



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

901 Locust Street, Suite 480
Kansas City, MO 64106

WARNING LETTER

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

October 31, 2022

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

CPF 3-2022-066-WL

Dear Mr. Poirier:

From March 29, 2021 through February 1, 2022, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected TC Oil Pipeline Operations, Inc.'s Keystone Pipeline (TC Oil) from Walhalla, North Dakota to Cushing, Oklahoma and from Steele City, Nebraska to Patoka, Illinois.

As a result of the inspection, it is alleged that TC Oil has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. **§ 195.402 Procedural manual for operations, maintenance, and emergencies.**
 - (a)
 - (e) **Emergencies. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs:**
 - (1)
 - (4) **Taking necessary actions, including but not limited to, emergency shutdown, valve shut-off, or pressure reduction, in any section of the operator's pipeline system, to minimize hazards of released hazardous liquid or carbon dioxide to life, property, or the environment.**

TC Oil failed to have emergency shutdown devices adequately identified at each pumping station. Emergency shutdown devices (ESDs) were observed at Pierson Pump Station, St. Paul

Pump Station, Middletown Pump Station, Centralia Pump Station, Edinburg Pump Station, and other locations with inconsistent signage and color. When asked, a TC Oil employee was unable to identify an ESD due to it being labeled indistinguishably and the button was yellow in color. These devices should be readily identifiable for use in an emergency.

2. § 195.403 Emergency response training.

(a)

(b) At the intervals not exceeding 15 months, but at least once each calendar year, each operator shall:

(1) Review with personnel their performance in meeting the objectives of the emergency response training program set forth in paragraph (a) of this section; and

TC Oil failed to review with personnel their performance in meeting the objectives of the emergency response training program at the required intervals not exceeding 15 months, but at least once each calendar year. On June 25, 2021, PHMSA requested a list of the individuals/titles/roles and their required training in order to meet the OPA 90 plan and the §195.403 emergency response training requirements. The training records provided to PHMSA documented that an individual failed to take the required online training course “EMS: Liquid Pipelines Emergency Response Plans” in the calendar years 2019 and 2020. Also, another individual failed to take the required online training course “EMS: Liquid Pipelines Emergency Response Plans” in the calendar year 2020.

3. § 195.440 Public Awareness.

(a)

(g) The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator’s area.

TC Oil failed to effectively conduct their public awareness program in other languages commonly understood by a significant number and concentration of the non-English speaking population in the Operator’s area.

PHMSA reviewed a record of TC Oil's public awareness stakeholder brochures. The brochures were written entirely in English. To accommodate for non-English speaking populations, TC Oil placed wording on the outside of the envelope that stated German, French, and Spanish translated versions were available upon request. TC Oil stated no other languages have ever been requested. Despite surveys which showed that TC Oil passed through communities with significant portion of the population that spoke Spanish or German.

TC Oil presented to PHMSA on March 29, 2022, a revised wording on the envelopes that better indicates what the brochure contains. Furthermore, TC Oil presented a draft translated insert highlighting the reason and importance for receiving the brochure.

4. § 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, including any pipeline located in a high consequence area unless the operator effectively demonstrates by risk assessment that the pipeline could not affect the area. (Appendix C of this part provides guidance on determining if a pipeline could affect a high consequence area.) Covered pipelines are categorized as follows:

TC Oil failed to effectively demonstrate, by risk assessment, that the pipeline could not affect a high consequence area. TC Oil did not consider the effects of all drainage systems such as small streams and other smaller waters that could serve as a conduit to a high consequence area. The records reviewed demonstrated that the operator failed to identify two pipeline segments located at Wolf Creek and Belleau Creek that could affect an HCA.

The Operator modeled spill points at equal distances along the pipeline centerline which may gap at a water crossing directly intersecting the pipeline centerline. If that water crossing led to an indirect or contributory pipeline segment (CPS), only the location of the spill points would be identified as HCAs. As the spill points were not buffered, there was no method for the operator's spill model to identify the location between spill points as being a potential HCA location.

TC Oil identified and resolved the modeling error on or around April 30, 2020, with the following amendments:

- The spill model now automatically spans across water crossings if spill points on either side show interaction with HCA.
- The spill model was switched to a 10 m digital elevation dataset from a prior 30 m one.
- The spill model was switched to the higher resolution new US Hydrography dataset which is extracted from USGS's National Hydrographic Dataset Plus High Resolution (NHDPlus_HR) from the previously used medium resolution US Hydrography dataset which was extracted from the NHDPlusV2 data by USGS released in 2012.

PHMSA reviewed the corrected HCA data on November 19, 2021.

5. § 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.

TC Oil failed to base the assessment and periodic evaluation schedule on all risk factors that reflect the risk conditions on the pipeline segment. In 2020, TC Oil changed its annual visual inspection program of all facilities to a 3 year cycle. TC Oil did this without performing a facilities integrity risk assessment that incorporates all the factors listed under § 195.452(e) to determine the proper assessment and evaluation schedule.

Furthermore, TC Oil failed to establish an integrity assessment and periodic evaluation schedule that prioritizes pipeline segments. TC Oil has not risk ranked their facilities against one another to prioritize continued assessments and periodic evaluations.

TC Oil has stated they have undertaken the development of a facilities integrity risk assessment which incorporates HCA's and other relevant risk factors in accordance with CFR §§ 195.452(e) and 195.452(j)(2). Furthermore, TC Oil specifically committed to incorporating equipment failure and incorrect operations threats.

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 \$2,391,142 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.

No reply to this letter is required. If you choose to reply, in your correspondence please refer to 3-2022-066-WL. 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).

Sincerely,

Gregory Ochs
Director, Central Region
Pipeline and Hazardous Materials Safety Administration

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