

July 1, 2019  
Lisa D. Houser, P.E.  
Environmental Engineer Manager  
**Pennsylvania Department of Environmental Protection**  
Waste Management Program  
208 West Third Street, Suite 101  
Williamsport, PA 17701-6448

**RE: PA Waste LLC – Municipal Waste Landfill Application**  
**Camp Hope Run Landfill - Permit # 101719**  
**APS 944978; AUTH 1189259**  
**Boggs Township, Clearfield County**

Dear Ms. Houser:

PA Waste, LLC (PA Waste) received the Pennsylvania Department of Environmental Protection (DEP) Pre-Denial Letter (PDL)<sup>1</sup> on June 4, 2019 regarding the subject solid waste permit application. The Pre-Denial Letter addresses both the Phase I Solid Waste Application and the Phase II Solid Waste Application.

On behalf of PA Waste, Smith Gardner, Inc. (S+G) and our subconsultants have prepared the following responses to address all comments and deficiencies included in the DEP's June 4<sup>th</sup> PDL. Each of DEP's technical review comments/deficiencies is reiterated below in *italics* followed immediately by PA Waste's response.

Revised Forms, Attachments and Exhibits supporting each response are identified in **bold** and accompany this response in their entirety, and are reproduced on blue paper to simplify incorporation into the hard-copy applications and for ease of DEP review. Any portions of the application that are revised are so marked in the margins with a vertical line which locates the edited text. Additionally, all pages of the revised Attachment or Exhibit contain a footnote "**Revised June 2019**". Revised Forms contain a "**Revised June 2019**" date in the form where indicated. Any new Attachments or Exhibits are simply dated "**June 2019**".

#### **PHASE I DEFICIENCIES AND COMMENTS:**

##### **Form F – Attachment F-1 (Revised March 2019)**

- 1. Comment: The last sentence on page 1 of 12 states "In this regard, material with <1.0% Total Sulfur excavated from Area S2 will be used for those applications that have the more stringent particle size requirements (i.e. revegetated final and intermediate cover and subbase) whereas the material with <1.0% total sulfur from Area S2 (processed) from the rock/lithic material*

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<sup>1</sup> Letter from Lisa D. Houser, P.E. PA DEP to Robert Rovner, PA Waste, LLC dated June 4, 2019 (copy attached).

*will be used primarily for structural fill and daily operational cover.” It is unclear as to why this revision was made. It is uncertain as to what this sentence is describing and why % sulfur is discussed in this section. Please revise this section.*

**Response:** The narrative in **Attachment F-1 (Rev. June 2019)** has been revised to remove references to Total Sulfur, including the last sentence on Page 1 of 12 and the first sentence on Page 2 of 12.

2. *Comment: The narrative and table on page 5 of 12 do not match. The narrative states 34% is reclaimed mine area whereas the table indicates 32%. Please revise appropriate sections to provide an accurate and consistent application.*

**Response:** The reference to 34% within the narrative is correct. As a result, the Table on Page 5 of 12 in **Attachment F-1 (Rev. June 2019)**, has been revised to present the correct “Approximate Area within the Waste Footprint”.

3. *Comment: Table F-5.7 does not match the tables on pages 2 of 12 and 5 of 12. Please revise all appropriate sections to provide an accurate and consistent application.*

**Response: Attachment F-5 (Rev. June 2019)** Table F-5.7 has been revised to match the tables on pages 2 of 12 and 5 of 12. Additionally, all tables within **Attachment F-5 (Rev. June 2019)** have been reviewed for consistency with the narrative and corrections have been made to both the narrative and tables.

