Prepared for:

FORT ARMISTEAD ROAD – LOT 15 LANDFILL, LLC
3601 Fort Armistead Road
Baltimore, Maryland

2025 ANNUAL INSPECTION REPORT

Per Requirements of 40 CFR §257.84(b)(2)

Fort Armistead Road - Lot 15 Landfill
Baltimore, Maryland

Prepared by:

Geosyntec consultants

10211 Wincopin Circle, Floor 4
Columbia, Maryland 21044

Project Number: MR1352J
Document Number: MD25055

13 January 2026

Annual Inspection Report
CCR Unit: Fort Armistead Road - Lot 15 CCR Landfill

Certification:

I, **Davis R. Garrett**, a registered professional engineer in the state of **Maryland** certify that this Annual Inspection Report fulfils the minimum requirements of 40 CFR §257.84(b)(1) through §257.84(b)(5). This certification is based on my review of design and operational information and/or data made available by Talen Energy about the CCR Unit and inspection of the CCR Unit on 4 December 2025.

Printed Name: Davis R. Garrett

PE License Number: 55501 State: Maryland

Signature: _____

Date: 12 January 2026

Seal:

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1. INTRODUCTION

1.1 Organization and Terms of Reference

Geosyntec Consultants (Geosyntec) has prepared this inspection report for Fort Armistead Road - Lot 15 Landfill, LLC (a wholly owned subsidiary of Talen Energy) addressing the existing Fort Armistead Road – Lot 15 Landfill (Lot 15 Landfill or Facility) in Baltimore, Maryland for compliance with the Federal Coal Combustion Residuals (CCR) Rule. On 17 April 2015, the USEPA published the final rule for disposal of CCR from electric power utilities under Subtitle D of the Resource Conservation and Recovery Act (RCRA), contained in Section 257 of Title 40 of the Code of Federal Regulations (40 CFR 257 Subpart D). This Regulation is referred to herein as the CCR Rule. In this Annual Inspection Report for 2025, the specific requirements of §§257.84(b)(1) and (2) for annual inspection and reporting for CCR landfills are identified and addressed.

1.2 Site Location

The Lot 15 Landfill is located in the Curtis Bay area at 3601 Fort Armistead Road in Baltimore, Maryland as shown in **Figure 1**. It is bounded to the north, east, and west by Fort Armistead Road, CSX railroad tracks, and Fort Smallwood Road, respectively. A light industrial business is located adjacent to the south of the Facility.

1.3 Landfill Description and Permit Status

Lot 15 Landfill is permitted by the Maryland Department of the Environment (MDE) under Permit 2023-WIF-0653, which is provided in **Appendix A**.

The facility is 65 acres encompassing a 32-acre fill area with three constructed cells as shown on **Figure 2**. Constructed Cells 1 through 3 cover 14.3 acres and unconstructed Cells 4 through 6 cover the remaining 17.7 acres. Cell 1, which was the first active cell, was constructed and became operational in 2011. Cell 2 was constructed and became operational in 2014. Cells 1 and 2 are considered inactive as they are no longer receiving CCR and other compatible and approved materials but are not currently closed. Construction of Cell 3 began in mid-2018 and became operational at the end of 2019.

Since its development in 2011, the Facility has received CCR and other compatible and approved materials generated from three energy generating plants (Brandon Shores, H.A Wagner, and C.P. Crane power plants) in the Baltimore area.

Based on an evaluation of the design and construction of the cells, the Lot 15 Landfill meets all CCR Rule requirements pertaining to location restrictions (§257.60 through 64), design criteria (§257.70), operating criteria (§257.80 and 81), and groundwater monitoring criteria (§257.90 through 94).

2. CCR RULE REQUIREMENTS FOR ANNUAL INSPECTION REPORT - §257.84(b)

2.1 Annual Inspection by a Qualified Engineer - §257.84(b)(1)

As described in §257.84 (b)(1) of the CCR Rule, an annual inspection is to be performed as a means to *"ensure that the design, construction, operation and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards."* This is to be accomplished through a review of available information and visual inspection of the impoundment and appurtenant features. At a minimum, review of the information specified in paragraphs (b)(1)(i) and (ii) of §257.84, repeated below, must be made.

(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record; and

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures.

2.2 Inspection Report - §257.84(b)(2)

As described in §257.84(b)(2) of the CCR Rule, each inspection report must address, at a minimum, the information specified in paragraphs (b)(2)(i) through (iv) of §257.84, provided below.

(i) Any changes in geometry of the structure since the previous annual inspection;

(ii) The approximate volume of CCR contained in the unit at the time of inspection;

(iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and

(iv) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

Further, §257.84(b)(3)(i) of the CCR Rule requires that the owner or operator of existing CCR units must ensure that the annual inspection by a qualified professional engineer is completed and documented with a report no later than 13 January 2026.

2.3 Compliance with Annual Inspection Report Requirements

Sections 3 and 4 of this report present the results of the annual inspection and the documentation required by §257.84(b)(1) through (3). Section 5 of this report presents our recommendations to address conditions observed during the annual inspection.

The table below summarizes the information and documentation required to be included in the annual inspection report (subject to the conditions described in Section 2.1).

RULE SECTION	RULE REQUIREMENT	LOCATION WHERE ADDRESSED IN DOCUMENT
§257.84(b)(1)(i)	Review of Available Information	Section 3.2
§257.84(b)(1)(ii)	Visual Inspection of the CCR Unit	Section 3.3
§257.84(b)(2)(i)	Changes in Geometry	Section 4.2
§257.84(b)(2)(ii)	Current Volume of CCR in the Unit	Section 4.3
§257.84(b)(2)(iii)	Appearances of Actual or Potential Structural Weakness	Section 4.4
§257.84(b)(2)(iv)	Additional Changes Affecting Stability or Operation of the CCR Unit	Section 4.5
§257.84(b)(3)(i)	Documentation of the Annual Inspection	Section 3, Appendix B

3. ANNUAL INSPECTION

3.1 Overview

The 2025 annual inspection of the Lot 15 Landfill was performed by Mr. Davis R. Garrett, P.E., of Geosyntec Consultants, through review of available information and visual inspection of the landfill and appurtenant features. In the following sections, a summary and evaluation of the results of the inspection is presented.

3.2 Review of Available Information - §257.84(b)(1)(i)

3.2.1 Overview

The Lot 15 Landfill is permitted by MDE under Permit No. 2023-WIF-0653. The history of the design and construction of the Lot 15 Landfill is documented in several sources:

- "Assessment of Compliance Report, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated October 2015 by Geosyntec Consultants.
- "Phase III Minor Permit Modification Application (Cell 1 Construction), Hawkins Point Plant Landfill, Baltimore Maryland," dated March 2009, revised December 2009 by Geosyntec Consultants.
- "Phase III Report, Permit Expansion for Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated March 2012, revised August 2012 by Geosyntec Consultants.
- "Construction Quality Assurance Final Report, Cell 1 Construction, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated February 2012 by Geosyntec Consultants.
- "Construction Quality Assurance Final Report, Cell 2A Construction, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated March 2015 by Geosyntec Consultants.
- "Construction Quality Assurance Final Report, Cell 2 West Slope Cap and Cell 3 Construction, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated February 2020 by Geosyntec Consultants.

The facility was originally permitted as the Hawkins Point Plant Landfill and consisted of two parcels, one 30 acres in size and one 65 acres in size that were bisected by a CSX Railroad right-of way, effectively resulting in two separate landfills. In 2009, the 65-acre parcel had not yet been developed as a landfill and was split off from the 30-acre parcel and re-permitted as the Lot 15 Landfill to serve as a CCR landfill under MDE solid waste regulations. The initial disposal cell at Lot 15 Landfill (Cell 1) was completed in October 2011, with placement of CCR initiating shortly

thereafter. Cell 2 was constructed and became operational in 2014. Construction of Cell 3 began in mid-2018 and became operational at the end of 2019.

The Lot 15 Landfill was developed using a single composite liner consisting of (from top to bottom) a 24-inch thick leachate collection/protective cover layer (specific to Cell 1); a 12-inch thick bottom ash protective cover layer and geocomposite leachate collection layer (specific to Cells 2 and 3); a 60-mil HDPE textured geomembrane; and 24-inches of compacted clay with a maximum permeability of 1 x 10^{-7} cm/sec. Note that the protective cover material has not been installed on approximately three quarters of the northwestern portion of Cell 3. The protective cover is placed, where necessary, prior to CCR placement. The landfill also has automated leachate collection and removal systems as well as an environmental monitoring system. Lot 15 Landfill meets all CCR Rule requirements pertaining to location restrictions (§257.60 through 64), design criteria (§257.70), operating criteria (§257.80 and 81), and groundwater monitoring criteria (§257.90 through 94).

3.2.2 Weekly Inspections

Weekly inspections for structural stability at the Lot 15 Landfill were initiated on 19 October 2015 in accordance with the requirements of §257.84(a) of the CCR Rule. In preparation of this annual report, Geosyntec reviewed weekly inspection reports prepared by the Facility operator (Charah, Inc.) during 2025. The reports indicated some minor erosion rills/gullies on the exterior slopes of the landfill which were subsequently repaired and reseeded, occasional hydroseeding to vegetate bare areas, and the scheduling of mowing. All these reported items are indicative of regular maintenance commonly implemented on landfills.

