of pipeline within 1 year after the date the pipeline began operation. The diesel pipeline is a Category 3 pipeline according to § 49 CFR 195.452(a)(3). The pipeline construction was completed in May 2007 and, according to the operator, the pipeline began operation later that year. Therefore, Caelus was required to prepare a written integrity management plan in 2008. Caelus did not recognize that their pipeline is regulated by DOT until 2015, and failed to prepare a written integrity management plan until October 2017.

6. § 195.452 Pipeline integrity management in high consequence areas.

(a)

(b) *What program and practices must operators use to manage pipeline integrity?*

Each operator of a pipeline covered by this section must:

(2) Include in the program an identification of each pipeline or pipeline segment in the first column of the following table not later than the date in the second column:

Pipeline	Date
Category 1	December 31, 2001.
Category 2	November 18, 2002.
Category 3	Date the pipeline begins operation.

Caelus did not identify each pipeline or pipeline segments covered by § 195.452 within the required timeframe. Because the diesel pipeline is considered by PHMSA regulations to be a Category 3 pipeline, Caelus was required to identify each pipeline or pipeline segment that could affect a high consequence area (HCA) no later than the date the pipeline begins operations. Caelus had not identified segments that could affect HCAs when the pipeline began operations in 2007 as required. Furthermore, Caelus did not evaluate whether pipeline segments could HCAs until October 2017, when they prepared an HCA evaluation as part of their integrity management plan (See item 5). Lastly, the 2017 HCA evaluation failed to consider whether releases at the on-pad segments of the pipeline and other pipeline facilities (for example, the pigging valve modules) could affect an HCA.

7. § 195.452 Pipeline integrity management in high consequence areas.

(a)

(j) *What is a continual process of evaluation and assessment to maintain a pipeline's integrity?—*

(1) *General.* After completing the baseline integrity assessment, an operator must continue to assess the line pipe at specified intervals and periodically evaluate the integrity of each pipeline segment that could affect a high consequence area.

Caelus has not continued to assess the line pipe using one of the specified methods in § 195.452(j)(5). The diesel pipeline's baseline assessment was its construction hydrotest in 2007 and Caelus has not completed an integrity reassessment of the line pipe since then. The assessment interval cannot exceed 5 years, not to exceed 68 months.

Caelus's Integrity Management Plan (Rev 0, 10/2017) states that “[t]he monthly leak integrity test is the most effective method to measure whether the program is effective in assessing and evaluating the integrity of the pipeline and in protecting the high consequence area.” However, the “monthly leak integrity test” is not one of the

allowable integrity assessment methods in § 195.452(j)(5). The operator described the “monthly leak integrity test” as an in-service pressure test using diesel at pressures less than the pipeline’s maximum operating pressure. A pressure test conducted in accordance with Subpart E of § 195 is an allowable integrity assessment methods in § 195.452(j)(5)(ii), but the “monthly leak integrity test” is not consistent with Subpart E and therefore is not an allowable integrity assessment method.

8. § 195.583 What must I do to monitor atmospheric corrosion control?

(a) You must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

If the pipeline is located:	Then the frequency of inspection is:
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months.
Offshore	At least once each calendar year, but with intervals not exceeding 15 months.

Caelus did not conduct atmospheric corrosion inspections on the diesel pipeline at the required inspection intervals. Caelus conducted an atmospheric corrosion inspection in 2017, but did not conduct atmospheric corrosion inspections between 2007 (when the pipeline was constructed and began operation) and 2017. The onshore portions of diesel pipeline is exposed to the atmosphere and must be inspected at least once every three calendar years, but with intervals not exceeding 39 months.

Proposed Compliance Order

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$209,002 per violation per day the violation persists, up to a maximum of \$2,090,022 for a related series of violations. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed \$200,000 per violation per day, with a maximum penalty not to exceed \$2,000,000 for a related series of violations.

We have reviewed the circumstances and supporting documents involved in this case, and have decided not to propose a civil penalty assessment at this time.

With respect to Items 1 and 7 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Caelus Natural Resources Alaska LLC. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Items

With respect to Items 2, 3, 4, 5, 6, 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 these items. Failure to do so may result in 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).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. 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. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 5-2019-7002** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Hoidal", written in a cursive style.

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

cc: PHP-60 Compliance Registry
PHP-500 J. Gano (#158102)

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

PROPOSED COMPLIANCE ORDER

Pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Caelus Natural Resources Alaska, LCC a Compliance Order incorporating the following remedial requirements to ensure the compliance of Caelus Natural Resources Alaska, LLC with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice, Caelus must install a shutdown valve on the main land side of the Beaufort Sea water crossing. The location of the valve must be as near as practicable to the shore. The valve selected must comply with § 195.116 and be consistent with your Excess Flow Restricting Device study required by 195.452(i). Caelus must install the valve within 180 days after the receipt of the Final Order, and must provide documentation that this has been completed to PHMSA within 30 days of the installation.
2. In regard to Item Number 7 of the Notice pertaining to conducting assessments of pipeline integrity for pipeline segments in high consequence areas, Caelus must:
 - a. Prepare a written plan for conducting an integrity assessment consistent with §49 CFR 195.452(j)(1). If a pressure test is the selected assessment method, the written plan must be consistent with Subpart E of 49 CFR 195. Caelus must submit their written integrity assessment plan within 60 days after the receipt of the Final Order.
 - b. Implement an integrity assessment in accordance with Item 2(a). Caelus must complete the integrity assessment under Item 2(b), and submit the results of the integrity assessment, within one year of the receipt of the Final Order.
3. Caelus must submit documentation of the valve installation (Item 1), the integrity assessment plan (Item 2(a)), and the results of the assessment (Item 2(b)) to Chris Hoidal, Acting Director, Western Region, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 12300 W. Dakota Avenue, #110, Lakewood, CO 80228.

It is requested (not mandated) that Caelus Natural Resources Alaska, LCC maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Chris Hoidal, Acting Director, Western Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs 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.