

The Recorder

Inclusive, independent, indispensable.

Pipeline coating not risky, feds told by Dominion Energy

July 25, 2019

BY JOHN BRUCE • STAFF WRITER



The 42-inch diameter gas pipes for the proposed Atlantic Coast Pipeline have coatings that may have degraded during more than three years of exposure after transport. (File photo)

MONTEREY — Dominion Energy told the Federal Energy Regulatory Commission that residue from degraded pipeline coatings, while unknown, is “not expected to enter the environment in amounts capable of producing an adverse human health effect.”

Even so, the company proposing the Atlantic Coast Pipeline is testing the coating residue for adverse impacts and expects to announce findings in a month or sooner.

The probe followed comments by Little Valley resident Bill Limpert that coating experts told him more than three years of open exposure is risky.

On July 3, FERC requested Atlantic Coast Pipeline LLC and Dominion Transmission Inc., under oath, to provide within 20 days toxicological environmental and health information on epoxy coatings associated with the proposed ACP.

“Please provide toxicological environmental and health information for Fusion Bonded Epoxy coatings (3MTM Scotchkote TM Fusion Bonded Ep- oxy Coatings and 3MTM Scotchkote TM Liquid Epoxy Coatings, or their equivalents) used for coating the project’s pipeline and associated utilities,” FERC said in its request. “Evaluate and report on the toxicity of the FBE from all potential exposure pathways including from direct and indirect human contact, ingestion or inhalation; as well as environmental pathways (leachability and mobility) in air, soils, surface water, and groundwater. The evaluation should likewise include an analysis of human and environmental exposure from the degradation of FBE due to exposure to sunlight, and sloughing (chalking) of the material.”

This week, Dominion responded that there’s no health risk expected.

“According to the manufacturers, these substances are expected to be encapsulated in the polymer matrix when the coating is applied and fully cured onto the pipe and would be dispersed throughout the coating and not migrate onto the surface or leach out of the coating,” pipeline director of engineering services Carole McCoy said in reply on July 22.

“Regarding 3M’s Scotchkote 6233 FBE coating used on the projects’ pipeline, potential environmental pathways include (1) possible leaching by contact with water into soil and groundwater and (2) possible release of chalking material from portions of pipe exposed to sunlight for extended periods of time. Regarding the potential leaching pathway, 3M’s FBE coating has obtained NSF 61 certification. This certification applies to drinking water system components and is subject to rigorous health effects criteria.

“These results demonstrate that leaching into groundwater is not a significant pathway and will not result in human health risks.

“According to 3M, chalking is a phenomenon that occurs when epoxy-based coatings are exposed to UV for an extended period of time. The chalk is a thin layer (microns thick) that adheres to the surface of the pipe that is composed of polymer degradation products (not typically known with specificity) that are created by exposure of the surface of the pipe to UV light from the sun,” McCoy said. “FBE is applied to an entire pipe segment as part of the manufacturing process whereas LE coatings are field applied only to pipe joints and for repairs, and to fittings.

“Although 3M has no conclusive evidence at this time to confirm their exact identity, the degradation products are generated in low quantities, have low water solubility, and are therefore not expected to enter the environment in amounts capable of producing an adverse human health effect.

“DETI is undertaking an evaluation of the FBE chalking residue including composition, toxicity, and potential for environmental exposure. The results of this evaluation will be submitted by Aug. 23, 2019, or as soon as they are available,” McCoy said.

“The other LE coatings are field applied before they are placed into the ground and are not subjected to the storage yard durations that the factory coated FBE is subjected to. These field practices mitigate potential exposure pathways and/or risks of potential exposure from degradation due to sunlight, runoff or chalking,” McCoy added.