

6 March 2019

Mr. Michael A. Melito  
Environmental Scientist  
Solid and Hazardous Waste Management Section  
Department of Natural Resources and Environmental Control  
89 Kings Highway  
Dover, Delaware 19901

Re: Review of: *Permit Modification Application (Volumes 1, 2, and 3) for Vertical Expansion*  
DRPI Industrial Landfill (July 2018)  
Solid Waste Permit No: SW-15/02  
19 0108 02-D DRPI Permit Application Response

Dear Michael:

This letter and associated documents are submitted to the Delaware Department of Natural Resources and Environmental Control (DNREC) on behalf of Delaware Recyclable Products, Inc. (DRPI) in response to your review of the Permit Modification Application for Vertical Expansion for the DRPI Industrial Landfill Site (SW-15/02). As requested in your 8 January 2019 letter, Table 1 contains point-by-point responses to your comments. Where appropriate, revisions have been incorporated in to the Permit Modification Application and either replacement pages or full replacement sections (when many pages were revised) are attached for replacement. A compiled electronic copy of the attached pages has also been included, as requested. A full permit application package can be provided upon request or following receipt of, and in response to, forthcoming technical comments. Please see Attachment A for a list of documents attached.

Please call or email us if you have any questions.

Respectfully submitted,



Carrie H. Pendleton, P.E.  
Principal Engineer  
(410) 381-4333  
[CPendleton@Geosyntec.com](mailto:CPendleton@Geosyntec.com)

Copies to:

- Barry T. Sutch, P.E., Senior Area Engineering Manager Greater Mid Atlantic, Waste Management
- Brian P. Bolvin, P.E., Site Engineer, Delaware Recyclable Products, Inc. (Electronic Only)
- Richard Klonowski, District Manager, DRPI (Electronic Only)
- Jarod Freese, EP Manager, DRPI (Electronic Only)
- Jason Sunde, Environmental Program Administrator, SHMWS (Electronic Only)

Attachment A – List of Documents Attached

**ATTACHMENT A: List of attachments to the Response to Comments**

1. Part I Executive Summary (2 pages)
2. Part II Letter of Intent (1<sup>st</sup> page)
3. Part III Application form
  - a. Cover Sheet
  - b. Application form (revised site area to 205 acres)
  - c. Attachment 3. Includes:
    - Statement of corporate ownership
    - Current officer/director list
    - An affiliate entity report
    - Compliance history
4. O&M Plan (full)
  - a. Fully revised O&M plan
  - b. Figure V-1
5. O&M App A, Contingency Plan
  - a. Pages 1, 5, 11, 16, 19 and 22
  - b. Figure V-A-1
  - c. Figure V-A-2
6. O&M Plan App B Forms
  - a. Form A
  - b. Form D
7. O&M Plan App D, Odor Control System
  - a. Permit for both flares
8. O&M Plan App E, Leachate Pretreatment plan
  - a. Fully revised Leachate Pretreatment Facility O&M plan
  - b. Includes revised figures V-E-1, V-E-2, and V-E-3
  - c. Appendices A and B are included as complete package.
9. O&M Plan App F, SWP
  - a. Worksheet 1
  - b. Worksheet 5
  - c. Worksheet 8 + Page 30
  - d. Worksheet 10
10. Part VI – Engineering Report
  - a. Page 1, 2, 9, 24, 26, and 41
  - b. Figure VI-2
11. Part VI-C – Appendix B, boring plan
  - a. Appendix VI-C Cover Sheet
  - b. Attachment A, Figure 1
12. Part VI-E.1 – Leachate Generation
  - a. Pages 2, 4
  - b. Figure 1
  - c. Pages 38 of 85 (the 2005 markup)
13. Part VI-H – Cover System – page 5
14. Part VI-J - Technical Specifications