#### **Form 6 (Revised March 2019)**

4. *Comment: On the Overburden Analysis Summary Table 6.2, (also Drawing 14-2.2, Table J-1.3, Figure J-1.6, and Exhibit 24-4.3) hole No. S2-2 and S2-3 indicate that the Lower Kittanning Rider seam (LKr) was encountered but does not list the LKr distance above the bottom of LK. Please clarify and revise all appropriate application sections.*

**Response:** Page 2 of 3 of Table 6.2 inadvertently listed a depth for the Lower Kittanning rider (LKr) for S2-2 as 41.0 – 42.0 and for S2-3 as 31.0 – 32.0. These depths have been removed from the table since the LKr was not encountered in these holes. As a consequence of these revisions, other affected portions of the Phase II Application have been revised accordingly including:

- Table 6-2 (**Rev. June 2019**)
- Figure 14-2.2 (**Rev. June 2019**)

- Table J-1.4 (Rev. June 2019)
- Figure J-1.6 (Rev. June 2019)
- Figure 24-4.3 (Rev. June 2019)

**Form 8 - Attachment 8-13 (Revised March 2019)**

5. *Comment: Response to TDL Comment 5, The Department agrees with the response as stated in the TDL response letter, however there appears to be an error with the insertion of the response on Page 2 of Attachment 8-13. Please revise the second paragraph of the Sampling Monitoring Wells section of Attachment 8-13 to clearly describe the sampling method for wells with limited yield.*

**Response: Attachment 8-13 (Rev. June 2019)** has been revised to read:

“Using portable meters, pH and specific conductance will be measured in a water sample collected in a separate container to evaluate stabilized chemistry. This eliminates the potential for the probe(s) to contaminate a sample designated for laboratory analysis. These common stabilization parameters will be used to indicate that groundwater coming from a pumped interval is aquifer water. The minimum number of parameters that will be measured include temperature, pH, conductivity, and dissolved oxygen. Groundwater monitoring wells will be sampled: 1) after a minimum of one well borehole volume has been purged, and 2) stabilization is indicated after three successive readings taken at 3- to 5-minute intervals. Stabilization occurs when indicator parameters show a change of less than +/- 0.1 for pH, and no more than 5% for conductivity. In addition, wells that have limited yield will be purged dry and sampled once the well has recovered to sufficient volume for sampling. Based upon future conditions encountered in the field during groundwater sampling activities, the PA DEP Groundwater Monitoring Guidance (specifically D.3.d.iv [Special Problems of Low-Yielding Wells], will be implemented as warranted.”

**PHASE II DEFICIENCIES AND COMMENTS:**

**Form 3 – Phase II Map Requirements [25 Pa Code §273.133]**

**Sheet 3- Drawing S2: Proposed Development Plan (Revised March 2019)**

6. *Deficiency: Proposed benchmark BM-3 is located in a wetland area, proposed for delineation. The wetlands were not present on this drawing previously. It is recommended that the benchmark be relocated to a new location, not in a*

wetland. If the proposed permanent benchmark is going to stay in this location, this will in turn affect the impacts in the Waterways & Wetlands application and may inevitably require revision. Additionally, all proposed benchmarks must be tied to the proposed grid coordinate system.

**Response:** Benchmark BM-3 has been relocated outside the wetland area. Additionally, the Benchmark Table in the lower left corner of Drawing S2 has been revised to reflect the new location of BM-3. The revised Drawing S2 (**Rev. June 2019**) is included in the revised Phase II drawing set accompanying this letter along with the following Drawings that required this modification, including Drawings S1, S2, S3A, S4A, and S4B.

Additionally, the Survey Control Monument Summary Table on Page 8 of 21 of **Attachment 14-1 (Rev. June 2019)** has been revised to include the new location for BM-3.

#### **Sheet 4 – Drawing S3: Subbase Plan (Revised March 2019)**

- 7. Deficiency: Response to TDL Deficiency 16, The subgrade contours in the S3-1 Area on Drawing S3A (and Drawing S5) do not reflect the partially disturbed area (southern portion of S3-1). Contours on Drawing S3A indicate that the subgrade will be equivalent to the LK structure contour elevation whereas the revised narrative in Form J states that bedrock is not anticipated to be encountered. Please revise Drawings to clearly indicate proposed subgrade contours.*

**Response:** The subgrade contours within the S3-1 area on Drawing S3A as shown on the March 2019 drawings are correct. However; the excavation plan in this area is unclear, without contour labels. To provide additional clarification, labeled subgrade contours have been added to Drawing S3A (**Rev. June 2019**). Additionally, labels have been added, identifying the approximate boundary between the undisturbed excavation, partial excavation and excavation to the LK.

