



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

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

VIA CERTIFIED MAIL AND FAX TO (907) 777-8301

April 7, 2017

Mr. Greg Lalicker
President
Hilcorp Alaska, LLC
1201 Louisiana St., Suite 1400
Houston, Texas 77002

**RE: CPF No. 5-2017-7002H
Corrections to Order**

Dear Mr. Lalicker:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a Corrective Action Order (CAO), CPF No. 5-2017-7002H, to your company on April 6, 2017. After further review, we have found we need to make corrections and have attached a CAO showing those corrections:

On Page 3, third paragraph from the bottom – Preliminary finding reference to “in-line inspection” was deleted in its entirety and replaced with “pigging” of the *Affected Segment*.

On Page 6, Paragraph 5 – The Required Corrective Actions mandate the daily monitoring to be completed during “neap” tide, when in fact it should have said during “slack tide during daylight hours”.

Additionally, an enhanced map of the Anna to Bruce platforms is attached.

If you have any questions concerning this letter, please contact Mr. David Hassell, Alaska Office Operations Supervisor, at (907) 271-6519.

Sincerely,

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

cc: PHP-60 Compliance Registry
PHP-500 T. Johnson
Mr. David S. Wilkins, Senior Vice President, Hilcorp Alaska, LLC
Ms. Erin McKay, Regulatory Compliance Manager, Hilcorp Alaska, LLC



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

1200 New Jersey Avenue, SE
Washington, DC 20590

April 7, 2017

VIA CERTIFIED MAIL AND EMAIL TO: glalicker@hilcorp.com

Mr. Greg Lalicker
President
Hilcorp Alaska, LLC
1111 Travis Street
Houston, Texas 77002

CPF No. 5-2017-7002H

Dear Mr. Lalicker:

Enclosed please find a Corrective Action Order (CAO) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), in the above-referenced case. It requires Hilcorp Alaska, LLC, a subsidiary of Hilcorp Energy Company, to take certain corrective actions with respect to its 8-inch sub-sea hazardous liquids pipeline running from the Anna Platform to the Bruce Platform that experienced a crude oil release on April 1, 2017, into the Cook Inlet of Alaska.

Service of this CAO is being made by certified mail and facsimile. Service of the CAO by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon completion of service.

Sincerely,

for Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure: CAO, w/ copy of 49 C.F.R. § 190.233

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, OPS
Mr. Chris Hoidal, Region Director, Western Region, OPS
Ms. Erin McKay, Regulatory Compliance Manager, Alaska Integrity Group, Hilcorp
Alaska, LLC, at emckay@hilcorp.com

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

In the Matter of)

Hilcorp Alaska, LLC,)
a subsidiary of Hilcorp Energy Company,)

Respondent.)

CPF No. 5-2017-7002H

CORRECTIVE ACTION ORDER

Purpose and Background:

This Corrective Action Order (CAO or Order) is being issued under the authority of 49 U.S.C. § 60112 to require Hilcorp Alaska, LLC (Hilcorp or Respondent), to take the necessary corrective actions to protect the public, property, and the environment from potential hazards associated with the release from its 8-inch hazardous liquids subsea pipeline running from Hilcorp’s Anna Platform to its Bruce Platform in the Cook Inlet, Alaska.¹

On April 1, 2017, a reportable accident occurred on the portion of Hilcorp’s 8-inch, subsea pipeline that runs from the Anna Platform to the Bruce Platform (*Affected Segment*), resulting in the release of an unknown quantity of crude oil (Failure). Hilcorp reported that no injuries or fatalities occurred as a result of the Failure and there was no fire or explosion. The Failure occurred in a High Consequence Area (HCA) with endangered and threatened species of marine life near the location of the spill.² The cause of the Failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the Failure. The preliminary findings of the agency's ongoing investigation are as follows:

Preliminary Findings:

- The Granite Point crude oil pipeline facilities include pipelines associated with the Anna Platform, Bruce Platform, Granite Point Platform, and Granit Pointe Tank Farm. The

¹ The Anna to Bruce pipeline is a crude-oil gathering line that is part of Hilcorp’s Granite Point pipeline facilities located in the Cook Inlet, Alaska.