3.3 Visual Inspection of CCR Unit - §257.84(b)(1)(ii)

Visual inspection of Lot 15 Landfill was performed on 4 December 2025. The visual inspection was performed by walking around the perimeter of the site and making careful observation of the landfill embankment, interior and exterior side slopes, edges of liner, stormwater management features, the active face, and leachate storage pond. Observations were documented on an annual inspection form and photo log provided in **Appendix B**.

The following is a summary of the conditions observed.

Erosion and Sediment Control: No significant erosion of interior or exterior landfill slopes was observed. Vegetated soils were observed on the perimeter berm and the a majority of the landfill side slopes above the perimeter berm. The Facility operator indicated that measures to rectify areas without proper vegetation, namely on top of Cell 1, have continued to be implemented.

Leachate Management: Leachate is managed in accordance with required operating practices. Contact water from CCR is directed to chimney drains which lead to leachate

management piping at the base of the landfill. The leachate then gravity drains to a sump located at the low point of each cell. From the sump, leachate is pumped to the leachate storage pond, located near the front entrance, where it is loaded into tanker trucks to be hauled off-site for treatment.

Currently, the chimney drain pipes in Cells 1 and 2 extend above the soil cover to prevent non-contact stormwater from entering the leachate collection system while still promoting the drainage of liquids within the landfill. Additionally, no chimney drains have been installed in Cell 3 as they are not currently necessary for leachate management.

The leachate storage pond appeared to be operating properly. Leachate levels were below storage limits and a sensor is in-place to provide a high-level alarm for leachate within the storage pond.

Stormwater Management: At the time of the annual inspection, stormwater on exterior slopes of the landfill was being routed to stormwater basins, via perimeter channels, prior to discharge off-site. A textured scrim reinforced polyethylene temporary cover tarp was installed on the Cell 3 floor, side slopes, and on Cell 1 and intercell side slopes that terminate at the Cell 3 floor, to prevent stormwater from entering the leachate collection system. Stormwater that enters Cell 3 is contained on top of the temporary cover where it is collected in a common sump and is then pumped into a sediment basin located on the eastern side of the Facility for discharge.

During the annual inspection the following was observed regarding stormwater management in Cell 3:

1. Some of the temporary cover tarp on Cell 1 side slope was ripped and loose. The temporary cover should be repaired to minimize erosion and maintain proper stormwater management practices.

2. Saplings were observed to be growing on the cell floor in an area where soil has collected. Although the protective cover is being used temporarily for stormwater management and impact would likely be minimal, if damaged, the root system of the sapling could impact the liner system if it becomes large enough.

General Housekeeping: In general, the Facility is well kept. No tracking of mud or CCRs were observed on public roads. No excess litter was observed at the Facility.

Seepage: No Seepage was observed at the time of the inspection.

Groundwater Monitoring Network: There were no groundwater monitoring network issues observed or discussed during the inspection.

4. ANNUAL INSPECTION REPORT METRICS

4.1 Overview

The annual inspection report is required to document specific metrics as specified in paragraphs (b)(2)(i) through (iv) of §257.84. The following sections address each of the required metrics.

4.2 Changes in Geometry - §257.84(b)(2)(i)

The 2025 annual inspection is the tenth annual inspection required under the CCR Rule. To identify whether changes in the geometry have occurred, Geosyntec compared the site topography to design information provided with the permit documents. Based on our review, no apparent changes in the geometry have occurred along the base and perimeter of Cells 1, 2, and 3.

The topography within the landfill has changed as CCR is disposed. Currently, CCR disposal is only occurring within the limits of waste on the eastern side of Cell 3. At the time of the inspection, CCR disposal was occurring near the northeastern corner of Cell 3. No changes, since the previous inspection, were observed to adjacent Cell side slopes (Cell 1 and Cell 4) that terminate into Cell 3.

4.3 Volume of CCR in the Unit - §257.84(b)(2)(ii)

Based on information provided by the Facility operator, approximately 42,000 cubic yards of CCR were disposed at the Facility in 2025. It is estimated that a total of 1,029,000 cubic yards of CCR have been disposed at Lot 15 Landfill. The overall permitted capacity of the Lot 15 Landfill is approximately 6.3 million cubic yards.

4.4 Structural Weakness - §257.83(b)(2)(iii)

Potential structural weakness in landfills can be identified by distress in the embankment or fill slopes. Indicators of structural weakness include cracking, sloughing, scarps, bulging, seepage, and subsidence. Although it may not be an immediate cause of structural weakness, excessive erosion can also lead to slope geometry and/or conditions that may result in structural weakness.

No significant erosion of interior or exterior landfill slopes was observed. No visual indicators of structural weakness were observed.

4.5 Other Changes - §257.84(b)(2)(iv)

Since the last annual inspection (11 December 2024) the Lot 15 Landfill has made the following changes:

1. Some portions of the temporary cover were removed from the cell floor and southern and eastern side slopes of Cell 3 (adjacent to the current CCR placement area) prior to CCR disposal. This is consistent with waste placement practices to allow the CCR to be in contact with the liner system components.

These changes have not affected the stability or operation of the landfill since the previous annual inspection.

5. RECOMMENDATIONS

Based on the review of the provided information, the results of previous inspections of the Facility, and the results of our inspection performed in compliance with the CCR Rule, Geosyntec has developed the recommendations below to allow for the continued safe and protective operation of the Facility.

- Continue maintenance of erosion and sediment controls, which should include establishment of vegetation in bare areas, namely the top deck of Cell 1.
- Remove any saplings growing within Cell 3.
- Repair the damaged temporary cover tarp in Cell 3.

6. REFERENCES

United States Environmental Protection Agency (USEPA) (2015). "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule." Title 40 Code of Federal Regulations, Parts 257 and 261.

Geosyntec Consultants (2015) "Assessment of Compliance Report, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated October 2015.

Geosyntec Consultants (2009) "Phase III Minor Permit Modification Application (Cell 1 Construction), Hawkins Point Plant Landfill, Baltimore Maryland," dated March 2009, revised December 2009.

Geosyntec Consultants (2012) "Phase III Report, Permit Expansion for Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated March 2102, revised August 2012.

Geosyntec Consultants (2012) Design Drawings entitled "Application for and Industrial Landfill permit: Phase III Permit Drawings, Fort Armistead Road Lot 15 Landfill, Baltimore Maryland," dated March 2012.

Geosyntec Consultants (2012) "Construction Quality Assurance Final Report, Cell 1 Construction, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated February 2012.

Geosyntec Consultants (2015) "Construction Quality Assurance Final Report, Cell 2A Construction, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated March 2015.

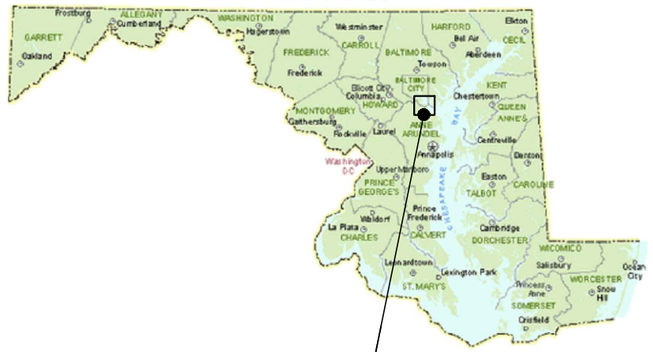
Geosyntec Consultants (2020) "Construction Quality Assurance Final Report, Cell 2 West Slope Cap and Cell 3 Construction, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated February 2020.

Geosyntec Consultants (2021) "Run-On and Run-Off Control System Plan, Per Requirements of 40 CFR §257.81, Fort Armistead Road – Lot 15 Landfill, Baltimore, Maryland," dated October 2021.