- Updated Cover Sheet and Table of Contents (2 pages)
  - 01666 Cleaning and testing of HDPE Piping, February 2018 replaces March 2015
  - 02055 Soils, Revision 2 April 2018 replaces April 2018
  - 02072 GCL, February 2018 replaces Revision 1 June 2015
  - 02075 Geomembrane, Revision November 9, 2018 replaces March 2015
  - 02081 LFG HDPE Pipe and Fittings, February 2018 replaces March 2015
  - 02220 Excavation, February 2018 replaces March 2015
  - 02230 Anchor trench, February 2018 replaces Revision 1 September 2015
  - 02715 Geocomposite, Revised April 5, 2018 replaces March 2015
15. Part VIII – EA – Pages 3, 7, 9, 10, and 12
16. Drawings – The following drawings were revised:
- Drawing 3 – Existing Site Conditions Plan
  - Drawing 4 – Site Development Plan
  - Drawing 5 – Environmental Monitoring Plan
  - Drawing 6 – Cell 1-3 Overlay Liner Plan
  - Drawing 7 – Liner Details
  - Drawing 8 – Leachate Management and Groundwater Control System Plan
  - Drawing 9 – Leachate Management System Profiles
  - Drawing 10 – Leachate Management System Details
  - Drawing 12 – Leachate Management System Control Details
  - Drawing 26 – Landfill Gas Management System Details I

**TABLE 1**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
1. Please make the following modifications throughout the above listed documents, as applicable	
a. please revise all document titles, references, headers, and footers, as applicable.	These have been updated.
b. please revise all drawings included in the permit application (e.g., operation and maintenance plan drawings) to reflect current or proposed landfill conditions.	These have been updated.
c. please update all "table of contents," as applicable.	These have been updated.
d. verify all references to specific permit conditions as some of these references may have changed during recent modification(s).	These have been updated.
2. Part I. Executive Summary: a. Please revise "Delaware Regulations Governing Solid Waste" to state "Delaware's Regulations Governing Solid Waste." in the first paragraph of the summary	This has been updated. Please see attached file.
3. Part II. Letter of Intent to Construct an Industrial Waste Landfill	
a. Please update Jason Sunde's title from Environmental Program Manager to Environmental Program Administrator.	This has been updated. Please see attached file.
b. Please update the Solid Waste Permit Number to the current permit number.	This has been updated. Please see attached file.
4. Part III. Solid Waste Management Facility Application Form:	
a. Please verify the total site area contained in Part 2 of the Solid Waste Management Facility Application. Several different acreages are referenced throughout the Permit Application.	The Site acreage is approximately 205 acres. The permitted waste footprint acreage is approximately 146 acres. This Site area has been updated on the application form.
b. Please submit statements required under 7 DE Del.C. Ch. 60, Subpart I, § 7902 (Statement required). Please see below for a link to the section: <a href="http://delcode.delaware.gov/title7/c079/sc01/index.shtml">http://delcode.delaware.gov/title7/c079/sc01/index.shtml</a>	Please see attached Part III Attachment A for the following: <ul style="list-style-type: none"> <li>• Statement of corporate ownership</li> <li>• Current officer/director list</li> <li>• An affiliate entity report</li> <li>• Compliance history</li> </ul>

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
<b>PART V- OPERATIONS AND MAINTENANCE PLAN</b>	
5. 1.2 Project Background: a. Please update the cell(s) in which the current disposal operations are occurring.	Current operations are taking place in the Cells 1-3 overlay area. Please see the updated O&M Plan.
b. Please verify that DRPI Landfill serves as a recycling facility, as stated in paragraph two of the section.	This sentence has been removed. Please see the updated O&M Plan.
6. 2.2 Hours of Operation a. Please add detail (i.e., reasons to open on a holiday) to the statement "reserves the right to open for business if needed.	The text has been revised. Please see the updated O&M Plan.
7. 2.3 Volume of Waste: a. Please update the tons per year average from 2013 to 2017.	The average tons per year over the past five years is based on the annual report numbers. The volume has been corrected in Section 2.3.
8. 2.4.3 Unacceptable Waste: a. Please correct the typo contained in the "White Goods" bullet.	The typo (parentheses) has been corrected.
9. 2.6 .2 Staffing: a. Please specify the number of staff that will fill each role listed in the section.	The text has been revised. Please see the updated O&M Plan.
10. 3.1.1 (Equipment) Types and Quantities: a. Please specify the quantity of each type of equipment listed in the section.	The text has been revised. Please see the updated O&M Plan.