#### **Sheets 17-25 – Drawing X1 to X9: Cross-sections (Revised March 2019)**

- 8. Comment: Response to TDL Deficiency 38, The revised Note 8 (on Drawings X1 through X9) states an incorrect alkaline addition rate. Please revise Note 8 to be consistent with the alkaline addition rate proposed in Attachment 14-2.*

**Response:** Note 8 on Drawings X1 through X9 has been revised to read:

“Structural fill placed beneath lined/capped areas may be from either the S2 or S3 in-tact rock excavation or the S3 overburden (i.e. non-pod) material and does not require alkaline addition, with the exception of

material placed within 5' of the Lower Kittanning Potentiometric surface. Material placed within this zone and material placed outside the lined area shall be treated with alkaline material at a rate of 6 tons of alkaline/1,000 tons of excavated material.”

The revised Drawings X1 through X9 (**Rev. June 2019**) are included in the revised Phase II drawing set accompanying this letter.

**Form 14 – Operation Plan: Phase II [25 Pa Code §273, Subchapter C]**  
**Attachment 14-2, Mining Special Material Handling Plan (Revised March 2019)**

9. *Comment: Response to TDL Comment 80, The revisions in Attachment 14-2 and Figure J-1.6 indicate a zone where the LKr could be encountered but does not describe how this zone was determined. Please revise Attachment 14-2 to include a brief description about how the LKr zone was determined.*

**Response:** Paragraph 2 on Page 2 of 5 of **Attachment 14-2 (Rev. June 2019)** has been revised to read as follows:

“Excavated high potential acid producing materials, which are typically associated with the Lower Kittanning rider, as identified in Figure 14-2.2 ( $S_{total} \geq 1.0\%$ ), will be disposed of within the constructed landfill footprint as waste. Although not identified in M&E’s investigation, the Lower Kittanning rider may be encountered in other areas not shown as high potential acid producing zones on Figure 14-2.2. Based on data collected during field investigations and the borehole logs provided by M&E, when present, the Lower Kittanning rider is generally between 20 and 40 feet above the Lower Kittanning Coal and is visually identifiable as a thin coal with carbonaceous shale intermixed with black shale. As an additional conservative approach, Figure 14-2.2 highlights areas of excavation that encounter the zone that is 20 to 40 feet above the bottom of the Lower Kittanning Coal where the Lower Kittanning rider could be encountered. Not all cells will encounter this zone. However; if a coal with carbonaceous shale intermixed with black shale is encountered in this 20 to 40 foot zone, then the coal along with the black shale above and below the coal that could be up to 2 feet thick will be handled as waste material.”

10. *Comment: Response to TDL Comment 90, The response provided in the TDL response is adequate in regard to limiting exposure of the potentially high sulfur bearing material but was not incorporated into the application narrative. Please revise Attachment 14-2, 3.0 and any other appropriate sections to include suitable portions of the comment response.*

**Response:** The response provided in the TDL was included within Section 1, under the S3-Mine Spoil narrative; however this discussion is also relevant to

Section 3. As a result, the second paragraph of Section 3.0 Excavation – S2 and S3 Areas has been revised to read as follows:

“Upon the completion of the landfill’s initial cell (S2-1), excavation of the pod-containing area of S3 will commence in successive north-south strips (or block cuts), beginning at the West side and progressing to the East and proceeding to the mine pit floor, with the exception of the intact rock area within S3-1. Any spoil or loose material within S3 will be removed down to intact bedrock. Based on discussions with Kenneth Maney, Environmental Compliance Manager for the former Kauffman mining operation, during the previous mining the pit floor was “cleaned” and the material was handled like pod material. For the S3 Area, any spoil or loose material will be removed down to intact bedrock. If loose (non intact) black or carbonaceous material, however, still exists on top of the intact bedrock it will be placed in the active disposal area as waste material.