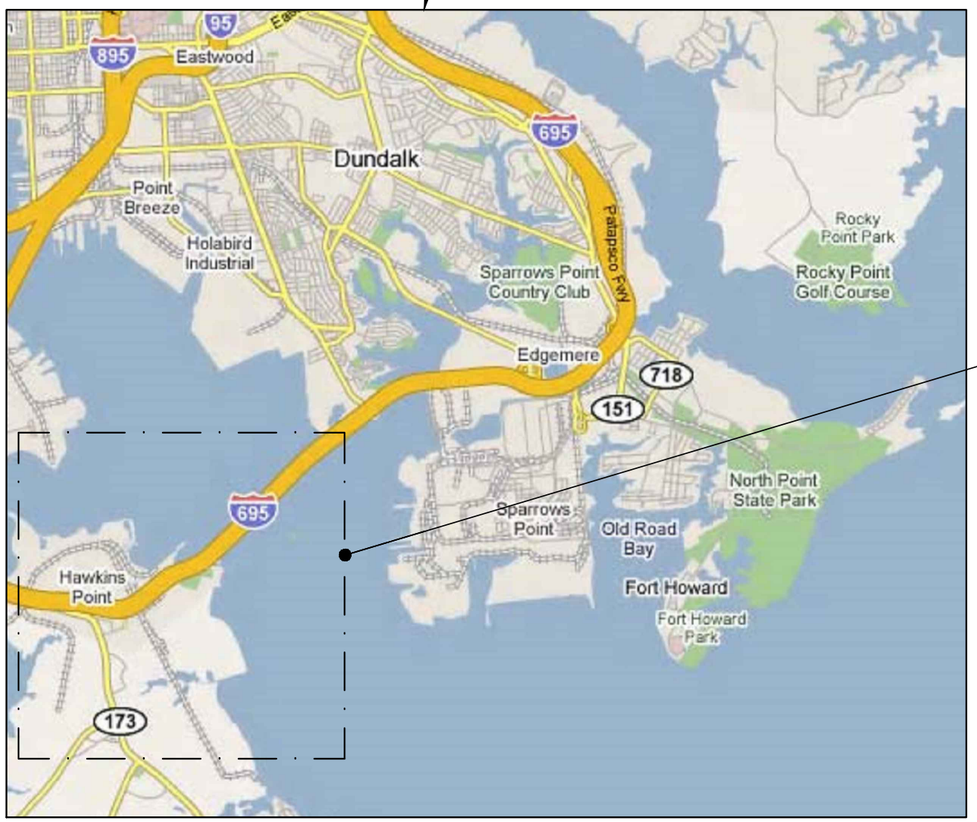
Geosyntec Consultants (2025) "2024 Annual Inspection Report – Fort Armistead Road Lot 15 Landfill" dated January 2025.

FIGURES

MAP OF MARYLAND
NO SCALE

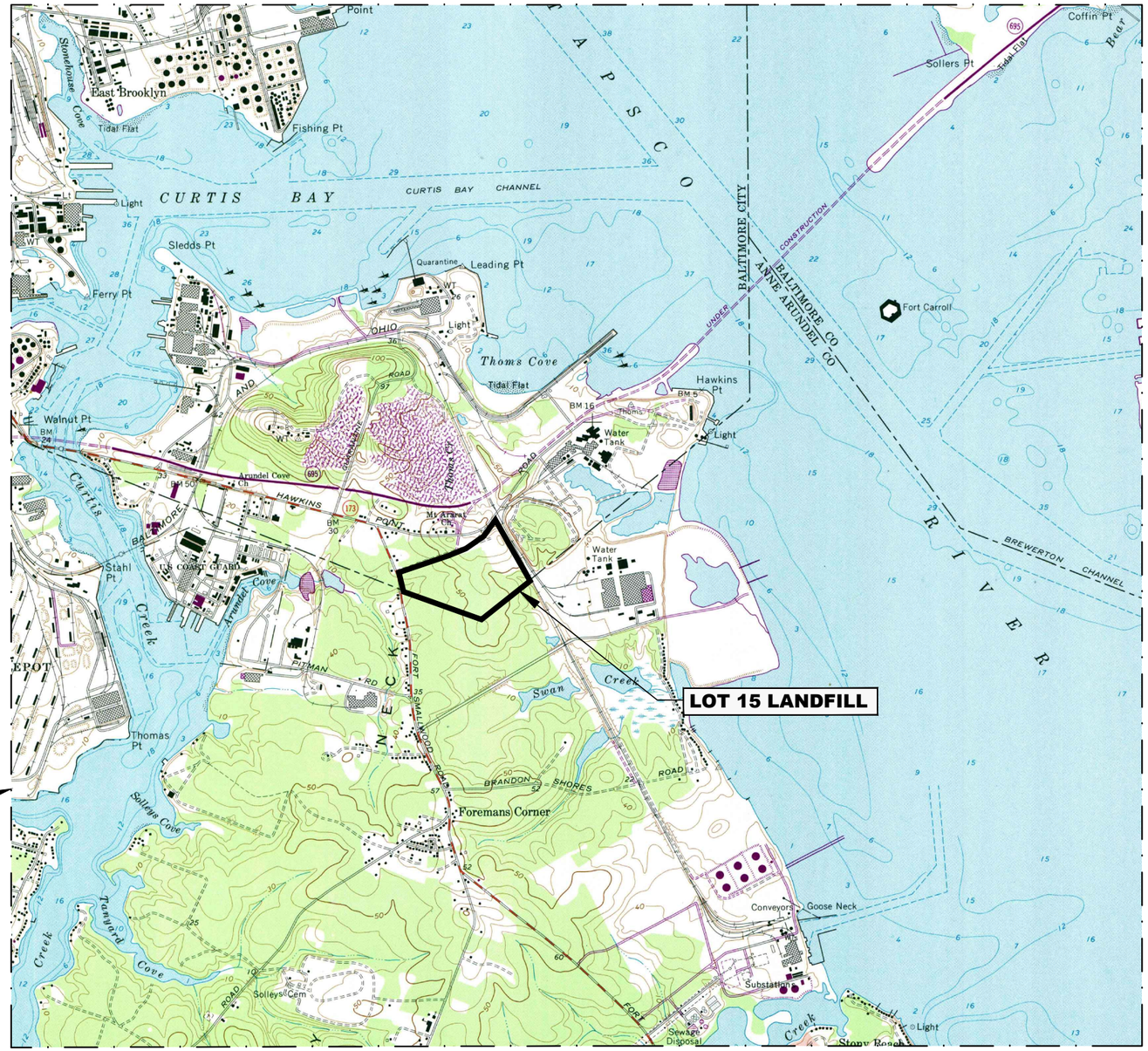


NORTH



MAP SOURCE: "MAPQUEST.COM"

REGION MAP
NO SCALE



REFERENCE: BACKGROUND IMAGE IS the "CURTIS BAY, MARYLAND" USGS 7.5' QUADRANGLE, 1969, PHOTOREVISED 1974.

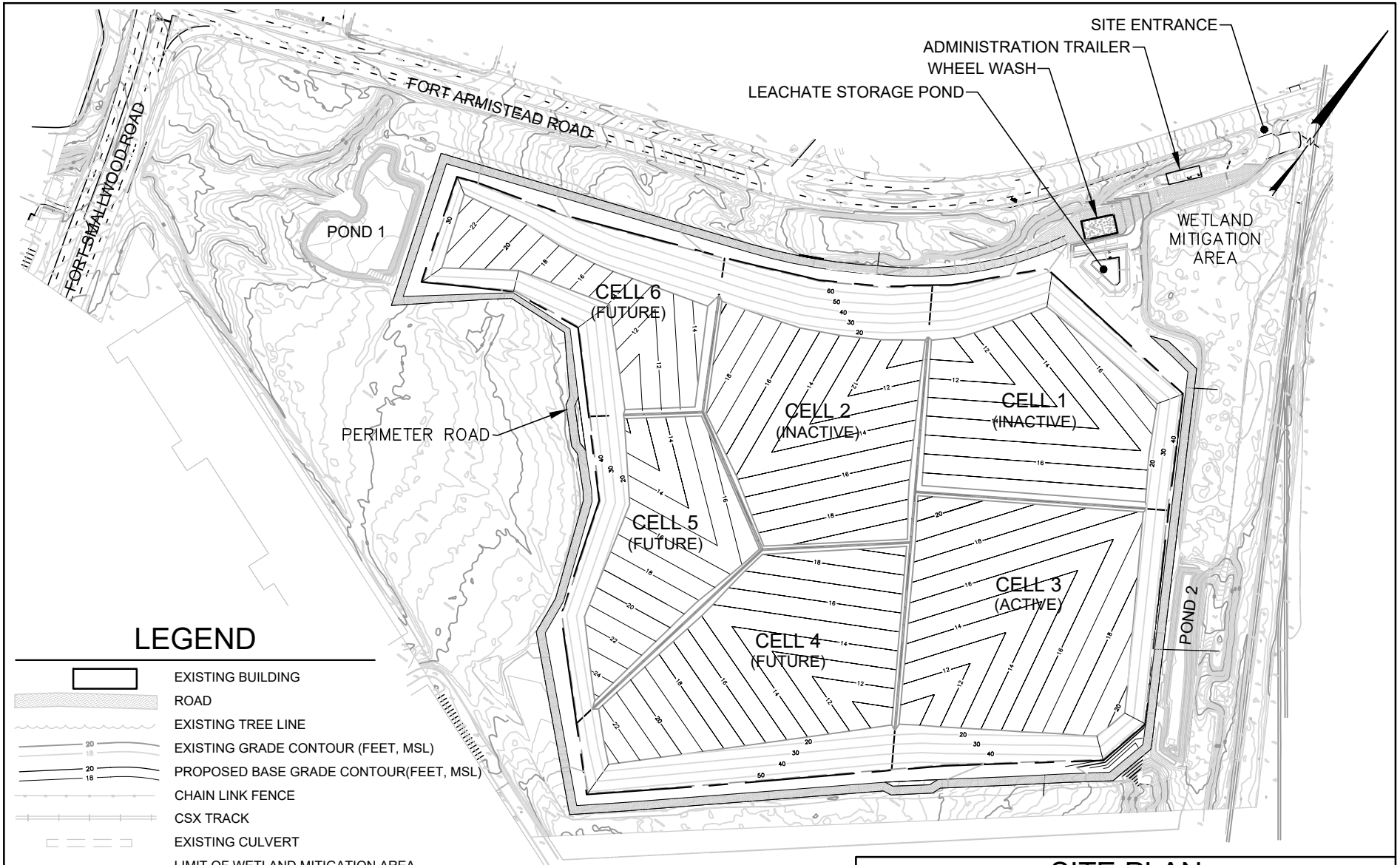
AREA MAP
NO SCALE

AREA MAP
LOT 15 LANDFILL
BALTIMORE, MARYLAND

Geosyntec consultants
COLUMBIA, MARYLAND

DATE:	JANUARY 2026
PROJECT NO.	MR1352
DOCUMENT NO.	MD24067
FILE NO.	1352F001
FIGURE NO.	1

P:\CADD\0LOT15\1352\1352-003\1352F001



LEGEND

- EXISTING BUILDING
- ROAD
- EXISTING TREE LINE
- EXISTING GRADE CONTOUR (FEET, MSL)
- PROPOSED BASE GRADE CONTOUR(FEET, MSL)
- CHAIN LINK FENCE
- CSX TRACK
- EXISTING CULVERT
- LIMIT OF WETLAND MITIGATION AREA
- EXISTING WETLANDS

