



August 5, 2021

**CERTIFIED MAIL NO: 7017 1070 0000 7523 4442**

Wendy Marburger, Chief Operating Officer, Delaware County Solid Waste Authority  
583 Longview Road  
Boyertown, PA 19512

Re: Major Permit Modification  
Southern Area Landfill Expansion  
Rolling Hills Landfill  
Permit ID No. 100345  
APS No. 981697  
Authorization No. 1253247  
Earl Township, Berks County

Dear Wendy Marburger:

Enclosed is a major permit modification to Solid Waste Permit No. 100345 for the operation of the Rolling Hills Landfill, issued in accordance with Article V of the Solid Waste Management Act, 35 P.S. Sections 6018.101, et seq.

This permit modification approves the Southern Area Landfill Expansion at Rolling Hills Landfill.

Compliance with the terms and conditions set forth in the permit is mandatory. Please note that issuance of this permit does not eliminate the necessity to comply with all federal, state, or local requirements at the permitted facility. You have the right to file an appeal as to these terms and conditions.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S.A. Chapter 5A. The Board's address is:

Environmental Hearing Board  
Rachel Carson State Office Building, Second Floor  
400 Market Street  
PO Box 8457  
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

**IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.**

**IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.**

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please call John Oren, Permits Section Manager, at 717.705.4706.

Sincerely,

*Anthony L. Rathfon*

Anthony L. Rathfon  
Program Manager  
Waste Management Program

Enclosure

cc: Earl Township Supervisors (w/enclosure)  
Berks County Planning Commission (w/enclosure)  
Edward J. Layton, P.G., BAI Group Inc. (w/enclosure)

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WASTE MANAGEMENT PROGRAM  
SOUTHCENTRAL REGION

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, as amended, Solid Waste Permit Number 100345 issued on December 17, 1990 to:

Delaware County Solid Waste Authority  
Rose Tree Park – Hunt Club, 1521 North Providence Road  
Media, PA 19603  
Earl Township, Berks County

is hereby modified as follows:

This modification approves the Southern Area Landfill Expansion at Rolling Hills Landfill

This permit modification is based upon the following permit application documents:

1. Application for major permit modification, prepared by BAI Group, Inc., dated September 26, 2018, received November 14, 2018, consisting of the following:

Phase I:  
Checklist – Major Modification to a Municipal Waste Landfill Permit  
GIF – General Information Form  
Form A – Application for Municipal or Residual Waste Permit  
Figure A-1 Site Location Map (DCSWA107A002)  
Attachment A-1 Proof of Newspaper Publication  
Attachment A-2 Municipality Notifications  
Attachment A-3 Contiguous Landowner Notifications  
Form B – Professional Certification  
Form B1 – Application for Certification  
Form C1 – Compliance History Certification

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on August 5, 2021.

*Anthony L. Rathfon*

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Form D – Environmental Assessment

Attachment D-1 Narrative Response to Environmental Assessment Criteria

Exhibit D-1.1 Wetland Delineation Report by WHM Consulting, Inc.

Exhibit D-1.2 Response from U.S. Fish and Wildlife Service &  
Phase I Bog Turtle Assessment by WHM Consulting, Inc.

Exhibit D-1.3 PNDI Environmental Review Receipt

Exhibit D-1.4 Summary of Orth-Rodgers Traffic Study

Exhibit D-1.5 Earl Township Zoning Ordinance Excerpt MWL District

Exhibit D-1.6 Visual Impact Analysis

Attachment D-2 Benefits and Harms – Environmental and Social and Economic

Form E – Contractual Consent of Landowners

Figure E-1 Form E Map (DCSWA111A001)

Attachment E-1 Summary of DCSWA-Owned Parcels

Form F – Soils Information Phase I

Attachment F-1 Required Soil & Aggregate Material Volumes

Form 1 – Facility Plan

Attachment 1-1 Narrative Response

Form 2 - Map Requirements – Phase I

Table 2-1 Drawing Location Matrix

Form 6 - Geologic Information

Attachment 6-1 Narrative Response

Attachment 6-2 Site Location Map (DCSWA111A001)

Attachment 6-3 Drill Logs

Attachment 6-4 Fracture-Trace Map

Attachment 6-5 Geologic Map

Attachment 6-6 Geologic Cross Sections

Form 7 - Hydrogeologic Information

Attachment 7-1 Narrative Response

Attachment 7-2 Pumping Test Results

Attachment 7-3 Summary of Water Levels

Attachment 7-4 Groundwater Sampling and Analysis Plan

Form 8 - Baseline Ground Water Analyses – Phase I

March 2017

May 2017

Form 11 - Mineral Deposits Information – Phase I

Attachment 11-1 Narrative Response

Form 12 - Alternative Water Supply – Phase I

Attachment 12-1 Narrative

Attachment 12-2 Private Water Supplies within One-Half Mile Radius

Form 45 - Protection of Capacity

Attachment 45-1 Narrative Response

Attachment 45-2 Host Community Agreement (February 14, 1991)

