

January 22, 2021

Mr. Nicholas Bryan Energy Transfer 101 W. Third Street, 3<sup>rd</sup> Floor Williamsport, PA 17701

Re: Pennsylvania Pipeline Project (PPP)/Mariner East II

Marsh Creek Lake Drawdown Sampling Plan Upper Uwchlan Township, Chester County

Dear Mr. Bryan:

This is the Department of Environmental Protection's (DEP or Department) response to the sampling plan dated January 7, 2021 submitted by AECOM on behalf of Energy Transfer. Parameters for the plan were set out in a December 24, 2020 communication from Department counsel to Sunoco counsel Curtis Stambaugh. The Department approves the sampling plan, subject to implementation of the conditions stated below.

### Immediate Implementation of Sampling Plan

As communicated to you previously, the reservoir is being drawndown a total of three feet below normal pool elevation by DCNR. Currently the drawdown has reached over one foot and will be continuing.

In order to ensure that the location and extent of the drilling fluids that entered Marsh Creek Lake as a result of Sunoco's August 10, 2020 inadvertent return are properly characterized, the sampling should be initiated immediately, even though the drawdown is not complete.

These efforts will help ensure that human health and the environment are protected from any potential effects of exposure to the drilling fluid.

### Scope of Sampling Plan

The AECOM sampling plan proposes a 50 ft grid pattern resulting in 40 grid sampling locations in the one foot drawdown and 93 locations in the three foot drawdown. These are considerably less samples than were requested (a minimum of 100 sampling points per acre) in the Department's December 24th communication. Therefore, in addition to the grid samples proposed by AECOM, additional samples should be taken to determine and delineate

the areal extent of settled HDD fluid components at a 21ft grid spacing (~100 samples/ac) when any positive detection of bentonite is found. Documentation of the final sampling grid must include the preparation and production of a site plan showing the location and extent of impacted areas. Areas of the cove that could enhance the settling of sediments, such as beds of aquatic macrophytes and depressions (that were deep pools or thalwegs when the lake was inundated), should be included in this sampling regime. Additionally, the sampling crew should inspect, document, and delineate as much of Ranger Cove's exposed bed, as its condition allows, for any possible visible drilling fluid components that do not require coring to detect. This survey should include all the exposed shoreline that will occur from the stream's inflow to the park's restricted buoy line.

# Coring and Visual Characterization

At each sample location a 2.0 inch core of the top 12 inches of substrate needs to be obtained and visually characterized for the following:

- Date and time of sample collection
- Location and setting (level bed, sloped, depression, historic channel, etc.)
- Sediment layers described
- Thickness of each layer
- Color of each layer (using a Munsell Color Chart)
- Photograph documentation
- Composition (silt, clay, sand)
- Biota presence
- Identification of sample crew

### Verification Samples

AECOM proposed that only 10% of the sampling locations will be sampled for XRD analysis for the presence of bentonite. This percentage would result in a very low number of verification samples. A minimum of 20% verification samples is needed for proper verification.

## Schedule and Crewing of Sampling

Another item that is needed is a schedule for the sampling event. Along with the schedule, Sunoco should describe the number of sampling crew, and how consistency of determinations will be made between the crews.

The above sampling specifications are necessary to determine if a threat to human health potentially exists. This proposed sampling does not preclude additional future sampling to further characterize human exposure and/or to collect additional data necessary for the restoration of the reservoir.

As a final note, please be aware that DCNR, as landowner of Marsh Creek State Park, may request additional sampling or other actions it believes are necessary to further ensure the protection of human health and the environment from potential exposure to drilling fluids.

If you have any questions or concerns, please contact me at the telephone number located in the first page footer.

Sincerely,

John Hohenstein, P.E.

Environmental Program Manager

Waterways and Wetlands

cc: Ms. Bollinger, PA Department of Conservation and Natural Resources

**Chester County Conservation District** 

Upper Uwchlan Township

Army Corps of Engineers - Philadelphia

Mr. Gordon, Energy Transfer

Mr. Embry, Energy Transfer

Ms. Styles, Energy Transfer

Re 30 (JH21WAW020-1)