NOTES:

1. BACKGROUND EXISTING CONTOURS ARE FROM EXISTING CONDITIONS EXTRACTED FROM AUTOCAD FILES (LOT15_LANDFILL_PLAN.dwg) BASED ON FLYOVER DATED 7 MAY 2020 BY PRECISION SURVEY AND MAPPING CO., INC. PROPOSED BASE GRADES ARE BASED ON DRAWING 4 OF 42, "BASE GRADING PLAN" BY GEOSYNTEC CONSULTANTS DATED MARCH 2012.

2. HORIZONTAL GRID IS NORTH AMERICAN DATUM 1927 (NAD27); VERTICAL DATUM IS NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29).

SITE PLAN
LOT 15 LANDFILL
BALTIMORE, MARYLAND

Geosyntec consultants
COLUMBIA, MARYLAND

DATE:	JANUARY 2026
PROJECT NO.	MR1352
DOCUMENT NO.	MD24067
FILE NO.	1352F002
FIGURE NO.	2

P:\CADD\LOT15\1352\1352-003\1352F002

APPENDIX A
MDE Permit

Maryland
Department of
the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

March 19, 2024

CERTIFIED MAIL
Return Receipt Requested

Kevin P. Panzino, Sr. Director
Fort Armistead Road – Lot 15 Landfill, LLC
3000 Brandon Shores Road
Baltimore, Maryland 21226

Dear Kevin P. Panzino:

Enclosed herewith is the State of Maryland Refuse Disposal Permit No. 2023-WIF-0653, which is being renewed pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder for the continued construction and operation of the Fort Armistead Road-Lot 15 Industrial Landfill located at 3601 Fort Armistead Road, Baltimore, Maryland.

Please note that this permit is subject to the terms and conditions which are enclosed. No written response from the permittee regarding this permit ten days following receipt of this letter constitutes acceptance of the terms and conditions contained therein.

If you have any questions regarding this matter, please contact me or Andrew Grenzer at (410) 537-3315 or *andrew.grenzer@maryland.gov*.

Sincerely,

Edward M. Dexter, P.G., Administrator
Solid Waste Program

Enclosure

cc: John Basciano, Fort Armistead Road – Lot 15 Landfill, LLC
Tyler Abbott, Director, Land and Materials Administration (LMA)
Brian Coblentz, Chief, Compliance Division, SWP/LMA (w/encl.)
Samuel Ogbogu, Head, Construction and Maintenance (C&M) Section, SWP/LMA
Sara Haile, Project Engineer, C&M Section, SWP/LMA

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Wes Moore
Governor

Land and Materials Administration
Solid Waste Program
1800 Washington Boulevard, Suite 605, Baltimore, Maryland 21230-1719

Serena McIlwain
Secretary

Refuse Disposal Permit

No. 2023-WIF-0653

ISSUE DATE: March 19, 2024 ***EXPIRATION DATE:*** March 18, 2029

Issued to: Fort Armistead Road – Lot 15 Landfill, LLC

Authorizing: the continued construction and operation of the Fort Armistead Road – Lot 15 Industrial Landfill

Located at: 3601 Fort Armistead Road, Baltimore, Maryland

This permit is renewed pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder, and is subject to the attached terms and conditions, and compliance with all applicable laws and regulations.

Edward M. Dexter, P.G., Administrator
Solid Waste Program

Tyler Abbott, Director
Land and Materials Administration

REFUSE DISPOSAL PERMIT
Permit No. 2023-WIF-0653
Issuance Date: March 19, 2024
Expiration Date: March 18, 2029

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard
Baltimore, Maryland 21230-1719

This Refuse Disposal Permit is renewed pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, by the Maryland Department of the Environment, Land and Materials Administration (MDE) to:

Fort Armistead Road – Lot 15 Landfill, LLC (the "permittee")
1005 Brandon Shores Road, Suite 100
Baltimore MD 21226

for the construction and operation of the

Fort Armistead Road – Lot 15 Industrial Landfill

encompassing a

32-acre fill area on a 65-acre site

located at

3601 Fort Armistead Road
Baltimore, Maryland

This permit is granted in accordance with the referenced documents in Part I, and subject to the terms and conditions specified in Parts II, III, and IV of this Permit as follows:

Part I: Referenced Materials - permit application, plans and specifications and other pertinent documents submitted to the Department.

Part II: Facility Specific Conditions - conditions which amend all other permit conditions applicable to this facility should any discrepancies or conflicts exist.

Part III: General Conditions - conditions which are generally applicable to solid waste acceptance facilities similar to this facility.

Part IV: Standard Conditions - conditions which are generally applicable to all solid waste acceptance facilities.

Part I: Referenced Materials:

A. Operating Documents:

1. A Refuse Disposal Permit Application for the Hawkins Point Plant (HPP) Industrial Waste Landfill to accept coal combustion byproducts, prepared and submitted by Geosyntec Consultants, dated January 23, 2009 and received on February 24, 2009.

2. Document entitled "Phase I Report Permit for Fort Armistead Road – LOT 15 Landfill", dated April 2011 and received on April 6, 2011.

3. Document entitled "Cell 1 and 2 Construction Drawings (65 Acre-Parcel)", consisting of drawing Nos. 1 of 11 through 4 of 11, 4A of 11, 5 of 11 through 7 of 11, 7A of 11, and 8 of 11 through 11 of 11, prepared by Geosyntec Consultants, dated April 2011 and received on April 25, 2011.

4. Document entitled "Cell 1 Construction, Fort Armistead Road – LOT 15 Landfill", consisting of drawing Nos. S-1 through S-3, prepared and submitted by Geosyntec Consultants, dated February 2012 and received on February 3, 2012.

5. Document entitled "Phase II Report Site Geologic Study: Permit Expansion for Fort Armistead Road – LOT 15 Landfill", consisting of Figures 1 through 15, prepared and submitted by Geosyntec Consultants, dated November 2011, revised March 2012, and received on March 23, 2012.

6. Document entitled "Phase III Report: Permit Expansion for Fort Armistead Road – LOT 15 Landfill", consisting of drawing Nos. 1 of 42 through 42 of 42, prepared and submitted by Geosyntec Consultants, dated March 2012, revised August 2012, and received on August 2, 2012.

7. Revised Refuse Disposal Permit Application stating the applicant's legal name as "Fort Armistead Road – LOT 15 Landfill, LLC", dated July 31, 2012 and received on August 2, 2012.

8. A letter requesting to include filter bag waste from Brandon Shores and C.P. Crane energy generating plants as acceptable waste at the Fort Armistead Road – LOT 15 Industrial Landfill, prepared and submitted by Geosyntec Consultants, dated and received on April 9, 2014.

9. Document entitled "Minor Permit Modification Application", consisting of drawing Nos. 1 of 6 through 6 of 6, for the sump pump redesign of Cell 2, prepared and submitted by Geosyntec Consultants, dated April 1, 2014 and received on April 23, 2014.

10. A letter requesting to include wastewater solids from Brandon Shores, H.A. Wagner, and C.P. Crane energy generating plants as acceptable waste at the Fort Armistead Road – LOT 15 Industrial Landfill, prepared and submitted by Geosyntec Consultants, dated and received on May 29, 2014.

11. Document entitled "Minor Permit Modification Application – Cell 2 Liner Design Modification", consisting of drawing Nos. 1 of 6 through 6 of 6 to directly place bottom ash on top of the protective cover in lieu of the geotextile filter cover, prepared by Geosyntec Consultants, dated July 15, 2014 and received on July 21, 2014.

12. A construction as-built report entitled "Construction Quality Assurance Final Report, Cell 2A Construction, Fort Armistead Road – LOT 15 Landfill, Baltimore, Maryland", prepared by Geosyntec Consultants, dated March 13, 2015 and received on March 16, 2015.

13. A letter requesting to use leachate generated at the Fort Armistead Road – LOT 15 Industrial Landfill for compaction and dust suppression at the working face of the landfill, dated June 3, 2016 and received on June 7, 2016.