**TABLE 1 (cont'd)  
Response to Comments  
DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
<p>11. 3.4.1 Operational Cover:</p> <p>a. Please revise the first paragraph of the section. On numerous occasions, SHWMS Staff observed wind-blown litter throughout the site. Fortunately, SHWMS Staff has not observed litter migrating off of the landfill property. It is the Department's concern that the potential for litter migrating off of the landfill property will increase as the landfill increases in height, if operational cover is applied only once every two weeks.</p> <p>Section 6.9.2.2 of the DRGSW states "Cover. Approved cover material shall be applied at a frequency and thickness specified by the Department." SHWMS recommends that six inches of approved, compacted cover material be placed over exposed waste at a minimum of once every week. On windy days, or when strong wind is forecast for the area, DRPI should immediately work the waste into the working-face of the landfill, and cover with six inches of approved, compacted operational cover at the end of operations for the day.</p>	<p>The text has been revised. Please see the updated O&amp;M Plan.</p>
<p>12. 3.4.3 Seeding:</p> <p>a. The Delaware Erosion and Sedimentation Control Handbook was last updated in 2016. Please update the year reference in the section from 1989 to 2016.</p>	<p>The text has been revised. Please see the updated O&amp;M Plan.</p>
<p>13. 3.4.4 Estimate of Borrow Requirements:</p> <p>a. Please update the amount of soil needed for the final cover system of the landfill. The estimated 500,000 cubic yards of soil is based on a final elevation of 130 feet mean sea level (MSL).</p>	<p>Given that this is a vertical expansion, the volume of final cover soil remains approximately the same at a final elevation of 190 ft-msl as it is at 130 ft-msl. The volume was checked and the provided volume of approximately 500,000 CY is correct.</p>

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
<p>14. 3.5.1 Dust Control:</p> <p>a. The fourth paragraph of the section references Form J (Appendix V-B). Form J is not included in Appendix V-B. Please update the reference in the second paragraph or revise Appendix V-B.</p>	<p>Form F replaced Form J. This correction has been made throughout the O&amp;M Plan.</p>
<p>15. 3.5.3 Dust Control:</p> <p>a. The second paragraph of the section references Form J (Appendix V-B). Form J is not included in Appendix V-B. Please update the reference in the second paragraph or revise Appendix V-B.</p>	<p>Form F replaced Form J. This correction has been made throughout the O&amp;M Plan.</p>
<p>b. Please revise the first sentence of the third paragraph of the section. A portion of the 13-acre area outside of Cell 6 will be occupied by Cell 6-2B.</p>	<p>The text has been revised. Please see the updated O&amp;M Plan.</p>
<p>16. 3.5.4 Odor Control:</p> <p>a. The second paragraph of the section references Form J (Appendix V-B). Form J is not included in Appendix V-B. Please update the reference in the second paragraph or revise Appendix V-B.</p>	<p>Form F replaced Form J. This correction has been made throughout the O&amp;M Plan.</p>
<p>17. 3.5.6 Mud Control:</p> <p>a. The second paragraph of the section references Form J (Appendix V-B). Form J is not included in Appendix V-B. Please update the reference in the second paragraph or revise Appendix V-B.</p>	<p>Form F replaced Form J. This correction has been made throughout the O&amp;M Plan.</p>
<p>18. 3.5.7 Control of Leachate Seeps:</p> <p>a. The second paragraph of the section references Form J (Appendix V-B). Form J is not included in Appendix V-B. Please update the reference in the second paragraph or revise Appendix V-B.</p>	<p>Form F replaced Form J. This correction has been made throughout the O&amp;M Plan.</p>