Attachment 45-3 Capacity Agreement (2013)

Form 46 - Relationship between Municipal Waste Management Plans and Permits  
Attachment 46-1 Narrative Response  
Attachment 46-2 Capacity Agreement (2013)

Drawings:

Sheet 1A Existing Conditions -  $\frac{1}{4}$  -  $\frac{1}{2}$  Mile Radius Map (Sheet 1)  
Sheet 1B Existing Conditions -  $\frac{1}{4}$  -  $\frac{1}{2}$  Mile Radius Map (Sheet 2)  
Sheet 1C Existing Conditions -  $\frac{1}{4}$  -  $\frac{1}{2}$  Mile Radius Map (Sheet 3)  
Sheet 1D Existing Conditions -  $\frac{1}{4}$  -  $\frac{1}{2}$  Mile Radius Map (Sheet 4)  
Sheet 1E Existing Conditions -  $\frac{1}{4}$  -  $\frac{1}{2}$  Mile Radius Map (Sheet 5)  
Sheet 2 Geologic Map  
Sheet 3 Groundwater Contour Map (2017 1st Quarter)  
Sheet 4 Soils Map  
Sheet 5 Environmental Monitoring Map  
Sheet 6 Conceptual Plan

Phase II:

Form G(A) - Air Resources Protection, Dust Emissions Estimate and Control Plan  
Attachment G(A)-1 Narrative Response  
Attachment G(A)-2 Part 1: Potential to Emit Total Dust and PM10 Emissions on Roadways  
Attachment G(A)-3 Part 2: Potential to Emit Total Dust and PM10 Emissions Landfill Operations and Equipment (non-hauling)  
Attachment G(A)-4 Part 3: Potential and Actual Dust and PM10 Emissions  
Form - G(B) Air Resources Protection, NMOC Emissions Estimate and Control Plan  
Attachment G(B)-1 Narrative Response  
Attachment G(B)-2 Emissions Calculations and Backup  
Exhibit G(B)-2.1 Annual Waste Placement Rate Calculations  
Exhibit G(B)-2.2 LandGEM Landfill Gas Emission Model Output: Existing & Proposed  
Exhibit G(B)-2.3 Peak Emission Inventory – Existing & Proposed

Form H - Revegetation

Attachment H-1 Narrative Response

Form I - Soil Erosion and Sedimentation Controls

Attachment I-1 Narrative Response  
Attachment I-2 Channel Profiles  
Attachment I-3 Schedule of Earthmoving Activities  
Attachment I-4 Sedimentation Basin Design Calculations  
Attachment I-5 Stormwater Control Calculations

Form J - Soils Information – Phase II

Form K - Gas Management

Attachment K-1 Narrative Response  
Exhibit K-1.1 Landfill Gas Emission Model  
Exhibit K-1.2 Condensate Generation Calculation  
Exhibit K-1.3 Pipe Sizing Calculations

Form L - Contingency Plan for Emergency Procedures

Attachment L-1 PPC & SPCC Plan

- Form R - Waste Analysis and Classification Plan
  - Attachment R-1 Narrative Response
- Form X - Radiation Protection Plan
- Form 3 - Map Requirements – Phase II
  - Table 3-1 Drawing Location Matrix
- Form 14 - Operation Plan
  - Attachment 14-1 Narrative Response
  - Attachment 14-2 Nuisance Control Plan
  - Attachment 14-3 Nuisance Control Plan Notification List
- Form 18 - Water Quality Monitoring System – Phase II
- Form 24 - Liner System – Phase II
  - Attachment 24-1 Narrative Response
  - Attachment 24-2 Bearing Capacity Analysis
  - Attachment 24-3 Settlement Analysis
  - Attachment 24-4 Leachate Collection Pipe Spacing & Flow Capacity Analysis
  - Attachment 24-5 Leachate Collection/Leachate Detection Pipe Structural Stability Analysis
  - Attachment 24-6 Leachate Detection System Geocomposite Analysis
  - Attachment 24-7 Veneer Stability Analysis
  - Attachment 24-8 Cap Geocomposite Apparent Opening Size (AOS) Analysis
  - Attachment 24-9 Cap Geocomposite Transmissivity Analysis
  - Attachment 24-10 Slope Stability Analysis
  - Attachment 24-11 Construction Quality Assurance Plan
  - Attachment 24-12 Geosynthetic Manufacturer's Summary and Specifications
  - Attachment 24-13 Slope Cap Liner System Reinforcement over Existing Waste Areas
- Form 25 - Leachate Management – Phase II
  - Attachment 25-1 Narrative Responses
  - Attachment 25-2 Leachate Quality (Form 50)
  - Attachment 25-3 Off-site Leachate Treatment Agreements
  - Attachment 25-4 Collection System Sump and Pump Sizing Calculations
- Form 28 - Closure / Post-Closure Land Use Plan
  - Attachment 28-1 Narrative Responses
  - Attachment 28-2 Bonding Instructions and Calculations
- Form 54 - Background Meteorological Monitoring
  - Attachment 54-1 Narrative Response (September 2003)
  - Attachment 54-2 Background Meteorological Monitoring Plan
  - Attachment 54-3 Weather Station Specifications
- Drawings:
  - Cover Sheet / Site Location Map
  - Sheet 6A Proposed Expansion Pre-Development Conditions
  - Sheet 6B Top of Subgrade Plan
  - Sheet 6C Top of Protective Cover Plan
  - Sheet 6D Final Grade Plan

