United States Senate

COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION

WASHINGTON, DC 20510–6125

WEBSITE: https://commerce.senate.gov

January 9, 2023

Mr. Tristan Brown
Deputy Administrator
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Deputy Administrator Brown,

I am writing to you about concerns over the Pipeline and Hazardous Materials Safety Administration's ("PHMSA") oversight of TC Energy's Keystone pipeline. On December 7, 2022 the pipeline ruptured spilling at least 588,000 gallons of bitumen oil (also known as tar sands), becoming the largest onshore crude pipeline spill in almost a decade. This is the Keystone pipeline's twenty-third leak since it became operational in 2010. Despite these incidents, PHMSA has continued to allow TC Energy to operate under a special permit to move product at pressure higher than allowed under regulations. To ensure the safety of the public and the environment, I am calling on PHMSA to immediately begin a review of TC Energy's special permit and to update its oil spill response requirements for bitumen oil. It is especially important to review TC Energy's safety records as the company looks into increase the throughput of the Gas Transmission Northwest pipeline.

This latest spill is no surprise. In 2007, PHMSA issued a special permit that allowed TC Energy to operate eleven percent higher than the regulatory maximum stress level, when it is known that pipelines that operate at higher pressures are at a greater risk of deforming or other failures that can lead to a rupture. The Government Accountability Office ("GAO") also reviewed PHSMA's actions taken in response to the prior twenty-two Keystone leaks and found that the incidents were caused by the original design, pipe manufacturing, or construction. For example, in 2011, TC Energy's design of the pipeline system did not adequately account for the vibrations that occur at pump stations in North Dakota and Kansas. The report also found that PHMSA has issued five different enforcement actions between 2012-2020 regarding TC Energy corrosion prevention deficiencies found during inspections. Yet, spills continue to happen and PHMSA has not reviewed TC Energy's special permit to determine if it is still adequate to ensure the safe operation of Keystone Pipeline.

PHMSA is also supposed to ensure that companies like TC Energy quickly and effectively respond to an onshore oil spill. The Keystone pipeline was transporting bitumen oil when it leaked, and the spill polluted 4.5 miles of Mill Creek. It is still unknown if the spill impacted drinking water wells or the public. According to the National Academies of Science, when tar

sands spills reach a body of water it initially floats and spreads, but then the residues will submerge or sink to the bottom of the water body. Because bitumen is heavy and sinks, traditional containment efforts, such as oil booms, are less effective. To address these issues, in 2015, the National Academies of Science made recommendation to a number of federal agencies, including PHMSA, to update their oil spill response requirements to consider the unique characteristics of tar sands. However, PHMSA has still not adopted these updated recommendations, which would have required TC Energy to have a spill response plan that was appropriate for tar sands.

It is imperative that PHMSA provide robust oversight over our nation's oil pipeline infrastructure to ensure the safety of both the public and the environment.

In addition to reviewing TC Energy's special permit, please respond to the following questions:

1. When initially issuing the special permit, PHMSA required TC Energy to comply with additional safety requirement to help ensure the safe operation of the Keystone pipeline while operating at higher pressure. After the 2016 and 2019 spills in North Dakota did PHMSA review the additional requirements to determine whether they were sufficient?
2. Please provide any plans or other information TC Energy submitted to comply with the following special permit conditions 41, 44, and 45 having to do with ground movement, verification of the reassessment interval, and the increased pressure's impact on the pipe after two years of operation.
3. What analysis did you complete after the four Root Cause Failure Analysis reports issued after the incidents in 2011, 2016, 2017, and 2019, to determine that the operating stress level of a pipeline would not have had an effect on the accidents?
4. On how many occasions has PHMSA conducted inspections of the Keystone pipeline since its first date of operation? What technologies and methods did you use to conduct those inspections? And how many miles of the pipeline were inspected?
5. How many times has PHMSA found the Keystone pipeline to not be in compliance with the special permit's additional safety requirements since PHMSA issued the special permit? Does PHMSA independently verify TC Energy's compliance with these requirements?
6. Please provide a copy of TC Energy's Keystone pipeline most recent oil spill response plan. Does TC Energy's onshore oil spill response plan appropriately consider the unique characteristics of bitumen oil? When did TC Energy last update its spill response plans?
7. What action has PHMSA's taken to adopt the National Academies of Science's recommendations to improve tar sand spill response from their report *'Spills of Diluted Bitumen from Pipelines. A Comparative Study of Environmental Fate, Effects, and Response"*?
8. Does PHMSA believe the current limits on civil penalties under 60122 of Title 49 are adequate to hold companies accountable for violating safety regulations and orders?
9. What resources or statutory changes does PHMSA need to improve its oversight over hazardous liquid pipelines?

Thank you in advance for your attention to this matter.

Sincerely,

Senator Maria Cantwell