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<b>Comment</b>	<b>Response to Comment</b>
19. 3.6.2 Inspection of Incoming Loads: a. The first sentence of the first paragraph states "DRPI will implement an inspection program for incoming loads on a routine basis." Please define "routine basis".	The section has been revised. Please see the updated O&M Plan.
20. 3.6.4 Training: a. Please update the section reference in the first sentence of the section.	The section has been revised. Please see the updated O&M Plan.
21. 3.6.6 Unacceptable Waste and Hazardous Waste Response Procedures: a. Please correct the typos in the first list of the section (Items 4 and 5).	The section has been revised. Please see the updated O&M Plan.
22. 3.8.1 (Leachate Management) Introduction: a. Please update the reference to the DRGSW included in the first paragraph of the section	The section has been revised. Please see the updated O&M Plan.
23. 3.8.3 Inspection and Maintenance: a. The second sentence of the first paragraph states "Any deficiencies found during the routine inspections will be noted on the leachate monitoring report found in Appendix V-B, Form D." The Leachate Daily Facility Inspection Log (Form D) does not have a field for deficiencies to be noted. Please revise the form to include a field for deficiencies to be noted.	The Leachate Daily Facility Inspection Log (Form D) has been revised to include a field for deficiencies.
24. 3.10.1 (Groundwater Control System) Introduction: a. Please revise paragraph one of the section to accurately reflect site conditions. The paragraph states "From these sumps, a submersible pump removes the collected groundwater and discharges it into perimeter drainage channels that convey flow to the stormwater management ponds." A portion of the groundwater underdrains discharge to the perimeter swale, but a portion of the groundwater underdrains discharge to the leachate force main.	The section has been revised. Please see the updated O&M Plan.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<b>Comment</b>	<b>Response to Comment</b>
<p>25. 3.10.2 Inspection and Maintenance:</p> <p>a. The second sentence of the first paragraph states "Any deficiencies found during the routine inspections will be noted on the leachate monitoring report found in Appendix V-B, Form D." The Leachate Daily Facility Inspection Log (Form D) does not have a field for deficiencies to be noted. Please revise the form to include a field for deficiencies to be noted.</p>	<p>The Leachate Daily Facility Inspection Log (Form D) has been revised to include a field for deficiencies.</p>
<p>26. 3.11.2.1 Vegetative Stabilization:</p> <p>a. The Delaware Erosion and Sedimentation Control Handbook was last updated in 2016. Please update the year reference in the section from 2014 to 2016.</p>	<p>The section has been revised. Please see the updated O&amp;M Plan.</p>
<p>27. 3.11.2.3 Permanent Vegetation:</p> <p>a. The Delaware Erosion and Sedimentation Control Handbook was last updated in 2016. Please update the year reference in the section from 2014 to 2016</p>	<p>The section has been revised. Please see the updated O&amp;M Plan.</p>
<p>28. 4.5 Fire Prevention Plan:</p> <p>a. Please revise the first paragraph of the section to include DNREC as an agency that DRPI must report immediately to during a fire, as per permit conditions.</p>	<p>The section has been revised. Please see the updated O&amp;M Plan.</p>
<p>b. Please revise paragraph 5 of the section. DRPI must immediately report a fire to DNREC, and must submit a written account of the fire, as per permit conditions.</p>	<p>This text has been clarified. Please see the updated O&amp;M Plan.</p>
<p>29. Figures:</p> <p>a. Please update Figure No. V-1, to accurately reflect the current landfill configuration.</p>	<p>Figures V-1, V-A-1, and VI-2 have all been updated to reflect the current landfill configuration. Please see attached.</p>

