



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF SOLID & HAZARDOUS WASTE

BUREAU OF SOLID WASTE PERMITTING

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Commissioner

July 8, 2021

Geoffrey Perselay, Deputy County Commissioner
Monmouth County Reclamation Center
6000 Asbury Avenue
Tinton Falls, NJ 07753

Re: Solid Waste Facility Permit Renewal and Expansion Application
MONMOUTH COUNTY RECLAMATION CENTER (MCRC)
Tinton Falls Borough, Monmouth County
Preferred ID: 133927
Application No.: SWF150001

Dear Mr. Perselay:

The Bureau of Solid Waste Permitting (the Bureau) is in receipt of a letter dated October 14, 2020 along with a report entitled "Amendments to the Solid Waste Facility Permit Renewal and Phase IV Expansion Major Modification, TNOD 2 Response" submitted on your behalf by Prentiss Shaw, P.E. and Arie Kremen, Ph.D. of Tetra Tech, in response to the Department-issued Technical Notice of Deficiency dated September 10, 2020.

The Bureau has completed a technical review of the aforementioned submittal and previous application documents pursuant to N.J.A.C. 7:26-2.4(g)11. Upon review, the Bureau has determined the application is **TECHNICALLY INCOMPLETE**.

In order for this office to determine the application to be complete, the following deficiencies must be addressed:

Closure and Post-Closure Care Plan:

Per N.J.A.C. 7:26-2A.9(f)6 a Financial Plan Update shall be submitted every two years. The Financial Plan dated July 2018 has outdated figures and shall be updated to reflect current projections.

Amendment 6: Landfill Gas Management Plan & Details:

The Landfill Gas Management Plan outlines the new gas system that will be installed as the Phase IV landfill is being constructed. However, the Plan does not specify what will happen to

the existing landfill gas collection system in operation on Phase III. Please specify if the current gas system will be extended along with the Phase IV expansion, or if it will be abandoned.

Attachment 1: Slope Stability Analysis

- 1) The Department-issued Technical Notice of Deficiency dated September 10, 2020 stated "Considering the perched water conditions in Phase III (Areas III, IV, and V) and the steeper slopes, it is critical to include global stability analyses for profiles across the southeastern as well as northeastern slopes covering these areas."

Please provide a revised Global Stability Analysis (Profile E-E) to include the southeastern and northeastern slopes. Given that an overliner is proposed to be used on Phase II, the analysis shall also include an evaluation for veneer failure prior to shearing through the liner.

- 2) Profiles for temporary slopes (B-1, B-2, C, D-1) only go to a height of 250. Please revise the analyses to reflect the proposed elevation of 300 feet above mean sea level (AMSL).
- 3) The revised analyses provided in Attachment 1 does not provide revised drawings. Provide drawings showing location(s) of updated profiles.

Attachment 2/3/4: Settlement Analyses

The Department-issued Technical Notice of Deficiency dated September 10, 2020 requested clarification of the use of different waste density values. The MCRC stated "The settlement analysis employed contrasting waste densities for newly placed waste and in-place waste...Tetra Tech utilized 90 pcf and 82 pcf for in-place and newly placed waste, respectively"

Analysis performed	Waste Density (pcf)
Slope Stability (old and new waste)	82
Foundation Settlement Analysis	82
Overliner Settlement Analysis	90 existing/ 82 new
Pipe Loading Calculations (Phase II & Phase III)	82
Pipe Loading Calculations (Phase IV)	82
Slope Stability (impacts on Phase III)	82 existing/82 new

The chart above identifies the type of analysis performed in the Report and the corresponding waste density used. The 2020 Annual Topographic Report found the in-place waste density for Phase III and Phase II to be approximately 79 lb/ft³ and 82 lb/ft³, respectively. Given the historic waste densities at the MCRC, and the rational provided in the Report for utilizing contrasting waste densities, please update the analyses to reflect this reasoning and conditions at the MCRC.

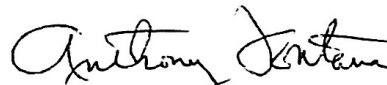
Attachment 6: Impact of Poned and Perched Leachate on Phase III Slope Stability:

- 1) In Attachment 6, four different scenarios were considered: perched leachate, ponded leachate on liner, no perched leachate, no ponded leachate. However, there is no drawing included to show the location of the profile. Please provide a drawing indicating where the analyses were performed.
- 2) The Factor of Safety (FS) for no ponded leachate is 1.690. The FS assuming no perched leachate is 1.888. Given that both profiles utilize the same assumption and conditions, please provide an explanation and justification for the different FSs.
- 3) The current analysis considers two phreatic surfaces, which reflects more of an artesian condition compared to a perched leachate condition. Based on the available data, such as gas well screening levels, please perform an analysis with a defined aquiclude or aquitard with the appropriate thickness, density, cohesion, and angle of friction. Also provide a plot of pore-water pressure produced along the slip surface.

The Bureau hereby requests that Monmouth County submit a response that addresses the aforementioned items within thirty (30) days from the date of this letter.

If you have any questions concerning this matter, please contact Victoria Goldman of my staff at (609) 292-0749 or by email at Victoria.Goldman@dep.nj.gov.

Sincerely,



Anthony Fontana, Chief
Bureau of Solid Waste Permitting

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