² According to 49 C.F.R. § 195.450, a “High Consequence Area” is (1) a commercially navigable waterway, (2) a high population area, (3) an “other populated area,” or (4) “an unusually sensitive area,” as more specifically defined in § 195.6.

Failure is associated with the crude oil pipeline that transports crude oil from the Anna Platform to the Bruce Platform. Once on the Bruce Platform, the Anna crude oil is commingled with the crude oil produced on the Bruce Platform and the commingled crude oil is transported by pipeline from the Bruce Platform to the Granite Point Tank Farm.³

- The *Affected Segment* is a crude-oil pipeline associated with Hilcorp's Granite Point Tank Farm (GPTF) facility. The GPTF includes crude-oil and gas pipelines that serve the company's Anna, Bruce, Granite Point, Spark, and Spurr Platforms in Cook Inlet. The GPTF is not part of Hilcorp's Middle Ground Shoal (MGS) Fuel Gas System, which is currently experiencing an ongoing natural gas leak in another part of the Cook Inlet, Alaska and is subject to a separate PHMSA enforcement proceeding.⁴
- The *Affected Segment* is approximately 8570 feet in length, and is constructed with 8.625-inch diameter, Grade B, seamless pipe with a coal tar/enamel coating. The pipe wall thickness is 0.593 inch for the offshore pipe and 0.500 inch for the riser pipe. The steel coating is in turn overlaid with a 1.25-inch-thick concrete coating. This segment was installed in 1966. The Maximum Operating Pressure (MOP) of the pipeline is 340 psig.
- The *Affected Segment* has a maximum capacity of 461 barrels of crude oil and was operating at full capacity at the time of the Failure. The crude oil in the *Affected Segment* is produced and processed on the Anna Platform for crude-oil pipeline transportation. The Anna to Bruce pipeline was operating at 70 psi at the time of the Failure.
- At approximately 11:20 a.m. AKDT (all times are AKDT unless otherwise noted) on April 1, 2017, Hilcorp discovered a discharge of crude oil due to a potential leak on the Anna to Bruce pipeline. Hilcorp reported an impact on the Anna Platform and immediately confirmed by visual observation a crude-oil release. Hilcorp reported that the *Affected Segment* and the Anna Platform were shut in (closed) immediately upon the visual observation of the release. The Bruce Platform is still operating and continues to produce and send processed crude oil to the GPTF facility.
- The accident was initially reported by Hilcorp to the National Response Center at 3:55 p.m. EDT on April 1, 2017 (NRC Report No. 1174601), indicating a release of an unknown quantity of crude oil. Hilcorp subsequently reported that the release amount was less than 10 gallons.
- No injuries or fatalities occurred as a result of the Failure and there was no fire or explosion. The *Affected Segment* is located in an Unusually Sensitive Area with endangered and threatened species marine life in and around the location of the Failure.

³ See Figure 1, Map of the Granite Point crude oil pipeline facilities

⁴ See, *In the Matter of Hilcorp Alaska, LLC [5-2017-0004S]* (available on PHMSA's website).

