



August 19, 2020

Marcia Thiess  
Brunner Island, LLC  
PO Box 221  
York Haven, PA 17370-0221

Re: Brunner Island, LLC  
Ash Basin 7 Berm Amendment MW-7-5 Area Abatement Plan

Dear Marcia Thiess:

The Department received the Ash Basin 7 Berm Amendment MW-7-5 Area Abatement Plan for Brunner Island, LLC, on February 7, 2020, submitted by Talen Energy and dated February 6, 2020. The proposed work includes amendment of the Basin 7 berm via conventional slurry wall. The Department has reviewed the submittal and provides the following comments:

1. The proposed grout wall should be installed deeper than currently proposed based on the following:
  - a. The three piezometers shown in Basin 7, on Figures 3 & 5, used the depths of the piezometers with present day surface elevation instead of using the former surface elevation at the time of the Ish Inc, 2005 Technical Report investigation. During the intervening time since the Ish Inc, 2005 Technical Report investigation, many tons of Stabil-Fill (336,000 tons) were placed into Basin 7. Therefore, on the figures, the ghost images of these three piezometers should be placed at lower elevations, with the bottom elevation of PZ-7-2 slightly entering the weathered fractured bedrock (Well Log).
  - b. The ash in Basin 7 was placed directly on top of the fractured bedrock allowing the liquid from the ash to flow freely down into the fractured bedrock before flowing horizontally beneath the berm and out towards the nearby waterways.
2. Using the Ish, Inc, 2005 Technical Report bedrock drawing, it is recommended that the northern end of the proposed grout wall should extend northward to the area where the intruding shallow bedrock surface enters Basin 7. Also, the southern end of the proposed grout wall could be extended further south depending on the amount of ash COCs (mg/kg) that were found in the former piezometers (PZ-7-3 and PZ-7-4) and/or leachate discovered in former PZ-7-5, PZ-9, PZ-7-10, PZ-7-11 and MW-7-6.
3. There are no proposed locations for wells/piezometers to be used to evaluate the effectiveness of the grout wall. It is recommended that the evaluation wells/piezometers be placed on top of the berm along the outside/downgradient side of the access road with well screen elevation depths equivalent to MW-7-5. Also, while the drill rig is onsite, Brunner should have the proposed deeper well (MW-7-5B) in the Ish, Inc, 2005 Technical Report investigation report installed downgradient/across the street from MW-7-5 opposite from MW-7-5N at the northern end of the pull off area.

4. To gather more information, Brunner could further investigate the “Hot Spot” area identified in the Ish, Inc, 2005 Technical Report around former PZ-7-2. This expanded investigation by installing more piezometers on both sides and upgradient/in basin of PZ-7-2’s former location would provide more data to allow for contouring the COCs associated with the Hot Spot area. The ash from the additional boreholes should be analyzed for the COCs in mg/kg and the liquid from the piezometers in ug/L, just like the previous investigation to help isolate the possible Hot Spot.
5. The Department considers the proposed work for the Basin 7 berm to be maintenance/repair to the existing conditions of Basin 7. Therefore, a permit modification for Basin 7 is not necessary.

If you have any questions, please contact me at 717.705.4908 or dtuzzato@pa.gov.

Sincerely,

**Domenico Tuzzato**

Domenico Tuzzato, E.I.T.  
Environmental Engineering Specialist  
Waste Management Program

**John L. Oren**

John L. Oren, P.E.  
Environmental Engineering Manager  
Waste Management Program

bcc: Carrie Fleming  
John Oren  
Anthony Rathfon  
Linda Houseal  
Kurt Fritz  
File  
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