

May 9, 2018

Robert Rovner PA Waste, LLC 1785 Bustleton Pike Feasterville, PA 19053

Re: Camp Hope Run Landfill – Permit # 101719

APS 944978; AUTH 1189259

Phase I Municipal Waste Landfill Application

Boggs Township, Clearfield County

Dear Mr. Rovner:

The Department of Environmental Protection (DEP) has reviewed the Phase I Waste Management application for the above referenced site and has identified the following deficiencies. The resolution of the following deficiencies does not constitute the approval of the Phase I application. Additional deficiencies to the Phase I application may be identified as the application review process continues. The deficiencies are based on applicable laws and regulations.

#### **Deficiencies**

#### Form E – Contractual Consent of Landowner [25 Pa Code § 271.123]

1. The Right of Way for Camp Rattlesnake is not mentioned nor addressed in the consent form. Please explain how this has been resolved.

### Form F – Soil Information – Phase I [25 Pa Code §273.117]

- 2. Section B lists Edifluvents as a soil series. This soils series is not included on the soil maps. Please revise all appropriate forms and attachments.
- 3. The map referenced in Section C of Form F, Attachment F-2, is small and in a non-satisfactory scale. Please include a map of appropriate scale in this section of the application or indicate that a larger soils map is located in Attachment 2-3. [25 Pa Code §273.114]

- 4. Attachment F-1 page 2 3 indicates that 34% of the area within the waste footprint is comprised of the soil series Udorthents. This is not reflected on the soils maps. Please revise all appropriate forms and attachments.
- 5. Section C refers to Attachment F-2 for a plan of borrow areas. Borrow areas are not identified on the map in Attachment F-2. Please revise all appropriate forms and attachments.
- 6. Attachment 2-3, Note 6 states that "soil/rock cross sections are in Exhibit F-6.1." This Exhibit is not included in the application. Please submit Exhibit F-6.1.
- 7. All Cut/Fill maps (Figure F-5.2 through F-5.6) are missing Cut/Fill elevations and/or Subbase contour elevations. Please provide revised maps to include this information.
- 8. Section C, 6. The application states that the particle size for daily cover will have a maximum particle size of less than 6 inches. Please provide technical justification how the maximum 6-inch particle size proposed for use for daily cover will meet the performance criteria in 25 Pa Code §273.232 (b).
- 9. Section C, 6. The application states that the particle size for intermediate cover will have a maximum particle size of less than 6 inches. Please provide technical justification how the maximum 6-inch particle size proposed for use for intermediate cover will meet the performance criteria in 25 Pa Code §273.233 (b).
- 10. Section C, 6. The application states that the particle size for final cover will have a maximum particle size of 6 inches. Please provide technical justification how the maximum 6-inch particle size proposed for use for final cover will meet the performance criteria in 25 Pa Code §273.234 (d).
- 11. Please provide technical specifications for verification in the field, during placement/construction of the 6' to 12' maximum size controlled fill that compaction will be met so as to not create stability issues in the areas of placement.
- 12. If blasting is required, a Blast Plan must be submitted to the Department's Bureau of Mining Program for review and determination prior to blasting.

13. Page 9 of Attachment F-1 discusses the proposed processing method for oversized material. Please include a discussion about where the processing will take place and what E&S controls will be implemented.

# Form 2 – Phase 1 Map Requirements [25 Pa Code §273.113], Attachment 2-1, Sheets 1 through 5

- 14. The line type for the Proposed Limit of Waste in the legend on Sheet 1 does not match the line type on the map. The line type is correct on subsequent sheets (Sheets 2-5). Please revise Sheet 1.
- 15. The symbol for "Former Borehole Location" appears to be incorrect in the legend on all Sheets. Please revise the legend on all appropriate application maps.
- 16. Section B, 1. There is no property line between Property 1 and 2. Please revise all appropriate application maps. [25 Pa Code §273.113 (a)(1)]
- 17. Section B, 1. The right of-way for Camp Rattlesnake (Property 1) is not shown. Please revise all appropriate application maps and forms to include all right of-ways. [25 Pa Code §273.113 (a)(1), (a)(7)]
- 18. Section B, 2. The maps do not indicate the boundaries of land to be affected during the life of the operation. Please include an approximate limit of disturbance boundary, which includes stockpiles, impoundments, and any other proposed earth disturbance. Please revise all appropriate application maps. [25 Pa Code §273.113 (a)(2)]
- 19. Section B, 3. Stockpile S1 and S2 are not identified on the maps. Please include the boundaries of the proposed S1 and S2 stockpiles on all appropriate maps and clarify between existing stockpiles and proposed stockpiles. Please revise all appropriate application maps.
- 20. Section B, 4. The private water supply on Property 1 is not shown. Please revise all appropriate application maps. [25 Pa Code §273.113 (a)(4)]
- 21. Section B, 5. For clarification, please indicate in the legend whether the ½ and ¼ mile radius boundaries are the distance away from facility boundary or disposal area. Please revise all appropriate application maps.