Sheet 7A Landfill Cross Sections – Sheet 1 of 3  
Sheet 7B Landfill Cross Sections – Sheet 2 of 3  
Sheet 7C Landfill Cross Sections – Sheet 3 of 3  
Sheet 8A Landfill Liner, Cap, and Berm Details – Sheet 1  
Sheet 8B Landfill Liner, Cap, and Berm Details – Sheet 2  
Sheet 8C Landfill Liner, Cap, and Berm Details – Sheet 3  
Sheet 8D Landfill Sump and Leachate Conveyance Details – Sheet 4  
Sheet 8E Temporary Landfill Sump and Leachate Conveyance Details –  
Sheet 5  
Sheet 8F Landfill Sump and Leachate Conveyance Details – Sheet 6  
Sheet 8G Landfill Berm and Cap Details – Sheet 7  
Sheet 9A Proposed Expansion Phase 1 - Development Plan  
Sheet 9B Proposed Expansion Phase 2 - Development Plan  
Sheet 9C Proposed Expansion Phase 3 - Development Plan  
Sheet 9D Proposed Expansion Phase 4 - Development Plan  
Sheet 10A Stormwater Management Sedimentation Basin Plans  
Sheet 10B Stormwater Management Sedimentation Basin, Trap Schedules  
and Details  
Sheet 10C Stormwater Management Terrace, Letdown Schedules and  
Details  
Sheet 10D Stormwater Management Channel and Miscellaneous Details -  
Sheet 1 of 2  
Sheet 10E Stormwater Management Channel and Miscellaneous Details -  
Sheet 2 of 2  
Sheet 11A Landfill Gas Management Plan  
Sheet 11B Landfill Gas Management Details – Sheet 1 of 2  
Sheet 11C Landfill Gas Management Details – Sheet 2 of 2

2. Form Q - Request for Equivalency Review to Use 1.5" Max. Particle Size Protective Cover and Form Q - Request for Equivalency Review to Modify Terraces received October 31, 2018
3. Response to DEP's May 23, 2019 Environmental Assessment Review Letter, prepared by BAI Group, Inc., received July 19, 2019, consisting of the following:

Comment response letter  
Appendix A – Proof of Notification under Form D Section I.2  
Appendix B – Transportation Compliance Plan  
Appendix C – Viewshed Maps  
Appendix D – Economic Benefits Summary Table  
Appendix E – Landfill Gas Migration Documentation  
Appendix F – Updated Fracture Trace Map

4. Response to the April 2, 2019 PennDOT Review of Traffic Information prepared by Trans Associates Engineering Consultants, Inc., received July 24, 2019, consisting of the following:

Comment Response Letter  
Form D Responses  
Transportation Impact Study

5. Noise Impact Assessment prepared by Hessler Associates, Inc. received September 3, 2019
6. Revised Trip Generation, Distribution and Assignment Report prepared by Trans Associates Engineering Consultants, Inc., received November 18, 2019
7. Response to the January 31, 2020 PennDOT Review of Trip Generation Distribution and Assignment Report prepared by Trans Associates Engineering Consultants, Inc., received February 13, 2020, consisting of the following:

Comment Response Letter  
Revised Trip Generation, Distribution and Assignment Report

8. Revised Transportation Impact Study and Form D responses, prepared by Trans Associates Engineering Consultants, Inc., received April 10, 2020
9. Response to the June 4, 2020 PennDOT Review of Transportation Impact Study and revised TIS, prepared by Trans Associates Engineering Consultants, Inc., received October 14, 2020
10. Supplemental Submission prepared by BAI Group, Inc., received January 14, 2021, consisting of the following:

Revised Phase I Table of Contents  
Revised Attachment D-2: Benefits and Harms: Environmental, Social and Economic  
Exhibit D-2.1: Road Impact Funding Agreement executed between DCSWA and Borough of Boyertown