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
<b>APPENDIX V-A: CONTINGENCY PLAN</b>	
30. 1.2 Project Background: a. Please update the cell in which the current disposal operations are occurring	This text has been revised to state that current operations are primarily within the Cells 1-3 overlay liner area. Please see revised Contingency Plan.
31. 4.2 (DRPI Arrangements with Emergency Response Teams) Fire Department: a. The first paragraph of the section states "In the event of an emergency, Dial "911" for the Wilmington Fire Department.", while the Leachate Pretreatment Facility Operations and Maintenance Manual states "Call Minquadale Fire Company for providing fire protection for the plant." Please update the fire department information for the section.	This text has been revised to state that 911 should be contacted in the event of an emergency but that Minquadale Fire Company can be contacted directly for non-emergencies.
32. 6.2.4 Employee Training Program: a. Please update the section reference in the first paragraph of the section.	This text has been corrected. Please see revised Contingency Plan.
33. 6.5 Explosive Landfill Gas: a. Please update the explosive landfill gas monitoring frequency in paragraph 2 of the section. The permit and other sections of this application reference a lesser frequency of monitoring.	This text has been corrected to semi-annually. Please see revised Contingency Plan.
33. 6.5 Explosive Landfill Gas: a. Please update the explosive landfill gas monitoring frequency in paragraph 2 of the section. The permit and other sections of this application reference a lesser frequency of monitoring.	This text has been corrected. Please see revised Contingency Plan.
b. Please update paragraph 2 of the section. DRPI must notify DNREC as per Permit Condition VII.D of Solid Waste Permit SW-15/02.	This text has been updated. Please see revised Contingency Plan.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
34. 6.13 Receipt of Unauthorized Waste: a. Please update the section reference in the first paragraph of the section.	This text has been corrected. Please see revised Contingency Plan.
b. Please update paragraph 2 of the section. DRPI must notify DNREC as per Permit Condition VII.D of Solid Waste Permit SW-15/02.	This text has been revised. Please see revised Contingency Plan.
35. 6.15.1 Groundwater Impacts: a. Please update the section reference in the first paragraph of the section.	This text has been corrected. Please see revised Contingency Plan.
36. Figures: a. Please update Figure No. V-A-1, to accurately reflect the current landfill configuration.	See attached.
b. Please update Figure No. V-A-2, to accurately reflect the current landfill configuration.	See attached.
<b>APPENDIX V-B: SAMPLE RECORD KEEPING FORMS</b>	
37. Sample Record Keeping Forms: a. The Operations and Maintenance Plan references Form J (Appendix V-B) several times in the plan. Form J is not included in Appendix V-B. Appendix V-B contains Form A through Form F. Please update the references in the Operations and Maintenance Plan to include all referenced forms or update the appendix to include all applicable forms.	Form J has been replaced by with Form F. The text has been corrected throughout.
<b>APPENDIX V-D: DRPI LFG ODOR CONTROL SYSTEM</b>	
38. Please forward a copy of the updated Division of Air Quality (DAQ) permit for inclusion into this application, after the permit has been approved. It is the SHWMS 's understanding that the DAQ is in the process of issuing of new permit for the landfill, to incorporate a second flare and increased overall flow.	The updated Division of Air Quality (DAQ) permit is now included in Part V, Appendix V-D.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
<b>APPENDIX V-E: LEACHATE PRETREATMENT FACILITY</b>	
<p>39. Section 1,B, I Groundwater Collection System:</p> <p>a. Please revise the last paragraph of the section. The paragraph states "Pumps then lift the groundwater and discharge to the perimeter ditch which flows to the stormwater sediment basin." A portion of the groundwater underdrains discharge to the perimeter swale, but a portion of the groundwater underdrains discharge to the leachate force main.</p>	<p>The leachate pretreatment plan has been completely revised, reformatted, and updated. Under Groundwater Collection System, the text has been corrected.</p>
<p>40. Section 1,B, 3 Leachate Pretreatment System:</p> <p>a. Please update the first paragraph of the section.</p>	<p>This paragraph has been revised.</p>
<p>41. Section 4, A, 2 System Description:</p> <p>a. Please revise the first paragraph of the section. The paragraph states "From these sumps, a submersible pump removes the collected groundwater and discharges it into perimeter drainage channels that convey the flow to the stormwater management ponds." A portion of the groundwater underdrains discharge to the perimeter swale, but a portion of the groundwater underdrains discharge to the leachate force main.</p>	<p>This paragraph has been revised.</p>
<p>b. Please revise paragraph 3 of the section to accurately reflect site conditions.</p>	<p>This section is confirmed to be correct.</p>
<p>42. Section 4, A, 3 Major Components:</p> <p>a. Please revise the section to accurately reflect site conditions.</p>	<p>This section has been confirmed or revised to reflect site conditions.</p>
<p>43. Section 4, B, 2 System Description:</p> <p>a. Please correct the cell reference typo in paragraph 3 of the section.</p>	<p>The cell reference has been corrected.</p>