14. A letter requesting to place a geomembrane barrier on the west side slope of Cell 2 inside the Fort Armistead Road – LOT 15 Industrial Landfill footprint, prepared and submitted by Geosyntec Consultants, dated February 14, 2018 and received on February 15, 2018.

15. Document entitled "Cell 3 Construction Drawings, Fort Armistead Road – LOT 15 Landfill", consisting of drawing Nos. 1 of 33 through 33 of 33, prepared and submitted by Geosyntec Consultants, dated April 2018 and received on April 3, 2018.

16. A report entitled "Groundwater Monitoring Plan for Lot 15 Landfill, Baltimore, Maryland", prepared and submitted by Geosyntec Consultants, Dated July 2019 and received on July 16, 2019.

17. A construction as-built document entitled "Construction Quality Assurance Final Report, Cell 2 West Slope Cap and Cell 3 Construction, Fort Armistead Road – LOT 15 Industrial Landfill, Baltimore, Maryland", prepared by Geosyntec Consultants, dated February 2020 and received on February 24, 2020.

18. Document entitled "Cell 3 CQA Report Addendum No. 1, Liner System Dewatering, LOT 15 Landfill, Baltimore, Maryland", prepared by Geosyntec Consultants, dated January 2022 and received on January 28, 2022.

19. A Refuse Disposal Permit Renewal Application for the Fort Armistead Road – LOT 15 Industrial Landfill submitted by Fort Armistead Road – LOT 15 Landfill, LLC, dated and received on October 18, 2023.

B. Historical Facility Documents:

1. Refuse Disposal Permit Renewal Application for the Fort Armistead Road – LOT 15 Industrial Landfill submitted by Fort Armistead Road – LOT 15 Landfill, LLC, dated August 24, 2018 and received on August 29, 2018.

Part II: Facility Specific Conditions:

A. Hours of Construction and Operation:

1. The permittee may construct and operate this facility during daylight only between the hours of 6:00 a.m. to 6:00 p.m., Monday through Friday (and on Saturdays as needed). Operations may be performed during these hours after sunset or before sunrise if artificial light adequate to perform the activity in a safe and acceptable manner is provided to the satisfaction of the Department.

2. These specified hours may be changed upon written approval by the Department. For approval, a letter requesting the change of hours and a letter from the appropriate local government office stating that the change is consistent with local zoning and land use requirements must be submitted with such a request.

3. A statement of the days and hours of operation shall be posted at the entrance to the facility.

4. Emergency conditions or unusual circumstances which require the performance of the activities which are authorized under A.1 after hours, shall be reported to the Department at (410) 537-3315 during normal business hours, or via the Department's Emergency line at (866) 633-4686 at other times.

5. The Department may authorize an extension of the facility's hours of operation in emergency conditions. This approval does not authorize any infringement of federal, State or local laws or regulations, such as local zoning and land use requirements.

B. Leachate Use:

Leachate generated at the Fort Armistead Road – Lot 15 Industrial Landfill may be sprayed on the working face of the landfill to improve compaction and dust suppression. Application shall be done using a water truck with front and rear application bars that extend downward. Leachate shall not be applied on the side slopes of the landfill, and the spray application shall not cause ponding and runoff of leachate.

C. Authorized Wastes for the Facility:

1. The landfill may only accept coal combustion byproduct wastes generated from Brandon Shores, H.A. Wagner, and C.P. Crane energy generating plants.

2. The landfill may accept filter bag waste generated from Brandon Shores and C.P. Crane energy generating plants.

3. The landfill may accept wastewater solids generated from Brandon Shores, H.A. Wagner, and C.P. Crane energy generating plants.

D. Monitoring Parameters:

1. The permittee shall submit to the Department a semiannual water quality report containing summary and interpretative discussion of all analyses of the chemical quality of groundwater from all of the monitoring wells for the following parameters:

TABLE III
MONITORING PARAMETERS

ELEMENTS AND INDICATOR PARAMETERS	PQL (ppm)	*ELEMENTS AND INDICATOR PARAMETERS*	PQL (ppm)
Total Aluminum	0.0020	Total Selenium	0.0120
Total Antimony	0.0020	Total Silver	0.0100
Total Arsenic	0.0040	Total Sodium	0.20
Total Barium	0.0100	Total Sulfate	0.38
Total Beryllium	0.0020	Total Thallium	0.0020
Total Boron	0.013	Total Vanadium	0.0100
Total Cadmium	0.0040	Total Zinc	0.0100
Total Chromium	0.0100	PH	0.1 (SU)
Total Calcium	0.08	Alkalinity	1
Total Cobalt	0.0100	Hardness	0.5
Total Copper	0.0100	Chloride	0.39
Total Iron	0.0050	Specific Conductance	1
Total Lead	0.0020	Nitrate	0.06
Total Lithium	0.016	Chemical Oxygen Demand	1
Total Magnesium	0.004	Turbidity	0.11 (NTU)
Total Manganese	0.0100	Ammonia	1
Total Mercury	0.0002	Total Dissolved Solids	10
Total Molybdenum	0.016	Fluoride	0.5
Total Nickel	0.0110		
Total Potassium	0.39		

This list of parameters supersedes all monitoring parameters listed under Tables I and II of Part III: General Conditions, pages 12 of 18, 13 of 18, and 14 of 18.

2. Upon detection of (i) the exceedance of an MCL, Action Level or other health standard, or (ii) sulfate in a concentration in excess of 150 mg/l (the "Sulfate Threshold"), for the first time, the monitoring points(s) in which the standard was exceeded must be immediately resampled to verify the initial detection. This resampling must occur as soon as possible, and no later than 30 days following notification of the permittee of the exceedance of the standard by the analytical laboratory performing the analysis of the sample which indicated the exceedance. If the resampling does not result in an exceedance, but the mean average of the initial exceedance and the first resampling exceeds the MCL, Action Level or other health standard or the Sulfate Threshold, as applicable, then a second resampling shall be performed as soon as possible, and no later than 30 days following the first resampling. If the first or second resampling exceeds the MCL, Action Level, or other health standard or the Sulfate Threshold, as applicable, the exceedance will be evaluated in terms of a potential release from the fill area. The well sampling frequency will be increased to quarterly for the parameter(s) for which there is an observed exceedance. If an exceedance is confirmed to be due to a potential release from the fill area, an action plan to reduce the parameter concentration below the applicable trigger level will be prepared and submitted to the Department within 30 days. The sampling frequency will return to semi-annually when it is demonstrated that over a period of one year, the fluctuation of the parameter concentrations detected in the quarterly samples is less than 5 percent of the mean concentration, or the parameter concentration decreases to below the applicable standards for three consecutive sampling events.

   This paragraph D.2 replaces and supersedes the requirements listed in Part III: General Conditions, paragraph F.2.k.

3. The historic parameter data contained within the report entitled "Analysis of Groundwater Analytical Data, Millennium Hawkins Point Plant Landfill for the July, 2010 Sampling Event", and the parameter data collected after July 2010 and before placement of CCBs, shall be used to establish the background data for the 65-acre parcel. The Department shall approve all data used as background data. Upgradient groundwater quality data shall be used to determine the contributions from sources outside the 65-acre parcel.

E. Financial Guarantees:

1. The permittee shall maintain a $1,300,000 bond throughout the operational life of the facility.

2. Upon closure and capping of the landfill to the satisfaction of the Department, the permittee shall maintain a $1,500,000 bond throughout years 1-5 of the post-closure period, a $1,000,000 bond throughout years 6-10 of the post-closure period, and a $500,000 bond throughout years 11-15 of the post-closure period.

F. Duration of Post-Closure Period for the Facility:

At least six months prior to cessation of landfilling operations, the permittee shall submit a closure plan to the Department for review and approval. The plan shall specify a post-closure monitoring and maintenance period of not less than 15 years.

G. Plans and Specifications:

The approved plans and specifications under Part I and Part II of this permit shall be considered to override any conflicting requirements under Parts III and IV of this permit. All requirements in Parts III and IV that are not overridden by an approved plan or specification under Part I or II of this permit remain valid and enforceable.

Part III: General Conditions (Applicable to Industrial Waste Landfills):

A. Waste Restrictions:

1. The permittee may only accept industrial waste as specified in this facility's Refuse Disposal Permit Application and its supporting documents identified in Part I of this permit, except as restricted or prohibited in this condition.