- On April 1, 2017, Hilcorp directed its Oil Spill Removal Organization (OSRO), Cook Inlet Spill Prevention & Response, Inc. (CISPRI), to mobilize the spill response ship Perseverance. Hilcorp also mobilized a helicopter overflight in the area of the Failure. The overflight confirmed the presence of a *crude-oil* sheen. There were approximately six different sheens found near the area of the Failure. Most of the sheens had an area of approximately 100 square feet. The leading edge of the sheens was approximately 3.5 miles south from the Anna Platform.
- At 1:15 p.m. AKDT on April 2, 2017, Hilcorp began activities to purge the *Affected Segment* of oil and replace it with sea water by the use of a foam pig. The purging activities were completed at 9:20 p.m. on April 2, 2017, and the *Affected Segment* is now purged. ADEC and the USCG had observers on the Anna Platform during the purging of the *Affected Segment*. PHMSA's Office of Pipeline Safety Western Region also had an inspector present at the Incident Command Site in Nikiski, Alaska.
- On April 2, 2017, at 8:00 a.m., a Unified Command comprised of the USCG, ADEC, and Hilcorp was established.
- The *Affected Segment* had an In Line Inspection (ILI) preformed in June 2016. Less than 20 anomalies were found. The deepest anomaly had metal loss less than 35 percent of the 0.593" thick pipe wall.
- On April 3, 2017, Hilcorp conducted an additional overflight and reported no observable oil sheen or wildlife in the area of the Failure. Based on the overflight information from April 2nd and April 3rd, the Unified Command stood down the Incident Command Post at 9:00 a.m. on April 3rd 2017.
- On April 3-4, 2017, Hilcorp conducted pigging of the *Affected Segment*. Hilcorp reported that it sent a cleaning/scrapper "pig" followed by a foam pig toward the Bruce Platform, past the sub-sea flanges near the Anna Platform. Hilcorp used 100 barrels of filtered Cook Inlet water to push the pigs past the sub-sea flanges near the Anna Platform. Hilcorp reported that they are unable to send the pigs the full distance to the Bruce Platform at this time due to the low water-handling capability at the Bruce Platform.
- On April 3-4, 2017, Hilcorp conducted a pressure test on the *Affected Segment* by increasing the pressure to 340 psig for a period of 24 hours. Hilcorp reported that the *Affected Segment* lost pressure slowly during the test.
- Hilcorp reports that it installed blind flanges on both ends of the *Affected Segment*. On April 5, 2017, Hilcorp performed a second pressure test on the *Affected Segment* starting at 1:30 a.m. to 337 psig. The pipeline pressure was 335 psig at 6:30 a.m. At approximately 8:30 a.m., the pressure was reading 336 psig, seven hours after the test began. Hilcorp reports that it will prepare to perform an eight-hour hydro test in accordance with Federal pipeline safety standards, 49 CFR Part 195, Subpart E.

- Hilcorp reports that it is developing a plan to return the *Affected Segment* to service but will wait to see the results of the pressure test before making a determination on returning the line to service.
- Hilcorp reports that it has not yet identified the exact location of the release, its cause, or the exact amount of product released into the environment.

Determination of Necessity for Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is hazardous and requiring corrective action is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112, and the regulations promulgated thereunder, provide for the issuance of a Corrective Action Order without prior opportunity for notice and hearing upon a finding that failure to issue the Order expeditiously will likely result in serious harm to life, property or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact and considering the ongoing investigation of the Failure, I find that the continued operation of the *Affected Segment* without corrective measures is or would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, the circumstances surrounding the Failure, the hazardous nature of the product being transported, the pressure required for transporting the material, the uncertainties as to the cause of the Failure, the environmental hazards associated with the Failure, the location of the Failure in an HCA, and the ongoing investigations to determine the cause of the Failure, I find that a failure to issue this Order expeditiously to require immediate corrective action would result in likely serious harm to life, property, and the environment.

Accordingly, this Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Western Region, PHMSA (Director). If a hearing is requested, it will be held telephonically or in-person in Denver, Colorado, unless a different location is expressly agreed to in writing by the Director.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Respondent will be notified of any

additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Definitions:

Affected Segment – The *Affected Segment* means Respondent’s 8-inch *crude-oil* subsea pipeline segment of the Granite Point Tank Farm pipeline facility that runs approximately 1.6 miles from the Anna Platform to the Bruce Platform in the Cook Inlet, Alaska.

Director – The Director means the Director, Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety, Western Region.