The overlying structural fill (subgrade) material will be placed on the intact bedrock where there is exposed carbonaceous material in an expeditious manner to minimize the exposure of the material. Only an area that can be recovered at the end of the workday will be excavated. The S3 Area excavation floor will drain toward the North and West and be contained by earthen berms. These temporary diversion berms will be constructed and maintained to prevent any runoff from leaving the excavation area and direct the collected runoff to the on-site AMD Treatment Facility.”

The revised narrative is provided in **Attachment 14-2 (Rev. June 2019)**.

11. *Deficiency: Response to TDL Deficiency 92, The response provided in the TDL response letter did not include the volume and location of onsite alkaline material storage. Please indicate the location and approximate volume of onsite alkaline material storage and revise all appropriate application sections.*

**Response:** Table 14-2.4 has been added to **Attachment 14-2 (Rev. June 2019)** to show (1) the total alkaline needed for construction and operations, (2) a total average monthly alkaline quantity for construction, with S2-1 construction used as the basis for the calculation (as this construction phase requires the largest quantity of structural fill, representing the largest quantity of alkaline needed during any construction event), and (3) S3 mine spoil relocation (as this will be a 7-year-long, generally continual process). These volumes are provided as a guideline for determining the amount of material that will need to be transported and/or stockpiled on-site during construction and operations. Additionally, **Attachment 14-2 (Rev. June 2019)** has been revised to reference the new table and notes have been added to Drawing S3B, SP1 and SP2 to indicate the proposed locations for alkaline stockpiles,

including within the Stockpile areas and within the S3-1 mine spoil excavation limits. Please note the specific locations will vary dependent upon construction and operational needs and therefore specific locations have not been delineated.

**Form J - Soils Information – Phase II – Attachment J-1 (Revised March 2019)**

*12. Comment: Response to TDL Comment 100, The narrative in Attachment J-1 has not been revised to reflect the revised calculations. Attachment J-1 page 8 of 11 states “the Phase VI non-pod material is in excess of what is required to neutralize the potential acidity, resulting in a Net Neutralization Potential (NNP) of 3.7 tons/thousand tons...” and refers to Exhibit J-1.4. Exhibit J-1.4 was revised to conclude that the NNP of the Phase VI non-pod material is 0.1. Please revise all appropriate sections to provide an accurate and consistent application.*

**Response:** Page 8 of 11 of **Attachment J-1 (Rev. June 2019)** has been revised so that the Net Neutralization Potential correctly reflects the calculations provided in Exhibit J-1.4. As a result, the last paragraph of Section 3.6 has been revised to read as follows:

“M&E evaluated the previously Permitted Alkaline Addition Rates at the Kauffman Strip Mine Within the S3 Areas and determined that the alkaline material added to the Phase VI non-pod material is slightly in excess of what is required to neutralize the potential acidity, resulting in a Net Neutralization Potential of 0.1 tons/1,000 tons in the Phase VI area prior to any landfill alkaline additions. Refer to **Exhibit J-1.4.**”

*13. Comment: Response to TDL Comment 102, Table J-1.1 has been revised correctly but the same table in Form F revisions (F-5.9) has not been revised. Please revise Table F-5.9.*

**Response:** **Table F-5.9** of **Attachment F-5 (Rev. June 2019)** has been revised to match **Table J-1.1**.

*14. Comment: Sections 3.5 and 3.8 state that the material special handled and placed in the pods equates to approximately 205,119 cy and 205,120 cy respectively. Revised tables J-1.1 and J-1.2 indicate that this value is 203,603 cy. Please revise appropriate sections to provide an accurate and consistent application.*

**Response:** 203,603 CY is the correct volume. Section 3.5 and Section 3.8 of **Attachment J-1 (Rev. June 2019)** have been revised to reflect the correct volume of Special Handled Material.

15. *Comment: Section 3.8 discusses the volume of materials used to construct the pods and references Table J-1.2. The volumes listed in Section 3.8 do not match the corresponding values on Table J-1.2. Please revise appropriate sections to provide an accurate and consistent application.*

**Response:** The volume calculations presented in **Table J-1.2** are correct. As a result, Section 3.8 of **Attachment J-1 (Rev. June 2019)** has been revised to reflect the values presented in **Table J-1.2**.