2. The following waste materials are specifically prohibited from being accepted at this site, regardless of their origin or type:

   a. Controlled hazardous substances, defined as hazardous waste in Code of Maryland Regulations (COMAR) 26.13.02, unless specifically authorized by a valid permit issued under COMAR 26.13.07;

   b. Liquid waste or any waste containing free liquids, as determined by the EPA method 9095 Paint Filter Liquids test, as outlined in the EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Volume One, Section C, Laboratory Manual Physical/Chemical Methods", Third Edition, dated November 1986;

   c. Special medical waste as defined in COMAR 26.13.11.02.B(11);

   d. Radioactive hazardous substances as defined in COMAR 26.15.02;

   e. Automobiles;

   f. Drums or tanks, unless empty and flattened or crushed with the ends removed; drums or tanks that have held hazardous waste shall be emptied properly in accordance with COMAR 26.13.02.07;

   g. Animal carcasses resulting from medical research activities or destruction of diseased animals harboring diseases transmittable to humans, unless acceptance of the carcass(es) is ordered by the local county health officer, and the carcasses are covered with soil immediately upon deposition at the working face of the landfill;

   h. Untreated septage or sewage scavenger waste;

   i. Chemical or petroleum cleanup material, unless:

      i. the nature of the spilled substance is known;

      ii. the spilled material is not a controlled hazardous substance as defined in COMAR 26.13.02;

iii. the spilled material is not likely to adversely affect the landfill liner; and

iv. the spilled substance is contained in an absorbent material of sufficient excess volume that the material deposited at the landfill does not exhibit free liquids as defined in Part III.A.2(b) of this permit.

j. Truckloads of separately collected yard waste for final disposal, unless the permittee provides for composting or mulching of the yard waste;

k. Loads of separately collected food waste for final disposal unless the owner or operator provides for the organics recycling of the food waste; and

l. Scrap tires, unless the Department authorizes the acceptance and processing of scrap tires as required COMAR 26.04.08.

3. If sewage sludge, processed sewage sludge, or any other product containing these materials is proposed for storage, handling, or utilization at the facility, a separate application shall be submitted to the Biosolids Division for a sewage sludge utilization permit. That permit must be issued prior to the acceptance on site of any sewage sludge.

4. The Department, upon written request of the permittee, may amend the list in Part III.A. If the Department denies the permittee's request or unilaterally determines to limit or exclude a waste stream from being disposed of at the landfill, the permittee will be notified of the Department's decision in writing and will be provided an opportunity for a hearing in accordance with the Administrative Procedure Act.

B. Cell Floor Construction:

1. The permittee shall notify the Department in writing 5 working days prior to the anticipated start of each phase of floor construction including floor grading and compaction, liner installation, and leachate collection system installation.

2. No waste emplacement may commence in any area of the landfill, unless said area of the cell floor has been constructed and graded in accordance with the approved plans and specifications.

3. During construction of each area of the landfill, the edges of each landfill cell or subcell shall be marked to indicate where the edge of the permitted disposal area is located:

   a. For the exterior edges of cells, which delineate the boundary of the area permitted for solid waste acceptance and disposal, a permanent means of marking such as durable posts set in concrete shall be placed around the boundary every 250 feet. The posts shall be placed as close to the solid waste boundary as is possible without causing damage to the liner or other pollution control systems, and if more than 1 foot away, shall have a durable marking indicating the amount of offset from the permitted disposal area. In no case shall the post be more than 5 feet away from the solid waste boundary unless otherwise approved by the Department;

   b. For the interior edges of subcells, where a new waste disposal area will eventually be constructed contiguous to an existing solid waste disposal area, a semipermanent method of demarking the prepared disposal area such as wooden or fiberglass stakes shall be installed no more than 100 feet apart, and at every corner or significant change in direction. These stakes shall be placed within 1 foot of the edge of the prepared area, and shall be checked and repaired as necessary. The marking may only be removed in accordance with an approved schedule for construction of the adjacent subcell. Care must be taken to insure that the liner, leachate collection system, and other pollution control systems are not damaged by the installation of the markers;

   c. Posts, stakes or other approved methods must be maintained in a serviceable condition at all times, and repaired as necessary; and

   d. Alternative means may be substituted if approved by the Department.

4. No liner and leachate collection system installation may commence in any cell unless the following requirements are fulfilled:

   a. The design of the liner and leachate collection system shall comply with the minimum requirements specified under COMAR 26.04.07.07C(12), unless otherwise approved by the Department. The design of the liner and leachate collection system must be approved by the Department before installation begins;

b. If applicable, a plan for the installation of synthetic membrane sections, illustrating overlap and seams, and sequence of installation shall be prepared and submitted to the Department at least 10 days prior to the start of liner installation;

c. If applicable, the sub-base for the synthetic membrane must be cleared of tree stumps, roots, vegetation, rubble, debris, angular rocks or stones, sharp-edged objects, and any material that may puncture or damage the overlying synthetic membrane to a maximum particle size established in accordance with the manufacturer's recommendations;

d. Sub-base construction must be conducted in lifts not to exceed 6 inches in thickness and compacted to the required density prior to addition of another lift; and

e. To ensure that the highest quality sub-base layer and synthetic membrane field seams are produced, continuous monitoring of all sub-base construction and synthetic membrane seaming operations shall be conducted by trained, experienced construction quality assurance monitors. In addition, undisturbed samples of the sub-base shall be tested for as-constructed permeability and 100% of all field seams shall be field tested (using an approved test method) as part of the liner installer's construction quality control activities. A quality assurance/quality control plan shall be submitted to the Department for review and approval. Quality assurance/quality control shall be performed by an independent contractor not associated with the construction contractor.

5. Synthetic membrane other than that specified in the approved plans and specifications may be used upon prior written approval from the Department.

6. The synthetic membrane sheets shall be properly seamed in accordance with the manufacturer's recommendations. All field seams shall be visually inspected and tested using the vacuum chamber method, air lance method or other nondestructive testing methods as recommended by the manufacturer. Construction verification tests including seam integrity verification, liner thickness, liner and seam strength, and other parameters shall be included in the quality assurance/quality control plan approved by the Department. Any imperfect seams, holes, punctures, and damaged areas shall be completely repaired or replaced as necessary to ensure the liner integrity. All factory seams shall be checked visually.

7. Any method of liner and leachate collection system construction which departs or varies in any way from those methods described in the approved plans and specifications or the procedures specified herein shall be approved in writing by the Department before construction.

8. An independent engineer or the manufacturer of the perforated and un-perforated pipes and fittings used in construction of the leachate collection system shall certify that:

   a. The material meets the required standards and specifications as addressed in the approved plans and specifications;

   b. The pipes have a maximum 7.5% allowable ring deflection, unless otherwise specified in the approved plans;

   c. The pipes have factors of safety against crushing and buckling of 2 or greater under dynamic (short duration) loading and 24 hours stationary (long duration) loading from landfill equipment and vehicles; and

   d. The pipes are new and not defective.

9. All piping projections through the synthetic membrane liner shall be properly installed in accordance with the plans and specifications.

10. Each leachate collection pipe shall be inspected prior to installation, and tested to ensure that no clogging exists, that it is a properly manufactured pipe, and that it was not changed in transit.

11. The leachate collection pipes, storage unit(s), and sumps shall be tested for leaks after installation.

12. The permittee must obtain certification from the manufacturer(s) that the synthetic membrane to be used as liner has thickness as specified in the approved plans and specifications with a permeability less than or equal to 1×10^{-10} cm/sec, and meets all of the applicable ASTM standards. A copy of the certification must be appended to the approved plan for the facility and provided to the Department within 60 days of receipt of the certification.

13. Following the satisfactory installation of the cell floor liners, the overlying layer shall be placed as soon as is practical for the protection of the liner.

14. No waste placement may commence in any cell unless and until the following requirements are fulfilled:

   a. All monitoring wells have been installed, sampled and analyzed by the permittee in accordance with the approved monitoring program

for the establishment of background water quality;

b. The cell floor liner and leachate collection system have been installed in accordance with the approved plans and specifications, and the requirements of this permit;

c. A minimum of 1 foot of pea gravel or other approved drainage material shall be placed to provide for the free passage of leachate to the liner and to serve as a protective layer for the liner and leachate collection system; and

d. Representatives of the Department have inspected and approved the construction of the cell floor.

C. Protection of Liner and Leachate Collection System:

A minimum of 4 feet of select industrial waste containing no long pipes, boards, or other materials that could damage the liner and leachate collection system must be placed over the protective layer before compaction, to minimize the risk of damage to the liner and leachate collection system. No refuse hauling vehicles, equipment used for landfill operations, or any heavy equipment shall operate over the leachate collection pipes and liner on the floor and side of the cell slopes until there is at least 4 feet of select industrial waste placed upon the protective drainage layer. The permittee must notify the Department prior to the placement of the select waste.

D. Leachate:

1. All ponded leachate occurring in areas that are not part of an approved leachate collection or treatment system shall be collected and treated in accordance with this permit.

2. Untreated leachate or contaminated liquid may not be discharged to the waters of the State, without prior approval of the Department. The permittee must notify the Department within 1 hour of becoming aware of any leachate or contaminated liquid discharge leaving the site or having the potential of being released off-site.

3. If applicable, all leachate collected in the leachate collection system shall be stored in the leachate storage unit(s) as specified in the approved engineering plans and reports referenced in Part I of this permit. Leachate shall be discharged to the sanitary sewer system or an approved waste water treatment plant in compliance with the provisions of COMAR 26.08.08 unless other methods of disposal are permitted by the Department.

4. Leachate or other contaminated liquids shall not be discharged, recirculated, or treated on site without prior approval of the Department. Any approved modifications to plans and specifications will be incorporated by reference as part of this landfill's permit.

5. The permittee shall monitor the leak detection unit, if any, at least twice each month and include the results in the semiannual report on water quality referenced in this permit.

6. Except for a leachate collection system relying solely on free gravity drainage to prevent leachate from ponding on the cell floor, the level of leachate in the leachate collection system shall be monitored a minimum of twice each operating day except Sundays and holidays. The data shall be recorded and initialed by the person performing the monitoring. Results are to be included in each semiannual report on water quality referenced in this permit.

