

December 5, 2017

Mr. Matthew Gordon Sunoco Logistics, L.P. 535 Fritztown Road Sinking Spring, Pennsylvania 19608

RE: Hydrogeological Re-Evaluation Report

Permit No. E11-352

Wetland C-17 Crossing (S2-0075) Cambria Township, Cambria County

Dear Mr. Gordon:

The Department of Environmental Protection (DEP) has reviewed the supplemental Horizontal Directions Drill (HDD) analysis submitted for S2-0075, E11-352 posted on the DEP Mariner East II pipeline portal webpage on September 20, 2017. DEP received responses from Sunoco to our October 10, 2017 and November 6, 2017 comment letters on October 16, 2017 and November 7, 2017 respectively. DEP also received and reviewed public comments submitted jointly by Clean Air Council, Mountain Watershed Association, and Delaware Riverkeeper Network to these Sunoco submissions. In response to comments received, DEP undertook further evaluation and concluded that the potential risks to water supplies were adequately considered.

Sunoco's report concluded the original HDD design for the 16 and 20-inch pipelines have a high risk of inadvertent returns (IRs) if implemented and therefore the HDD for both the 20-inch and 16-inch line were redesigned to maximize the potential to complete each HDD without an occurrence of an IR. The redesigns adjust the HDD profile deeper to place the HDD pathway through bedrock having better structural integrity than a shallower profile and increases the overall length of the HDD due to pipe design requirements.

DEP acknowledges the incorporation of the following best management practices noted in your report that SPLP will follow:

- 1. SPLP will mandate annular pressure monitoring during the drilling of the pilot hole, which assists in immediate identification of pressure changes indicative of loss of return flows or over pressurization of the annulus, managing development pressure that can induce an IR.
- 2. SPLP will mandate short-tripping of the drilling tools to ensure an open annulus is maintained to manage the potential of IRs.

- 3. SPLP will require monitoring of the drilling fluid viscosity, such that fissures and fractures in the subsurface are sealed during the drilling process.
- 4. During the reaming phase, the use of Loss Control Materials can be implemented if indications of a potential IR are noted or an IR is observed.
- 5. If necessary, the pilot hole and reaming phases of the HDD may utilize casing, hammered into the substrate down to structurally better rock, to prevent lateral or vertical movement of drilling fluids at shallow depths.

Considering the aforementioned, the supplemental information is adequate. You should contact the Cambria County Conservation District regarding a red line field change of any revised drill pit location within the limit of disturbance. You may proceed with the permitted activity in the manner proposed in your reevaluation and in accordance with all applicable permit terms and conditions.

If you have any questions regarding the matter, please contact me at 412.442.4149, or by email at dadrake@pa.gov.

Sincerely,

Dana Drake, P.E.

Environmental Program Manager Waterway & Wetlands Program

cc:

Joesph A. Maule, P.G. – GES Richard Wardrop, P.G. – GES

Cambria County Conservation District - via email