



CATANIA ENGINEERING ASSOCIATES, INC.

Consulting Engineers & Land Surveyors

December 11, 2017

File No. 84200-261

Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401
Via US Mail and Email: ra-eppipelines@pa.gov

Re: Sunoco Pipeline, L.P. (SPLP)
Pennsylvania Pipeline Project
Supplemental Horizontal Directional Drill Analysis
Arch Bishop/South Chester Road Crossing
PA DEP Section 105, Permit No: E15-862
PA-CH-0421.0000-RD & PA-CH-0421.0000-RD-16 (SPLP HDD No. S3-0541)
Thornbury Township, Delaware County
PUBLIC COMMENT

Dear Sir or Madam:

On behalf of the Thornbury Township Supervisors and other officials of Thornbury Township, we are writing as the Township Engineer to give official public comment on the above referenced project and their Supplemental HDD Analysis as required by the August 9, 2017 Environmental Hearing Board Stipulated Order as follows:

1. Intercept Drills – We have concerns that the proposed intercept drill concept for the South Chester Road HDD will not be accomplished and create greater environmental threats in the process. Another active drill site, exiting by Slitting Mill Road and starting only 1 property away from the South Chester Road HDD site, involved 1,350 ft of failed drilling from October 2, 2017 to October 19, 2017, where proper steering through a section of rock was found to be impossible. Failed Intercept drilling was also performed at this location between October 19, 2017 and November 7, 2017 (almost 3 weeks), upon which the failed intercept drilling was abandoned and an entirely new HDD location was begun. Most of the intercept drilling involved missing the intercept hole location and re-drilling new holes until finally giving up on the concept. From November 7, 2017 until November 20, 2017 the new HDD pilot hole was completed, however, the drill came out 10 feet away from the targeted exit point. This should not be a surprise, as the submitted Supplemental HDD Analysis report states on pages 3, 21, & 22 that "...steering within the Baltimore Gneiss has been problematic... These minerals and rocks can divert the drill bit from the intended alignment." With the proposed South Chester Road HDD being 6,346 feet in length, and almost 5 times the length of the failed intercept drilling referenced above, we do not have much confidence that an intercept drilling concept will work within the proposed South Chester Road Area.
 - a. Request – A single drilling location at West Chester Pike, SR 3, with exit point near SR 926 is requested. This would help to reduce construction noise in an adjacent Thornbury residential development and is the more likely scenario to actually be accomplished in the field.

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2. Inadvertent Returns – We have concerns that Inadvertent Returns (IR) are more likely to occur in a failing intercept drill scenario, where drills will likely need to be realigned and create additional holes to try to line up the intercept as seen at the above referenced Slitting Mill Road HDD site. With the Slitting Mill Road site, 6 IR's occurred in a 1350 ft HDD, whereas many more would be expected with a 6,346 ft HDD within similar geology.
 - a. Request – The handling of abandoned drill holes should be addressed in writing, as we have concerns about leaving failed drill hole sites open and creating unnatural pathways for groundwater, drilling contaminants, or promoting further inadvertent returns. Special consideration should also be taken with the drilling fluid mixture to minimize such impacts.
3. SR 926 Drill Site Location – The drill location near SR 926 has been moved further south along the SR 352 corridor. This will need to be coordinated with the tire wash rack located within the same area. The wash rack may need to be relocated to allow for efficient and proper usage as required by the Erosion Control Permit.
 - a. Request – If the SR 926 intercept drill site location is not abandoned as requested above, revised Erosion Control Plans should be submitted, documenting the proposed changes to the SR 926 HDD drilling location, along with any required changes in the wash rack location.
4. Noise Level consideration – The drill location near SR 926 will involve noise from not only the drill and construction equipment during work hours, but also from generators and heaters used outside of Township permitted work hours to keep drilling equipment and fluids from freezing overnight. The overnight noise from the generators and heaters has already generated a complaint, which Sunoco addressed by adding more sound barriers/sound curtains in the area of the Slitting Mill Road drill rig site. The referenced Slitting Mill Road HDD is located much further away from residential homes than the SR 926 site, which may have drilling equipment as close as 50 feet to a residential structure.
 - a. Request – If the SR 926 intercept drill site location is not abandoned as requested above, Sunoco should address how they will be able to provide a more quiet method of powering and heating the drilling equipment and fluids overnight and throughout the construction process. Temporary power and a meter from PECO should be investigated as an alternative quiet source of power for such (PECO power lines are adjacent to the SR 926 drill site). Heaters with better sound proofing and/or additional sound barriers should also be investigated.

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Thank you for the opportunity to comment on this project and we look forward to working with you in the future. Should you have any further comments or questions, please feel free to contact me.

Very Truly Yours,

A handwritten signature in black ink, appearing to read "Michael J. Ciocco". The signature is fluid and cursive, written over a light blue horizontal line.

Michael J. Ciocco, P.E.
For Catania Engineering Assoc., Inc.
Township Engineer

Cc: Sunoco Pipeline L.P.
Thornbury Township