16. *Comment: Section 3.9 (Sulfur-Bearing Strata in S2) does not correctly describe the current landfill construction plan and refers to 2014 revisions. This application was first submitted in 2017, references to previous applications causes confusion. Please revise section 3.9 (page 9 of 11) to reflect the current landfill construction plans and remove any reference to previous applications.*

**Response:** The last Paragraph of Section 3.9 has been revised to remove the reference to the November 2014 revisions. Additionally, the paragraph has been revised to align with revisions made to **Attachment 14-2 (Rev. June 2019)**, which state that the subbase elevations have been developed to minimize contact with potential acid producing material and not avoid those materials. The revised last paragraph reads:

“**Table J-1.3** lists the overburden intervals with total sulfur greater than 0.5 percent for the eight overburden holes within the S2 Area, and two adjacent drill holes to the S2 Area that were drilled for the Kauffman Mine Operation. The lithologic logs for these ten holes that include all of the overburden analyses are in **Form 6 Attachment 6-4**. **Table J-1.4** lists the overburden intervals with total sulfur greater than 0.5 percent for the five overburden holes drilled in April 2014 within the S2 Area. The lithologic logs for these five holes that include the overburden analyses are in **Attachment 6-5**. The subbase elevations, **Drawing No. S3**, were developed to minimize contact with potential acid producing material with zones greater than 0.5 percent sulfur, as listed in **Tables J-1.3 and J-1.4** for the S2 Area.”

17. *Deficiency: Figure J-1.6 (also Drawing S3B)- Isopach lines are missing in the area of Geologic Well A9 (Cells S2-1 and S2-3). Please revise all appropriate Figures and Drawings.*



**Response: Figure J-1.6 (Rev. June 2019), Figure 14-2.2 (Rev. June 2019) and Figure 24-4.3 (Rev. June 2019) and Drawing S3B (Rev. June 2019)** have been revised to add the isopach lines in the area of Geologic Well A9 (Cells S2-1 and S2-3).

**Form 24 – Liner System – Phase II [25 Pa Code §273.161 and §273.251 to §273.260] (Revised March 2019)**

*18. Deficiency: Part V. Properties of Synthetic Liners, page 7; Chemical compatibility testing information was provided for Solmax International 60-mil textured HDPE geomembrane in Exhibit 24-7.4. If it is the applicant's intention to utilize this material in the construction of the liner system, please supply the properties (physical, mechanical, etc.) requested on the page 7 of the Form 24. Additionally, please provide a Manufacturer Specification sheet for the material and add it to Exhibit 24-9.2.*

**Response: Form 24 (Rev. June 2019)** has been revised to include both the physical and mechanical properties for the Solmax HDPE Geomembrane. Additionally, a manufacturer specification sheet for Solmax HDPE material has been included in **Exhibit 24-9.2 (Rev. June 2019)**.

**Form 24 – Liner System – Phase II [25 Pa Code §273.161 and §273.251 to §273.260] Attachment 24-2 Technical Specifications (Revised March 2019)**

*19. Deficiency: Section 02607 – High Density Polyethylene (HDPE) Manholes, Section D. Construction, page 02607-2, item 3b; Please incorporate spark testing procedures for the testing of all welded connections of external pipes to stub-outs from the manholes. Additionally, if spark testing is going to be used on any other appurtenances or geosynthetics (Section 02775 HDPE Geomembrane, subsection D. Construction, item 10. Testing of Boots and Appurtenances) please incorporate testing procedures.*

**Response:** Section 02607 – HDPE Manholes, Section D. Construction, Paragraph 3.b. has been revised to remove spark testing of the external pipes and stubouts. Consequently, the Paragraph 3.b. has been revised to read as follows:

“All welded connections of external pipes to stub-outs from the manhole shall be tested in accordance with Section 02614, HDPE Pipe.”

Additionally, Drawing LCS5 has been revised to note that all dual contained manhole stubouts will be factory installed, which will allow testing of the dual contained pipe system upon connection of the dual contained pipe to the manhole.