- 22. Section B, 5(c). The Legend includes "Surface Water Impoundment" and "Sediment Basin from Former Mining Operation". It appears that the surface water impoundments shown on the map are the sediment basins from previous mining. Sediment Basin (SB) could not be located on the maps. Please revise and clarify on all appropriate application maps. [25 Pa Code §273.113 (a)(5)]
- 23. Section B, 5(d). Several wetlands on Sheets 2 through 5 are shown in a line type inconsistent with the legend. Please revise all appropriate application maps. [25 Pa Code §273.113 (a)(5)]
- 24. Section B, 5(d). On several Sheets some wetlands are labeled but others are not. For clarity please be consistent with line types and labeling formats. Please revise all appropriate application maps. [25 Pa Code §273.113 (a)(5)]
- 25. Section B, 5(g). The legend lists "Former Surface Mines" but does not indicate a symbol or line type. Please revise all appropriate application maps to identify the approximate boundary of former surface mines. [25 Pa Code §273.113 (a)(6)]
- 26. Section B, 5(i). Map Note 12 states that mine spoil is presented on the drawings. The legend does not include spoil piles. Spoil piles could not be found on the maps. Please revise all appropriate application maps to clearly indicate where spoil piles are currently located. [25 Pa Code §273.113 (a)(6)]
- 27. Section B, 5(n). Map Note 16 states that several dwellings and structures are shown on the map. The legend does not include structures/dwellings. Structures or dwellings could not be found on the maps. Please revise all appropriate application maps to clearly indicate structures and dwellings. [25 Pa Code §273.113 (a)(8)]
- 28. Section B, 5(p). The legend includes "Future Well Clusters," but they could not be located on the maps. Please revise all appropriate application maps to include the proposed water quality monitoring points. [25 Pa Code §273.113 (a)(10)]
- 29. Section B, 6(d). Map Note 21 states that water discharges and seeps are shown on the map. The legend does not include seeps/discharges. Seeps and discharges could not be located on the maps. Please revise all appropriate application maps to include seeps and discharges. [25 Pa Code §273.113 (a)(15)]

- 30. Section B, 6(e). Borings included in Attachment 6-5 could not be found on the maps. Please revise all appropriate application maps to include all borings and test holes included in the application. [25 Pa Code §273.113 (a)(12)]
- 31. Section, B 6(i). The regional groundwater flow direction is shown on Sheet 1 but is not shown on Sheets 2 through 5. Regional groundwater flow direction is included in the legend on all Sheets. Please revise all sheets to include regional groundwater flow direction.
- 32. There are several items on the maps that are not in the legend. These items include what appear to be possible tree lines, trails, piles, old bore holes or survey points, fence lines, and utility poles locations. These are the same line color and weight as the existing ground contours and make the maps confusing and cluttered. Please delete all unnecessary items from all application maps.

### Form 6 – Geologic Information Phase I [25 Pa Code §273.114, §273.115]

- 33. Exhibit 6.10 Lower Kittanning Structure Contours. Please reevaluate the Lower Kittanning structure contours in the southern S2 area (1690 and 1680 contours). It appears that these structure contours should be shifted to the west in the area of NW-3 to TH-22. This is based on the elevations of the Clarion coals in NW-3C and the average separation distance between the Clarion and Lower Kittanning coals indicated in other included borings. Please reevaluate the structure contours and revise all appropriate application maps and cross-sections.
- 34. There is a slight discrepancy of the Lower Kittanning elevation for W5A. Exhibit 6.10 shows it as 1692.0', on Table 6.1 it is 1669.2', and on Table 6.3 it is 1667.2'. Please determine the correct elevation and revise the all appropriate tables and exhibits.
- 35. There appears to be a typo on Table 6.2. Second column heading from the right "Height Above Bottom of gK", should be "..... Bottom of LK". Please revise this table.
- 36. Note 3 on Tables 6.3 and 6.4 refers to the borehole elevation survey performed in 2014. Please include an explanation for the discrepancy between the table data and corresponding lithologic logs provided in Attachment 6-4. Please revise all appropriate tables.
- 37. Table 6.3 is missing information for Borehole Number S2-1A. Please revise this table.