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

Comment	Response to Comment
44. Woodward -Clyde Drawing 3.1: a. Please revise the drawing to accurately reflect site conditions.	New Figure V-E-1 is based on Drawing 8. It includes both the leachate forcemain and groundwater control system plan.
45. GZA Drawing C-3: a. Please revise the drawing to accurately reflect site conditions.	The leachate drawing is replaced by new Figure V-E-1 based on Drawing 8
46. GZA Drawing C5-P003: a. Please revise the drawing to accurately reflect site conditions	The leachate drawing is replaced by new Figure V-E-1 based on Drawing 8
47. GZA Drawing C5-P004: a. Please revise the drawing to accurately reflect site conditions.	The leachate drawing is replaced by new Figure V-E-1 based on Drawing 8
48. GZA Drawing CS-P005: a. Please revise the drawing to accurately reflect site conditions	The leachate drawing is replaced by new Figure V-E-1 based on Drawing 8
49. Section 5, A, 1 Normal Operations: a. Please revise paragraph 1 of the section to accurately reflect site conditions.	This paragraph has been revised.
b. Please revise the first paragraph of the section. The paragraph states "Groundwater submersible pumps 4A, 4C, SA, and SD pump groundwater collected in sumps from the internal perimeter trench drain to perimeter ditches on the exterior of the landfill". A portion of the groundwater underdrains discharge to the perimeter swale, but a portion of the groundwater underdrains discharge to the leachate force main.	This paragraph has been revised.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<b>Comment</b>	<b>Response to Comment</b>
c. Please verify that operating levels for the pumps, listed in paragraph 3, are accurate.	This has been confirmed to be correct.
50. Section 6 (Equipment Catalog Sheets between Pages 6-2 and Pages 7-1): a. Please verify that DRPI uses the Sensidyne equipment (Gas Sampling System, Deluxe Hazardous Materials Kit, Sensidyne Detector Tubes and Airflow Indicator Kit) included in the Permit Application.	The catalog sheets have been removed.
51. Section 9, B, 3 Emergency Aid: a. The first sentence of the section states "Call Minquadales Fire Company for providing fire protection for the plant.", while Section 4.2 of the Contingency Plan states "In the event of an emergency, Dial "911" for the Wilmington Fire Department." Please update the fire department information for the section.	The text has been updated to be consistent with the updated Contingency Plan. The revised text is in new Section 9.2 Part 3.
52. Section 10, E, 6, a Test for Flammable Gas: a. Please revise the section to incorporate language consistent with current industry accepted instrumentation.	The text has been revised to meet current industry accepted standards.
53. Section 10, E, 6, c Test for Occupancy [Oxygen] Deficiency: a. Please revise the section to incorporate language consistent with current industry accepted instrumentation.	The text has been revised to meet current industry accepted standards.
54. Appendix C - Material Safety Data Sheets: a. Please update the material safety data sheets (MSDS) to safety data sheets (SDS) as required under the Hazard Communication Standard.	Appendix C has been removed. The SDS will be kept at the site.
55. Appendix D - Leachate Tank Area Drawings: a. Please provide a better copy of the Vandemark & Lynch, Inc. leachate tank drawing.	A new leachate tank area drawing is provided as Figure V-E-3.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<b>APPENDIX V-E (F): STORMWATER PLAN (SWP)</b>	
The following items are suggestions/recommendations to improve the SWP that was written in accordance with Delaware's Regulations Governing Storm Water Discharges Associated with Industrial Activities for the DNREC's Surface Water Discharge Section, as this plan is directly referenced in the Operations and Maintenance Plan replacement package.	
56. Facility Description Worksheet 1: a. Please update the Facility Contact for the worksheet.	Worksheet 1 is updated to Richard Klonowski.
b. Paragraph 2 of the worksheet states "The total site encompasses approximately 203 acres, of which approximately 165 acres are permitted footprint.", while the Solid Waste Management Facility Application has a total site area of 146 acres. Please verify the total DRPI property acreage and verify the acreage of the footprint of the landfill	Worksheet 1 paragraph 2 is updated to the 146-acre landfill footprint.
57. Inventory of Spills and Leaks Worksheet 5: a. Please include release information associated with NOV 18-SW-02, issued to DRPI by SHWMS on May 24, 2018.	Worksheet 5 has been revised to include the May 24, 2018 NOV.
58. Monitoring Worksheet 8: a. Please correct the typo in the fourth paragraph of the worksheet.	The typo has been corrected.
b. Please update the permit number and issue date of the permit referenced in the fourth paragraph of the worksheet.	The permit number and issue date have been corrected.
c. Please update the Monitoring Schedule and Parameters (Page 30) to mirror the language included in Permit Condition IV.A.3 for Solid Waste Permit SW-15/02.	The text has been revised. Please see attached.
59. Monitoring Worksheet 10: a. Please update the permit number and issue date of the permit referenced in the second paragraph of the worksheet.	Worksheet 10 has been updated.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<b>PART VI- ENGINEERING REPORT</b>	
60. 1.1 Terms of Reference: a. Please revise "Delaware Regulations Governing Solid Waste" to state "Delaware's Regulations Governing Solid Waste." in the first paragraph of the section.	Page VI-1 has been revised
61. 1.2 Project Overview: a. Please update the third paragraph of the section to accurately describe disposal operations at the landfill.	Page VI-2 has been revised
b. Please update the permit number in paragraph 5 of the section.	The permit number has been updated.
62. 1.3 Engineering Report Organization: a. Please update the reference to the DRGSW in the first paragraph of the section.	The reference to the DRGWS has been updated to 6.0.
63. 8.5.3 Local Heterogeneity: a. Please update the cover requirements in the second paragraph of the section.	The text has been revised.
64. Figures: a. Please update Figure No. VI-2, to accurately reflect current site conditions.	See attached.
<b>PART VI-C SOIL CHARACTERIZATION STUDY</b>	
65. Soil Characterization Study: a. Page VI-C 1 of the appendix is included twice. Please either remove the duplicate page from the certification or include page VI-C 2.	There is no page VI-C-2. A single page VI-C-1 is included.
<b>Part VI-C, Attachment A SUBSURFACE INVESTIGATION AND GEOTECHNICAL REPORT</b>	
66. Appendix B -Boring Location Plan: a. Please include the entire Boring Location Plan.	The full boring plan is attached and is inserted into Part VI-C.