Section 02775 – HDPE Geomembrane, Section D. Construction has been revised to remove all reference to appurtenances and specify ASTM standard D6365, which is the Standard Practice for Non-Destructive Testing of Geomembrane Seams Using the Spark Test. This reference has also been added to Section 02775 – HDPE Geomembrane, Section A.2 - References. Appurtenances have been removed from Section 02775 since there are no connections of the HDPE Geomembrane to appurtenances by design.

*20. Deficiency: Section 02710 Drainage Aggregate (Leachate Management), Section B. Materials, page 02710-3, item 2; This section addresses the “course aggregate from a non-carbonate source ( $\leq$  15% carbonate content by ASTM D3042) shall be placed around the collection pipes and within the sumps (including leachate detection sump) ...”. The course aggregate gradation criteria in item 2c does not meet the design requirement in 25 Pa Code §273.255(b)(2) and a Form Q – Equivalency Review Request was not submitted with the application. Therefore, either the narrative must be changed to delete “(including leachate detection sump)” or a Form Q must be submitted for the proposed use of this material in the detection sump.*

**Response:** Section 02710 Drainage Aggregate, Section B. Materials, Page 2, Item 2. A. has been revised to read as follows:

“Coarse aggregate (AASHTO No. 57 or alternate gradation if approved by the Engineer and the Department) from a non-carbonate source ( $\leq$  15% carbonate content by ASTM D 3042) shall be placed around the collection pipes and within the sumps (excluding leachate detection sumps) where shown on the Contract Drawings and shall be approved by the CQA Engineer at least four weeks prior to construction.”

Consequently, no Form Q is required and Detail 3 of Drawing LC2, which is part of the revised Phase II Drawing Package, has been revised to remove reference to AASHTO No. 57 Stone within the leachate detection sump.

**Form 24 – Liner System – Phase II [25 Pa Code §273.161 and §273.251 to §273.260] Attachment 24-3 Construction Quality Assurance (CQA) Manual (Revised March 2019)**

*21. Deficiency: Section 5.0 Geomembrane CQA, Subsection 5.5, 5.5.2-Sumps and Appurtenances, page 33; bullet 2 states that “extreme care is taken while seaming around appurtenances since neither nondestructive nor destructive testing may be feasible in these areas”. The Construction Quality Assurance*

*and Quality Control Plan (CQA/QC) must include “a description of the testing procedures and construction methods proposed to be implemented during construction of the liner system” per 25 Pa Code §273.161(b)(1). This includes the secondary and primary liner, as well as all appurtenances. Additionally, the liners must “be inspected for uniformity, damage and imperfections during construction and installation” in accordance with 25 Pa Code §273.254(c)(4) and §273.256(c)(3). Please modify the CQA/QC plan to incorporate testing procedures and methodologies to assure that 100% of the liner system is tested.*

**Response:** 100 percent of the liner system is planned to be tested. Consequently, Section 02775 – HDPE Geomembrane and the CQA manual have been revised to remove any ambiguity. Section 02775 HDPE Geomembrane, Section D. Construction, Paragraph 9 specifies non-destructive testing of the sumps by electric leak location or other equivalent methods as approved by the Engineer and the Department and Paragraph 10 of the same section has been revised to include nondestructive testing of boots by spark testing methods (ASTM D6365), or other equivalent methods, as approved by the Engineer and Department. Reference to “appurtenances” has been removed from the specifications and the CQA Manual, since there are no designed appurtenances.

As a result of these modifications Section 5.3.6.1 Nondestructive Seam Continuity Testing, **Attachment 24-3 (Rev. June 2019)** has been revised to include the electric leak location and spark testing methods. Additionally, Section 5.5.2 has been revised to reference only “Sumps and Boots” (no appurtenances) and remove the second bullet, which infers that there may be areas that are not feasible for testing.

**Form 24 – Liner System – Phase II [25 Pa Code §273.161 and §273.251 to §273.260] Attachment 24-9 Geosynthetic Specification Sheets (Revised March 2019)**

*22. Deficiency: Exhibit 24-9.3, LLDPE Geomembranes; Please provide a manufacturer specification sheet for the Solmax LLDPE material if it is the intention of the applicant to propose the use of this material in the cap system.*

**Response:** A manufacturer specification sheet for Solmax LLDPE material is included in **Exhibit 24-9.3 (Rev. June 2019)**.