11. Response to the June 2018 ClimeCo Report on Air Quality Assessment for Particulate Matter, prepared by Trans Associates Engineering Consultants, Inc., received March 18, 2021
12. Response to the April 3, 2019 Gilmore & Associates, Inc. Report on Assessment of Heavy Vehicle Traffic-Induced Vibrations, prepared by Trans Associates Engineering Consultants, Inc., received March 18, 2021



13. Response to DEP's March 18, 2021 1<sup>st</sup> technical review letter, prepared by BAI Group, Inc., received April 19, 2021, consisting of the following:

Comment Response Letter  
Phase I Master Table of Contents  
Phase II Master Table of Contents  
Form MRW-C – Identification of Interests & Compliance History (executed 4-14-21)  
Form 7- Hydrogeologic Information – Phase I  
Form 18 - Water Quality Monitoring System – Phase II  
Form 24 - Liner System – Phase II (select revised pieces)  
Form 28-2 - Closure / Post-Closure Land Use Plan - Bond Calculations  
Form R - Waste Analysis and Classification Plan (select revised pieces)  
Drawings:  
    Sheet 3 of 6  
    Sheet 5 of 6  
    Sheet 9 of 11

14. Response to DEP's May 25, 2021 2<sup>nd</sup> technical review letter, prepared by BAI Group, Inc., received June 10, 2021, consisting of the following:

Comment Response Letter  
Form MRW-C – Identification of Interests & Compliance History  
Form 7- Hydrogeologic Information – Phase I  
Form 18 - Water Quality Monitoring System – Phase II  
Bonding Worksheets  
Drawings:  
    Sheet 5 of 6  
    Sheet 9 of 11  
    Appendix VII – Residential Monitoring Well Locations

15. Response to DEP's July 7, 2021 correspondence prepared by BAI Group, Inc., received July 15, 2021, consisting of the following:

Select revised pieces of the Water Quality Sampling and Analysis Plan

16. Response to DEP's July 7, 2021 correspondence prepared by BAI Group, Inc., received July 23, 2021, consisting of the following:

Revised WQSAP Table 1  
Revised Form 7- Hydrogeologic Information – Phase I  
Revised Form 18 - Water Quality Monitoring System – Phase II

17. Response to DEP's July 29, 2021 correspondence prepared by BAI Group, Inc., received August 2, 2021, consisting of the following:

Revised Form 7- Hydrogeologic Information – Phase I  
Revised Form 18 - Water Quality Monitoring System – Phase II

Permit Conditions:

1. The request for equivalency review to use 1.5-inch maximum particle size protective cover in conjunction with 16 or 24-oz/sy non-woven geotextile is approved.
2. The request for equivalency review to use a modified terrace design with increased terrace spacing as needed from 25-foot vertical intervals up to a maximum vertical spacing of 40 feet and a 5-foot increase in terrace widths resulting in a terrace width of 20 feet is approved.
3. A revised Form 7, Hydrogeologic Information, Phase I, and revised Form 18, Water Quality Monitoring System, Phase II, shall be submitted within 60 days from the issuance of this permit. The revised forms shall contain accurate monitoring well construction elevations and depths, as determined based on updated well surveying activities, and shall be submitted as a minor permit modification.
4. The Permittee shall construct the approved facility in accordance with the design details approved herein and under the oversight of a licensed professional engineer who is registered to practice in the Commonwealth of Pennsylvania. Each individual construction project of the approved facility shall be documented, and this documentation shall be submitted with a Form 37, Certification of Facility Construction Activity, upon completion of the individual construction project and for DEP approval prior to operation of the constructed facility.
5. The Permittee has proposed mitigation of harms and has identified benefits of the project to the public as indicated in the application submissions included as part of this permit modification. Based upon the DEP evaluation of the environmental assessment, of which the harms/benefit analysis is part, it has been determined that the benefits of the project clearly outweigh the known and potential harms as required by Chapter 271.127(c) of the Municipal Waste Regulations. Failure to complete mitigation measures or failure to provide for all benefits described in the permit modification submissions on which DEP based its analysis may result in suspension or revocation of the permit. DEP may also take additional appropriate enforcement actions.
6. A report of mitigations completed to date and benefits provided to date shall be submitted annually with the Permittee's Annual Operation Report, due by June 30 of every calendar year.

7. Any final operation, design, or other plan developed subsequent to permit issuance which exhibits changes in the structures, locations, specifications, control measures or other changes of substance shall be submitted to the Department for subsequent permit action. Any deviation of plans herein approved shall not be implemented before first obtaining a permit modification or written approval from the Department.
  
8. Nothing herein shall be construed to supersede, amend or authorize violation of the provision of any valid and applicable law, ordinance or regulation, provided that said local law, ordinance or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. § 6018.101, et seq.