7. To ensure the integrity and proper operation of the landfill's leachate storage unit(s), all leachate storage unit(s):

    a. Shall be either tested annually, be equipped with a release detection system, or have some other method of determining leakage that is approved by the Department; and

    b. Shall be equipped with a level sensor that will, if the storage unit is nearly full, activate an audible alarm in the landfill office and a red light that is visible from the public road at all times of the year. The alarm and light shall be tested weekly and the results of these tests included in the semiannual report on water quality referenced in this permit. A sign shall be posted at the gate with instructions to notify the appropriate local and State emergency numbers, including the Department's phone number, if the light is on when the site is closed. Upon request, the Department may approve alternative alarm notification systems.

8. Commencing on the day that solid waste is received at the landfill, the permittee shall monitor the quantity of leachate and other contaminated liquids collected each and every calendar month. The results of this monitoring shall be included in the semiannual report on water quality as required by the landfill's permit. The report shall include:

   a. The volume of leachate or other contaminated liquid collected monthly. Quantities shall be reported in gallons or cubic feet;

   b. The method used to measure the quantities of leachate coming from the leachate collection systems;

   c. The volume of liquid discharged to a sanitary sewer. Quantities shall be reported in gallons or cubic feet;

   d. The volume of liquid disposed of by any means other than that specified in (c). Quantities shall be reported in gallons or cubic feet;

   e. The results of any chemical analyses performed on the collected liquid; and

   f. The estimated total amount of cumulative precipitation received at the landfill based on local climatological data. Quantities shall be reported in inches and the source of the data shall be stated in the report.

9. If applicable, means for separating and diverting uncontaminated storm water from the leachate collection system within lined landfill cells may be proposed by the permittee. If approved by the Department, the plans and specifications for the separation and diversion of uncontaminated storm water shall be incorporated into and become as part of this permit. Until such plans are approved, all water collected from cells containing refuse shall be treated as leachate.

10. Should a force main be constructed to convey leachate to a sewer system, the following conditions shall be met:

   a. All pretreatment requirements established in COMAR 26.08.08 shall be met;

   b. A flow meter shall be installed, with results to be recorded daily and included in the semiannual report on water quality referenced in this permit. Upon request, the Department may approve an alternative accurate flow measurement method; and

   c. The force main shall be pressure tested prior to use, by a method to be proposed to and approved by the Department.

E. Water Level Measurement:

1. The water elevations in all existing monitoring wells and piezometers shall be measured monthly and the readings shall be included in the semiannual water quality report referenced in this permit.

2. If examination of this information by either the permittee or the Department indicates that groundwater elevations have risen to encroach upon any existing or proposed cell floors, the bottom elevations of all subsequently constructed cells shall be raised. Except as permitted by the regulations, the increase in elevation shall be sufficient to insure a minimum buffer of 3 vertical feet between the base of any unconstructed fill areas, as well as the base of any unfilled areas of the waste cell currently being filled, and the highest observed or expected water level. A revised plan and specifications of all cell floors to be constructed, depicting these changes, shall be submitted to the Department for review and approval prior to commencement of construction of any cell area.

F. Written Reports on Water Quality Analysis:

1. Within 90 days of the effective date of this permit, the permittee shall submit a hard copy and a searchable electronic/digital copy to the Department for review and approval a Groundwater and Surface Water Monitoring (G&SWM) Plan. The Plan shall be prepared in accordance with COMAR 26.04.07.20D(2) and guidelines established by the Department.

2. a. The permittee shall submit to the Department a semiannual water quality report containing summary and interpretative discussion of all analyses of the chemical quality of groundwater from all of the monitoring wells and all of the surface water monitoring points specified in the approved G&SWM Plan;

   b. The semiannual water quality report shall be submitted to the Department within 90 days of the close of every first and third calendar quarters unless an alternative schedule is specified in the approved G&SWM Plan;

c. Sampling shall occur during the period between January through March and July through September of each year unless an alternative schedule is included in the G&SWM Plan and approved by the Department;

d. The permittee shall arrange for a qualified groundwater scientist to sample, or to oversee qualified environmental technicians who sample the wells twice annually at the intervals specified in the approved G&SWM Plan;

e. The parameters to be measured and their Practical Quantitation Limits (PQL) are listed in Tables I and II of this permit. The Department may approve an alternative list of parameters or an alternative PQL for any parameter;

f. The sampling, sample handling, analyses and reporting of analytical parameters shall be performed in accordance with the approved G&SWM Plan;

g. A qualified independent laboratory certified for water quality analysis by the Department or which is otherwise acceptable to the Department shall perform the analyses;

h. A qualified groundwater scientist or professional shall evaluate the results and advise the permittee of any changes in water quality or any exceedance of the State and federal Maximum Contaminant Level (MCL), Action Level or other health standard;

i. A complete copy of the laboratory data, and the qualified groundwater scientist or professional's interpretive findings shall be included in each semiannual water quality report referenced in this permit;

j. If analytical results from samples collected from any sources associated with the landfill or surrounding properties exceed MCL, Action Level, or other health standard for the first time, the permittee must notify the Department within 24 hours of receipt of the analytical data detecting this occurrence. Thereafter, if there is any significant increases above the MCL, Action Level, or other health standard, the permittee must notify the Department within 24 hours of receipt of the analytical data verifying this occurrence;

k. Upon detection of the exceedance of an MCL, Action Level or other health standard for the first time, the monitoring point(s) in which the standard was exceeded must be immediately resampled to verify the initial detection. This resampling must occur as soon as possible, and no later than 30 days following receipt of the analytical data by the permittee or the qualified groundwater scientist or professional who is reviewing the analytical data which indicated the exceedance. If the permittee accepts the initial sampling result as a valid result, then the permittee can elect to not resample the monitoring point(s);

l. All data for each well must be summarized and presented in time series format. The data for each well must be presented in a spreadsheet so that the water quality data for each parameter for each well can be observed simultaneously; and

m. All "J" values must be reported. "J" values are analytical results that are below the PQL but can be estimated.

MDE MONITORING PARAMETERS - TABLE I

Volatile Organic Compound Monitoring Parameters	Units	PQL	MCL	NCTS	Cleanup STD
Acetone	µg/L	5.0			1400
Acrylonitrile	µg/L	5.0		0.51	
Benzene	µg/L	1.0	5.0	22	5.0
Bromochloromethane	µg/L	1.0			
Bromomethane	µg/L	1.0			0.75
2-Butanone	µg/L	5.0			560
Carbon disulfide	µg/L	1.0			81
Carbon tetrachloride	µg/L	1.0	5.0	2.3	5.0
Chlorobenzene	µg/L	1.0	100	130	100
Chloroethane	µg/L	1.0			
Chloromethane	µg/L	1.0			19
1,2-Dibromo-3-chloropropane; (DBCP)	µg/L	0.04	0.2		0.20
1,2-Dibromoethane; (EDB)	µg/L	0.04	0.05		0.050
Dibromomethane	µg/L	1.0			
1,2-Dichlorobenzene	µg/L	1.0	600	420	
1,4-Dichlorobenzene	µg/L	1.0	75	63	
trans-1,4-Dichloro-2-butene	µg/L	5.0			
1,1-Dichloroethane	µg/L	1.0			2.8
1,2-Dichloroethane	µg/L	1.0	5.0	3.8	5.0
1,1-Dichloroethene	µg/L	1.0	7.0	330	7.0
cis-1,2-Dichloroethene	µg/L	1.0	70		70
trans-1,2-Dichloroethene	µg/L	1.0	100	140	100
Methylene chloride	µg/L	1.0	5.0	46	5.0
Methyl *tert*-butyl ether; (MTBE)	µg/L	2.0			20
1,2-Dichloropropane	µg/L	1.0	5.0	5.0	5.0
trans-1,3-Dichloropropene	µg/L	1.0			
cis-1,3-Dichloropropene	µg/L	1.0			
Ethylbenzene	µg/L	1.0	700	530	700
2-Hexanone	µg/L	5.0			
Iodomethane	µg/L	1.0			
4-Methyl-2-pentanone	µg/L	5.0			630
Styrene	µg/L	1.0	100		100
1,1,1,2-Tetrachloroethane	µg/L	1.0			
1,1,2,2-Tetrachloroethane	µg/L	1.0		1.7	0.076
Tetrachloroethene; (PCE)	µg/L	1.0	5.0	6.9	5.0
Toluene	µg/L	1.0	1000	1300	1000
1,1,1-Trichloroethane	µg/L	1.0	200	200	200
1,1,2-Trichloroethane	µg/L	1.0	5.0	5.9	5.0
Trichloroethene; (TCE)	µg/L	1.0	5.0	25	5.0
Trichlorofluoromethane; (CFC-11)	µg/L	1.0			
1,2,3-Trichloropropane	µg/L	1.0			
Vinyl acetate	µg/L	1.0			
Vinyl chloride	µg/L	1.0	2.0	0.25	2.0
o-Xylene	µg/L	1.0	10,000 (total)		10,000
m-+*p*-Xylenes	µg/L	1.0			
Bromodichloromethane	µg/L	1.0	80 (total)	80 (total)	80
Dibromochloromethane	µg/L	1.0			80
Bromoform	µg/L	1.0			80
Chloroform	µg/L	1.0			80

PQL = Practical Quantitation Limit
MCL = Maximum Contaminant Level
NCTS = Numerical Criteria for Toxic Substances in Surface Waters
Cleanup STD = MDE Cleanup Standards for Groundwater
µg/L = microgram per liter

MDE MONITORING PARAMETERS - TABLE I (cont.)