*23. Deficiency: Exhibit 24-9.4, Drainage Geocomposites; Please provide a manufacturer specification sheet for the SKAPS Industries, Transnet 270 and 330 materials and add them to Exhibit 24-9.4 as they are absent.*

**Response:** A manufacturer specification sheet for SKAPS Industries, Transnet 270 and 330 have been added to **Exhibit 24-9.4 (Rev. June 2019)**.

**Form R1 – Waste Analysis and Classification Plan – Attachment R1 [25 Pa Code §271.613]**

*24. Comment: No response provided to TDL comment 165, Section 2.0 – New Waste Streams, page 4 of 14; All FC-1 submissions, independent of tonnage must be submitted to the Department for review and approval prior to any waste being accepted on site. Please modify the narrative.*

**Response:** The complete text of the proposed revisions to the Form R1 Narrative were included in the April 3, 2019 response letter however, the changes to the final Form R1 document was inadvertently omitted. The revised language narrative is now included in the **Form R1 (Rev. June 2019)** to address the prior comments and has been enclosed for your review.

*25. Comment: No response provided to TDL comment 166, Section 2.0 – New Waste Streams, page 4 of 14; All asbestos containing waste must be submitted through on a Form U to the Department for review and approval prior to any waste being accepted on site. Please modify the narrative.*

**Response:** The complete text of the proposed revisions to the Form R1 Narrative were included in the April 3, 2019 response letter however, the changes to the final Form R1 document was inadvertently omitted. The revised language narrative is now included in the **Form R1 (Rev. June 2019)** to address the prior comments and has been enclosed for your review.

*26. Comment: No response provided to TDL comment 167, Section 2.0 – New Waste Streams, page 4 of 14; All residual waste, independent of volume, must be submitted through on a Form U to the Department for review and approval prior to any waste being accepted on site. All generators are to include a hazardous waste determination. Please modify the narrative.*

**Response:** The complete text of the proposed revisions to the Form R1 Narrative were included in the April 3, 2019 response letter however, the changes to the final Form R1 document were inadvertently omitted. The revised language narrative is now included in the **Form R1 (Rev. June 2019)** to address the prior comments and has been enclosed for your review.

*27. Deficiency: Table 1A and Table 2A; A pH equal to 2 or equal to 12.5 is considered hazardous. Please revise to accept a pH of above 2 or less than 12.5.*

**Response:** **Table 1A** and **Table 2A** of the **Form R1 (Rev. June 2019)** have been revised to correctly reflect that pH must be greater than 2 and less than 12.5. The appropriate revisions are included in this submission.

*28. Comment: Table 1A and 2A; Please justify the acceptance criteria that is being proposed for the following parameters: o-Cresol, m-Cresol, p-Cresol, Cresol, 2,4-D, Methoxychlor, Pentachlorophenol, 2,4,5-Trichlorophenol, Total Oil and Grease or Total Petroleum must be justified on a technical and chemical merit basis. The Department is requesting more information on the determination of these proposed limits.*

**Response:** The acceptance limits referenced in Tables 1A and 2A for o-Cresol, m-Cresol, p-Cresol, Cresol, 2,4-D, Methoxychlor, Pentachlorophenol, 2,4,5-Trichlorophenol, Total Oil and Grease/Total Petroleum Hydrocarbons has been revised based on our discussions with the Department. PA Waste, LLC is in agreement with the revised limits requested by the Department are acceptable and included in the revised **Form R1 (Rev. June 2019)**.

*29. Comment: Table 2A, Page 4 of 7; For Generic Wastes (400), please revise free liquids to be 40% in addition to passing the paint filter test.*

**Response:** Table 2A has been modified (**Rev. June 2019**) to indicate that, for Generic Waste (400), on page 4 of 8, the acceptance criteria has been revised to reflect the waste must pass the paint filter test in addition to having a liquid content less than 40%.

