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February 3, 2022

Mr. Francois Poirier  
President and Chief Executive Officer  
TC Energy Corporation  
450 1st Street, S.W.  
Calgary, Alberta T2P 5H1

**RE: CPF 3-2019-5023H**

Dear Mr. Poirier:

On November 5, 2019, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a Corrective Action Order to TC Energy Corporation (TC Energy) in regard to the release of crude oil from TC Energy's 30-inch Keystone pipeline near the Edinburg pump station, in Walsh County, North Dakota, reported to the National Response Center (NRC) on October 29, 2019. By letter dated January 14, 2022, from Mr. Lee Romack, Director – Regulatory Compliance, TC Energy requested closure of the Corrective Action Order (CAO or Order).

The CAO required corrective actions to the Keystone pipeline between the Edinburg and Niagara pump stations in North Dakota. TC Energy was required to use an independent third-party to perform a metallurgical examination and analysis of the failed section of pipe. The Order also included a provision to develop and implement a Remedial Work Plan to verify the integrity of the Edinburg to Niagara pipe segment. A root cause failure analysis report was required by the CAO to determine all factors that contributed to the failure and identification of lessons learned.

The root cause failure analysis indicated the joint of pipe at the release site was manufactured with an atypical seam weld geometry severe enough to initiate a fatigue crack. Per the Remedial Work Plan, TC Energy launched an in-line inspection program with a new technology platform to detect similar cracks.<sup>1</sup> PHMSA's Office of Pipeline Safety (OPS) Central Region monitored TC Energy's progress completing the actions required by the CAO. Previously, the Director – OPS Central Region, allowed removal of the pressure restriction based on an engineering analysis showing that the pipeline segment was safe to

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<sup>1</sup> GAO-21-588, *Pipeline Safety: Information on Keystone Accidents and DOT Oversight*, U.S. Government Accountability Office, July 2021, [www.gao.gov/assets/gao-21-588.pdf](http://www.gao.gov/assets/gao-21-588.pdf)

operate at pre-failure pressures considering all known anomalies and operating parameters of the Keystone pipeline.

Per Amendment 195-102, effective July 1, 2020, at 84 FR 52260; 49 CFR §195.452(g) requires that “any in-service ruptures or leaks - including identified causes” be integrated with other information when periodically evaluating the integrity of pipeline segments. Therefore, TC Energy’s integrity management program must include integration of information gathered during the implementation of corrective actions required by this Order and incorporate the identified causal factors that contributed to the in-service crude oil release.

PHMSA also reminds TC Energy of the requirements enacted by Congress and described in Section 114 of the “Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020” (PIPES Act of 2020), which requires all pipeline operators to address the elimination of hazardous leaks. Please refer to PHMSA Advisory Bulletin ADB-2021-01, for more information on this self-executing provision. PHMSA will be conducting inspections of these modified plans in 2022.

Based on a review of documentation provided by TC Energy, it has been determined that you have complied with the terms of this Order. Accordingly, this Corrective Action Order is now closed. It is our expectation that TC Energy will implement strategies to eliminate hazardous leaks on the Keystone pipeline. As noted previously, PHMSA will be inspecting pipeline facilities across the country to ensure alignment with statutory requirements for eliminating hazardous leaks. Thank you for your cooperation in this matter.

Sincerely,

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

cc: Lee Romack, Director – Regulatory Compliance, TC Energy, [lee\\_romack@tcenergy.com](mailto:lee_romack@tcenergy.com)

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