- 38. In cross-section C-C,' TH17 indicates a LKR hot zone. This is not indicated on the lithologic log for TH17. Please clarify and revise appropriate attachments and cross-sections.
- 39. Several overburden analyses test holes are located in close proximity to the geologic cross-sections. Since the subgrade elevation design in the S2 area is based on the elevation of potentially acidic material, please include overburden analyses test holes in the cross-sections and indicate zones of potentially acidic material (>0.5% total sulfur). Please revise all appropriate cross-sections.

# Form 7 – Hydrogeologic Information Phase I [25 Pa Code §273.114, §273.115, §273.118]

- 40. Section B,14. The first paragraph on page 11 of the narrative response states that there are two private water supplies within ½ mile east of the permit area. Attachment 2-1.1 shows 5 private water supplies within ¼ mile east of the permit area. Please revise the narrative for this section.
- 41. Section B, 14. The third paragraph on page 11 of the narrative response addresses the private water supply on the Camp Rattlesnake property. Please revise this narrative to discuss the aquifer(s) this well draws from.
- 42. Section D. The third paragraph on page 14 discusses groundwater samples obtained from private water supplies. The property numbers referenced in the discussion do not match the property numbers shown on Attachment 2-1. Please revise the narrative.
- 43. Section E. Surface water sampling location GR450 could not be located on Exhibit 6-1.11. Sample point GR561 is on Exhibit 6-1.11 but not listed in the narrative as a sample location. Please revise the narrative and maps to address all sample locations.
- 44. Section E. First paragraph on page 22 states both that there are 21 and 23 sample locations. Please clarify and revise.
- 45. Exhibit 7-1.5 The Legend states "See Note 5" regarding the subgrade elevations. Note 5 is not included in the notes. Please revise as necessary.

## Form 8 – Baseline Groundwater Analysis, Attachment 8-13, Groundwater and Surface Water Sampling and Analysis Plan

- 46. The proposed groundwater and surface water monitoring points are satisfactory. Note that the groundwater monitoring locations will not be approved until the landfill footprint is finalized and approved by the DEP.
- 47. Page 2 states that "The wells will be sampled after stabilized chemistry is reached or a minimum of one borehole volume." Please revise this section to state that the wells will be sampled after a minimum of 1 well borehole volume has been purged and stabilized chemistry has been reached. Include a discussion on how chemistry stabilization will be determined. Include a discussion on how wells that run dry during purging will be sampled.
- 48. Page 4 includes a description of surface water sampling. Please revise this section to include procedures and methods to measure stream flow rate and that flow rate will be a recorded field parameter. Also, include a discussion about how the surface water sample locations will be marked in the field.
- 49. Please include a discussion about quarterly and annual water quality analysis data evaluation. This should include procedures and techniques for evaluation of analytical results to determine if groundwater degradation has occurred.

### Form 12 – Alternate Water supply [25 Pa Code §273.119]

- 50. Section C, 1. The narrative refers to Attachment 2-1 to locate water supplies within ¼ of the waste disposal area. This map contains a boundary line that is ¼ mile from the permit area not the waste disposal area. Please include the ¼ mile radius boundary from the disposal area on Attachment 2-1 or provide a map that clearly shows this boundary and water supplies.
- 51. Section C, 10. The answer to this question states "There are no public or private water supplies within ¼ mile of the proposed permit area." Please revise this statement, since other sections of this application state the contrary.

Your response should be in the form of revisions to affected pages, forms or drawings in the application. Each revision or addition should bear the revision date and show what items have been revised or added. DEP suggests you use colored paper for page revisions to the application with additions highlighted and deletions lined out so changes are easily identified. All revised forms must have the title sheet marked with the latest revision date. A revised Page 2 of Form A - Application for Municipal or Residual Waste Permit must be re-signed by the applicant, notarized and marked with the revision date.

You must submit a response fully addressing each of the significant technical deficiencies set forth above within 20 business days or DEP may deny the application.

If you believe that any of the stated deficiencies is not significant, instead of submitting a response to that deficiency, you have the option of asking DEP to decide based on the information regarding the subject matter of that deficiency that you have already made available. If you choose this option regarding any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be denied.

Should you have any questions regarding the identified deficiencies, please contact me at 570.327.3752 or lhouser@pa.gov and refer to Application No. 944978, Authorization No. 1189259 to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the 20-business day period allotted for your reply, unless otherwise extended by DEP.

Sincerely,

Lisa D. Houser, P.E.

Environmental Engineer Manager

Waste Management Program

Cc: Clearfield County Commissioners

Boggs Township Supervisors

Field File