**TABLE 1 (cont'd)  
Response to Comments  
DRPI Permit Application for Vertical Expansion**

<b>APPENDIX VI-E LEACHATE MANAGEMENT SYSTEM CALCULATIONS</b>	
67. Summary of Previous Analysis: a. Please update the cover condition reference contained in the header for the first list in the section.	Daily cover is replaced with operational cover. See attached for revised Page 2 of 85 of Appendix VI-E.
68. Soil Data - Layer 1 (Cover and Daily): a. Please update the header and the body of the section to accurately reflect cover requirements for the landfill.	Daily cover is replaced with operational cover. See attached for revised Page 2 of 85 of Appendix VI-E.
69. Figures: a. Please replace revised Drawing 8 of 28, after revisions (see Comment 87) are complete.	Drawing 8 is revised and included.
70. Attachment B - Leachate Management Evaluation: a. Please update the second paragraph of Section 3.3 (Soil Data). Please update the cover layer references and submit a copy of the section without mark-ups.	References to cover layers been updated.
<b>APPENDIX VI-H COVER SYSTEM CALCULATIONS</b>	
71. Drainage Component of Geomembrane: a. Please correct the typo in the last paragraph of the section.	This has been corrected. Page is included.
<b>APPENDIX VI-J TECHNICAL SPECIFICATIONS</b>	
72. Cleaning and Testing of HDPE Piping: a. Please correct the typo on Page 5 of the specifications.	See updated specification.
73. Soils: a. Please update section 2.01.C.5 of the specifications with the updated total petroleum hydrocarbon level. The level was updated in the spring of 2018, to be consistent with the Operation and Maintenance Plan.	See updated specification.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