Failure Site – The Failure Site means the location on the *Affected Segment* where the leak occurred on April 1, 2017 in Cook Inlet, Alaska.

Pursuant to 49 U.S.C. 60112, I hereby order Hilcorp to immediately take the following corrective actions for the *Affected Segment*:

1. **Shut down of the *Affected Segment*.** Hilcorp must not operate the *Affected Segment* until authorized to do so by the Director.
2. **Pressure Test.** Within five days of receipt of this Order, Hilcorp must perform a hydrostatic pressure test of the *Affected Segment* during daylight hours that meets the requirements of 49 CFR Part 195 Subpart E. Hilcorp must submit the results of the Subpart E pressure test to the Director within three days of completing the pressure test required by this paragraph. Additionally, prior to the hydrostatic pressure test, Hilcorp must conduct a full volumetric accounting of the displaced oil in the pipeline.
3. **Inspection.** Within 25 days of receipt of this Order, Hilcorp must conduct a direct visual examination of the *Affected Segment* at the point where it exits the Anna Platform leg, including the interior of the Anna Platform leg, to ensure there has been no physical damage to the pipeline or ancillary connections. Examination of the annulus between the pipeline and the Anna Platform leg, including sampling for hydrocarbons, shall also be completed during this time. Hilcorp must submit written results of the visual observations and sampling, including any photographs, videos, or other supporting documentation, within three days of completion of the inspection required by this paragraph.
4. **Review of Prior ILI Results.** Within 14 days of receipt of this Order, Hilcorp must conduct a reevaluation of the 2016 ILI survey results on the *Affected Segment*, including a review of the ILI vendors' raw data and analysis. Hilcorp must determine if any features were present on the *Affected Segment* that may indicate an integrity-threatening anomaly. Hilcorp must submit documentation of this ILI review and analysis to the Director within 21 days of receipt of this Order.

5. **Return to Service.** Hilcorp must provide a restart plan to the Director for review and approval that demonstrates CAO Corrective Items 2-4 above have been completed prior to restart. The restart plan must also include a plan to conduct daily monitoring of the *Affected Segment* right-of-way. The daily monitoring shall be conducted during slack tide during daylight hours for a period of 30 consecutive days.

6. **Root Cause Failure Analysis.** Within 90 days following receipt of this Order, Hilcorp must complete a root cause failure analysis (RCFA) that is supplemented and facilitated by an independent third-party vendor acceptable to the Director. The RCFA must document all contributory factors and the decision-making process. Hilcorp must submit a final report of the RCFA to the Director. The final report must include findings, any lessons learned, and whether the findings and any lessons learned are applicable to other locations within Hilcorp's Granite Point Tank Farm Platform pipeline systems.

In addition to the above Corrective Action Items, PHMSA strongly encourages, but does not order, that Respondent take immediate steps to develop and implement a Safety Management System (SMS) for all its pipeline assets in Cook Inlet and that such a system be fully implemented within one year from the Date of this Order. API 1173 provides pipeline operators with safety management system requirements that, when properly applied, provide an effective framework for revealing and managing risk, promoting a learning environment, and continuously improving pipeline safety and integrity.

The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.

With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent will proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent will correct all deficiencies within the time specified by the Director, and resubmit it for approval. If a resubmitted item is disapproved in whole or in part, the Director may again require Respondent to correct the deficiencies in accordance with the foregoing procedure, and the Director may otherwise proceed to enforce the terms of this Order.

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).

In your correspondence on this matter, please refer to "CPF No. 5-2017-7002H" and for each document you submit, please provide a copy in electronic format whenever possible. The actions required by this Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Parts 190 through 199, under any other order issued to Respondent under authority of 49 U.S.C. Chapter 601, or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator shall be final.

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

The terms and conditions of this Order are effective upon service in accordance with 49 C.F.R. § 190.5.



for Alan K. Mayberry
Associate Administrator
for Pipeline Safety

April 7, 2017

Date Issued