



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

901 Locust Street, Suite 480
Kansas City, MO 64106

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

VIA ELECTRONIC MAIL TO: francois_poirier@tcenergy.com;
jessica_kirstine@tcenergy.com

October 14, 2022

Mr. Francois Poirier
President and Chief Executive Officer
TC Oil Operations, Inc.
450 1st Street, S.W.
Calgary, Alberta, Canada
T2P 5H1
francois_poirier@tcenergy.com

CPF 3-2022-025-NOPV

Dear Mr. Poirier:

On May 12 – 13 , 2020, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.), performed a specialized inspection of the TC Oil Operations, Inc.'s ("TC Oil") Lucas delivery facility in Beaumont, Texas, following a crude oil spill that occurred there on May 7, 2020.

As a result of the inspection, it is alleged that you have committed a probable violation of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The item inspected and the probable violation is:

1. § 195.579 What must I do to mitigate internal corrosion?

(a) *General.* If you transport any hazardous liquid or carbon dioxide that would corrode the pipeline, you must investigate the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and take adequate steps to mitigate internal corrosion.

TC Oil failed to investigate the corrosive effect of crude oil in the surge relief piping at the Lucas delivery facility and take adequate steps to mitigate internal corrosion. The failure of TC Oil to take adequate steps to mitigate internal corrosion led to the release of crude oil at the Lucas Terminal facility on May 7, 2020.

The Lucas facility is part of TC Oil's Keystone pipeline system and receives oil from the mainline for delivery to customer tankage. There was also surge relief equipment and associated piping in place at the facility. On May 7, 2020, there was a spill from a through-wall leak on the bottom of the 30-inch diameter surge relief line piping at the Lucas facility. This failure resulted in the release of a reported 442 barrels of crude oil.

The subsequent investigation by TC Oil determined the cause of the release to be internal corrosion. The surge relief line piping usually had no-flow. A metallurgical examination revealed the bottom section of the pipe had accumulated deposits on top of continuous scale. This provided an environment for under-deposit corrosion on the inside of the pipe. Further analysis found low pH values signifying an acidic environment, and indications for the presence of acid-producing organisms and organic acids. Therefore, the investigation concluded, and TC Oil reported, that the cause of the failure was microbiological influenced corrosion (MIC) on the inside of the pipe.

After the failure, in the written 30-day accident report (Form PHMSA F7000-1), TC Oil reported that measures to monitor and mitigate internal corrosion were not used on the surge relief line at the Lucas delivery facility, including: routine use of internal corrosion coupons for monitoring, treating the crude oil commodity with corrosion inhibitors or biocide, application of an interior coating or internal lining of the pipe as a protective coating, or utilization of routine cleaning / dewatering pigs (or other operations to address the build-up of water and deposits inside the pipe). At the time of the accident, TC Oil's internal corrosion program focused on mainline pipe segments capable of accommodating cleaning pigs and inline inspection, while internal corrosion control measures were not taken at the Lucas delivery facility as indicated in the written 30-day accident report.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation

persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022.

We have reviewed the circumstances and supporting documentation involved for the above probable violation(s) and recommend that you be preliminarily assessed a civil penalty of \$518,400 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$518,400

Proposed Compliance Order

With respect to item 1 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to TC Oil Operations, Inc. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be 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 3-2022-025-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Gregory A. Ochs
Director, Central Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

cc: Erik Hughes, Senior Manager Regulatory Compliance, erik_hughes@tcenergy.com
Dan Cerkoney, Interim Director Regulatory Compliance, dan_cerkoney@tcenergy.com;
Jessica Kirstine; Vice-President, Systems Operations & Engineering,
jessica_kirstine@tcenergy.com

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

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to TC Oil Operations, Inc., a Compliance Order incorporating the following remedial requirements to ensure the compliance of TC Oil Operations, Inc., with the pipeline safety regulations:

- A. In regard to Item number 1 of the Notice pertaining to the failure to take adequate measures to monitor and mitigate internal corrosion, TC Oil Operations, Inc., must submit a plan with schedule to develop comprehensive procedures that address monitoring and mitigation of internal corrosion at facilities (e.g. metering stations, pump stations, delivery facilities, tank farms, etc.) to the Director, OPS Central Region, for acceptance, within **30** days of receipt of the Final Order. The plan must list and describe each of the procedures, and the schedule to complete development of all the procedures must not exceed **180** days from the receipt of the Final Order.
- B. As each of the procedures for monitoring and mitigating internal corrosion at facilities is completed by TC Oil Operations, Inc., documentation of completion is to be submitted to the Director OPS Central Region. After receipt of the Final Order, TC Oil Operations, Inc., must submit a progress report on a quarterly basis until CPF 3-2022-025-NOPV is closed.
- C. It is requested that TC Oil Operations, Inc., maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Gregory A. Ochs, Director, OPS Central 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.