74. Geosynthetic Clay Liner: a. Please update Table 02072-1. The table was updated as part of a design variance approved in the spring of 2018.	See updated specification.
75. Geomembrane: a. Please update the Test Procedures Table in section 2.03 of the geomembrane specifications. The table was last updated during February 2018.	See updated specification.
b. Please update the Table 02075-1 of the geomembrane specifications. The table was last updated during February 2018.	
c. Please update the Table 02075-2 of the geomembrane specifications. The table was last updated during February 2018.	
d. Please include Table 02075-3 of the geomembrane specifications. The table was included in the specifications that were updated during February 2018.	
76. Landfill Gas High Density Polyethylene (HDPE) Pipe and Fittings: a. Please update section 3.03.D of the HDPE pipe and fittings specifications. The section referenced a project that was previously completed at the landfill.	See updated specification.
77. Excavation: a. Please update section 1.05 of the excavation specifications to reference the State of Delaware.	See updated specification.
78. Anchor Trench: a. Please update the entire anchor trench specification section with the section that was revised during February 2018.	See updated specification.
79. Geocomposite: a. Please replace Table 02715-1 with the table that was revised as part of design variance approved during the spring of 2018.	See updated specification.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<b>PART VIII - ENVIRONMENTAL ASSESSMENT REPORT</b>	
80. 3.3.1 Stormwater Quality and Management: a. Please verify the use of Recovermat at the landfill, and update paragraph three of the section accordingly.	This text has been updated. See revised page 7.
81. 3.8 1 Surface Water Use: a. Please update the section, to accurately describe the source of water used for dust control.	The text has been revised to reflect current and anticipated future use of on-site water sources for dust control. See revised page 10.
82. 3.10.4 Litter: a. Please update the cover material requirements based on revisions to Section 3.4. 1 of the Operations and Maintenance Plan.	The text has been revised. See revised page 12.
<b>PERMIT DRAWINGS NOS. 1-28</b>	
83. Drawing 3 of 28: a. The label for Cell 1 is placed over a cell boundary line. Please adjust the label for Cell 1.	Drawing 3 has been revised for label for Cell 1 and to update the Cells 1-3 overlay liner area.
84. Drawing 5 of 28: a. Please verify that the listed wells, gas probes and piezometers shown on the schedule of existing subsurface monitoring features table are plotted on the drawing. b. Please confirm that all of the subsurface monitoring features exist at the landfill, and have not been abandoned during operations or construction at the landfill.	Drawing 5 has been revised to reflect existing subsurface monitoring locations.
85. Drawing 6 of 28: a. Please clearly show the phases (completed and proposed) of the Cells 1 - 3 Overlay.	Drawing 6 has been revised to show the updated Cells 1-3 overlay liner area.
86. Drawing 7 of 28: a. Please add detail to the drawing, similar to the level of detail shown on the drawings for Cells 1 - 3 Overlay, Phase 2 certification.	Drawing 7 has been revised to show additional details from the Phases 2 and 3 certification drawings.

**TABLE 1 (cont'd)**  
**Response to Comments**  
**DRPI Permit Application for Vertical Expansion**

<p>87. Drawing 8 of 28:</p> <p>a. Please update the constructed and proposed areas for Cells 1 - 3 Overlay.</p>	<p>Drawing 8 has been revised to update the Cells 1-3 overlay liner area.</p>
<p>b. Please verify that all underdrain and leachate risers are shown on the drawing, and are plotted correctly.</p>	<p>The underdrain and leachate risers have been adjusted according to coordinates provided.</p>
<p>c. Please clarify the leachate corridor points shown on the drawing</p>	<p>The leachate corridor points and the table have been updated.</p>
<p>88. Drawing 10 of 28:</p> <p>a. Please indicate the depth of the anchor trench shown in Detail 6-6 of the drawing.</p>	<p>The depth of the anchor trench has been added to Detail 6 on Drawing 10.</p>
<p>89. Drawing 12 of 28:</p> <p>a. Please verify that Note 9 is accurate. The leachate and underdrain risers are scheduled to be upgraded in 2019.</p>	<p>Note 9 has been revised to clarify the purpose of the details shown on Drawing 12 and those shown on Drawing L2.</p>
<p>90. Drawing 14 of 28:</p> <p>a. Please provide the length of the overlap for the proposed final cover system that will be placed above the existing clay cap.</p>	<p>The length of the overlap is not a critical component of the design. The overlap portion is present in order to provide a location for the geocomposite to daylight. No revision has been made to the drawings as a result of this comment.</p>
<p>91. Drawing 26 of 28:</p> <p>a. Please confirm that the six inch HPDE elbow shown on Detail 2-25 is correct.</p>	<p>The six-inch elbow is correct. There is a 6"x4" reducer just above the elbow.</p>
<p>b. Please indicate the size of the wellhead riser depicted on Detail 2-25.</p>	<p>A detail callout has been added to Detail 2-25 to refer to Detail 1-25 for the size of the wellhead riser.</p>