**Form 28 – Closure/Post-Closure Land Use Plan – [25 Pa Code §273.191, §273.192, §273.321 and §273.322] – Attachment 28-1.1 – Bonding Worksheets (Revised March 2019)**

*30. Deficiency: Bonding Worksheet B – Cap and Final Cover Placement; Page 3, item 13g equals \$620,662.25. Please revise this line item and subsequently the total.*

**Response:** The Final Cover Soil Quantity within Bonding Worksheet B within **Exhibit 28-1 (Rev. June 2019)** has been revised to 190,373 CY to reflect a 59-acre closure with 2 feet of final cover. As a result, the Final Cover costs (190,373 CY @ \$3.25/CY) have been corrected to \$618,712.25. Additionally line item 13h was also corrected to \$14,850. The changes to these items result in a Subtotal, CQA Cost and Total of \$9,489,614.32, \$474,480.72 and \$9,964,095.03, respectively.

31. *Deficiency: Bonding Worksheet F – Gas Monitoring System; line item 6. Per the references, the number of probes and structure monitoring events per year should be 4. Please revise this line item and subsequently the total.*

**Response:** The quantity for line item 6 within Bonding Worksheet F within **Exhibit 28-1 (Rev. June 2019)** was inadvertently excluded, and has been revised to include a quantity of 4 (quarterly). Costs previously provided in Worksheet F included 4 monitoring events per year; therefore no revisions to these costs are required.

32. *Deficiency: Bonding Worksheet G – Gas Collection System, System installation, page 11; Item 20d equals \$352,000. Please revise this line item and subsequently the total.*

**Response:** The number of wells identified in line item 9 within Bonding Worksheet G within **Exhibit 28-1 (Rev. June 2019)** has been corrected to 23, which is 10% of the wells approved in the monitoring plan rounded up (10% of 222 rounded up equals 23). Costs previously submitted were associated with 23 wells to be repaired/replaced over the life of the monitoring period (and not 22); therefore the cost is correctly shown as \$368,000 and no revisions to these costs are required.

33. *Deficiency: Bonding Worksheet K – Facility Maintenance Costs*  
a. *Item 8.e. equals \$17,504. Please revise this line item and subsequently the subtotal and total.*  
b. *Item 14.a equals \$1,257,625.60. Please revise this line item and subsequently the subtotal and total.*

**Response:** Line item 8d within Bonding Worksheet K within **Exhibit 28-1 (Rev. June 2019)** was incorrectly listed as \$4,480, and has been corrected to \$4,840. Costs previously submitted included the correct unit cost of \$4,840 for vegetation repair (item 8d); therefore, no revisions to subsequent subtotals and totals are required.

34. *Deficiency: Bonding Worksheet L – Summary Cost Worksheet; Following revision of the totals on the worksheets, please correct the Summary Cost Worksheet.*

*Please note as per 25 Pa Code §271.326(a)(2): The operator shall deposit with the Department \$10,000 or 25% of the total amount of bond determined in this subchapter, whichever is greater, in approved collateral prior to issuance of the permit.*

Ms. Lisa D. Houser, P.E.  
July 1, 2019  
Page 15 of 15

**Response:** Bonding Worksheet L within **Exhibit 28-1 (Rev. June 2019)** has been revised to include Worksheet revisions as previously noted. Additionally, PA Waste is aware of the requirement under 25 PA Code 271.326(a)(2) and awaits notification from the Department that the Bonding amount has been agreed to and will provide the required Bonding in a timely manner.

Lisa, on behalf of PA Waste, we trust that the above responses and accompanying attachments adequately address the Department's technical deficiencies and comments. Should you have any additional questions, comments, or require further clarification, please do not hesitate to contact me at your earliest convenience.

Sincerely,  
**SMITH GARDNER, INC.**

  
John M. Gardner, P.E.  
Senior Project Manager  
john@smithgardnerinc.com



7/1/19

#### Attachments

#### Cc:

Robert Rovner, Esq. (PA Waste)  
Ramsey Dilibero (PA Waste)  
Rita Luber (PA Waste)  
Steven Rovner, Esq. (PA Waste)  
Joel Bolstein, Esq. (Fox Rothchild)  
Robert Hershey, P.G.  
Mike Logan (CPS)