Per- and Polyfluoroalkyl Substances (PFAS)	Units	PQL	MCL	HI MCL[1]	HBWC
Perfluorooctanoic acid (PFOA)	ng/L	2.0	4.0		
Perfluorooctanesulfonic acid (PFOS)	ng/L	2.0	4.0		
Perfluorononanoic acid (PFNA)	ng/L	2.0		1.0 (unitless)	10
Perfluorohexanesulfonic acid (PFHxS)	ng/L	2.0			9.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	2.0			2000
Hexafluoropropylene oxide dimer acid (HFPO-DA; GenX)	ng/L	2.0			10

PQL = Practical Quantitation Limit (Method 1633)
MCL = Maximum Contaminant Level
HI MCL = Hazard Index MCL
HBWC = Health Based Water Concentrations

Note:
1 – A running annual average hazard index value greater than 1.0 is a violation of the HI MCL.
Formula: Hazard Index Value = (GenX ng/L)/(10 ng/L)) + ((PFBS ng/L)/(2000 ng/L)) + ((PFNA ng/L)/(10 ng/L)) + ((PFHxS ng/L)/(9 ng/L))

MDE MONITORING PARAMETERS - TABLE II

Elements & Indicator Monitoring Parameters	Units	PQL	MCL / SMCL	NCTS[1]	Cleanup STD
Total Antimony	µg/L	2	6	5.6	6.0
Total Arsenic	µg/L	2	10	0.18	10
Total Barium	µg/L	10	2000	1000	2000
Total Beryllium	µg/L	2	4	4.0	4.0
Total Cadmium	µg/L	4	5	0.25	5.0
Total Calcium*	µg/L	80			
Total Chromium	µg/L	10	100	100	100
Total Cobalt*	µg/L	10			
Total Copper+	µg/L	10	1300 (AL)	9	1300
Total Iron**	µg/L	5	300		1400
Total Lead	µg/L	2	15 (AL)	2.5	15
Total Magnesium*	µg/L	4			
Total Manganese**	µg/L	10	50		43
Total Mercury	µg/L	0.2	2	0.77	2.0
Total Nickel+	µg/L	11	100	52	39
Total Potassium*	µg/L	390			
Total Selenium	µg/L	35	50	5	50
Total Silver**	µg/L	10	100	3.2	9.4
Total Sodium*	µg/L	200			
Total Thallium	µg/L	2	2	0.24	2.0
Total Vanadium*	µg/L	10			8.6
Total Zinc**	µg/L	10	5000	120	600
Alkalinity*	mg/L	1.0			
Ammonia (as N)*	mg/L	1.0		See note[2]	
Chemical oxygen demand*	mg/L	10			
Chloride**	mg/L	0.39	250		
Hardness*	mg/L	0.50			
Nitrate (as N)	mg/L	0.06	10		
pH**	SU	0.1	6.5-8.5		
Specific conductance*	µS/cm	1.0			
Sulfate**	mg/L	0.38	250		
Total dissolved solids**	mg/L	10	500		
Turbidity	NTU	0.11	5		

Primary MCL
* = No MCL
* *= Secondary MCL
+ = No MCL but recommended level by EPA

PQL = Practical Quantitation Limit
MCL = Maximum Contaminant Level
SMCL = Secondary Maximum Contaminant Level
NCTS = Numerical Criteria for Toxic Substances in Surface Waters
Cleanup STD = MDE Cleanup Standards for Groundwater
AL = Action Level
µg/L = microgram per liter
mg/L = milligram per liter
µS/cm = microsiemens per centimeter
NTU = Nephelometric Turbidity Unit
SU = Standard Unit (logarithmic unit)

Note:
1 - Per COMAR 26.08.02.03-2F(1) - The metals shall be measured as dissolved metal ...
2 - See COMAR 26.08.02.03-2 for ammonia

3. The semiannual report on water quality must include a time series analysis of the data. The historical data from each well should be presented in a tabular form in each semiannual report. The discussion should emphasize historical trends in the data.

4. A copy of the most current topographic map generated by a survey performed as required in this permit shall be included in each semiannual report and shall depict the location of all monitoring wells and piezometers in existence at the time of the survey.

5. A copy of a current groundwater contour map depicting the location of all monitoring wells from which groundwater data is collected shall be included in each semiannual report on water quality. Multiple aquifers shall be depicted on separate groundwater contour maps.

G. Spreading and Compaction:

Industrial waste shall be spread in uniform layers and compacted to its smallest practicable volume before application of cover material.

H. Industrial Waste Lifts:

A lift of industrial waste may not exceed 8 feet in height, except as specifically authorized in writing by the Department.

I. Daily Cover:

If applicable, a uniform compacted layer of clean earth at least 6 inches in depth, or an approved cover material of a thickness specified by the Department, shall be placed over exposed solid waste by the end of each day's operation, or more frequently as may be determined by the Department. To meet approval, the cover material may not:

1. Contain free liquids, putrescible, or toxic materials. Moisture that is present in the cover material solely as a result of precipitation is not free liquid;

2. Create a dust or odor problem;

3. Attract or harbor vectors; and

4. Impede compaction of wastes by standard landfill equipment.

J. Final Cover:

1. A uniform compacted layer of earthen material not less than 2 feet in depth shall be placed over any part of the final lift of refuse not later than 90 days following completion of that final lift.

2. Areas which have received final cover shall be mowed at least once a year, or more often if necessary, to control growth of woody vegetation and to allow facility personnel to inspect for signs of erosion, settlement, ponding of water, and leachate seeps..

K. Grading and Drainage:

The disposal site shall be graded and drained to:

1. Minimize runoff onto the fill area of the industrial landfill;

2. Prevent erosion and ponding within the fill areas; and

3. Drain water from the surface of the industrial landfill.

L. Erosion and Sediment Control Plan:

The permittee shall have a signed copy of a valid Erosion and Sediment Control Plan prepared in accordance with the requirements of COMAR 26.17.01 and approved by the appropriate approving authority prior to the construction of the landfill as authorized by this permit. An approved plan as required under COMAR 26.17.01 that covers all areas of the permitted facility must be maintained at all times during the life of this permit.

M. Storm Water Management Plan:

1. The permittee shall have a signed copy of a valid Storm Water Management Plan prepared in accordance with the requirement of COMAR 26.17.02 and approved by the appropriate approving authority prior to the construction of the landfill as authorized by this permit.

2. Means for separating and diverting uncontaminated storm water from the landfill cells may be proposed by the permittee. If approved by the Department, the plans and specifications for the separation and diversion of uncontaminated storm water shall be incorporated into and become as part of this permit.

N. Water Supply Contingency Plan:

1. If a risk to public health due to contamination of the groundwater by the landfill has developed to the extent that provision for an alternative water supply for offsite water users may become necessary, the Department will require the permittee to draft a detailed engineering design plan describing the manner in which alternative water supplies will be provided to potentially affected areas around the landfill. This plan must be developed and submitted to the Department for review and approval. The draft plan shall be submitted to the Department for review within 1 year of

notification by the Department. The plan shall be revised in accordance with any reasonable requirement of the Department. The level of detail of the plan shall be sufficient to serve as construction and implementation documents for the proposed water supply. The plan shall also include a schedule of all activities necessary to implement the plan, including activities to be performed by the permittee to bid, oversee, and implement the plan, and all activities by contractors.

2. The area which the plan must contemplate for water supplies must, at a minimum, include all areas within 1/2 mile of the property boundary of the landfill as depicted in the reports referenced in Part I of this permit, and any other groundwater use located downgradient of the landfill. The plan must also contain provisions for expansion of the area of impact should it become necessary to protect the public health. The plan may also contain provisions for partial or staggered implementation, based on specific information about the cause and extent of the triggering event, which is available at the time of implementation.

3. Upon approval by the Department, the water supply contingency plan shall become attached as a part of this permit, by reference.

4. Should the Department determine that migration of contaminants from the property on which the landfill is located has occurred or is likely to occur, the permittee shall immediately implement the water supply contingency plan in accordance with the approved schedule.

O. Closure and Post-Closure:

When the design capacity has been exhausted, the permittee shall cap the landfill in accordance with the requirements of COMAR 26.04.07.21. Furthermore, at least 6 months prior to cessation of landfilling operations, a closure plan shall be submitted to the Department for review and approval. The plan shall contain the following elements:

1. A description of the methods to be used in closing out and capping the facility in an environmentally sound manner;

2. A description of the facility's post-closure activities including groundwater monitoring and maintenance of the closed facility as specified in COMAR 26.04.07.22;

3. A description of the future use of the facility upon closure; and

4. A deadline for the submission of a map based on an actual field survey, which depicts the final topography of the site upon closure.

P. Wetlands and Wildlife Protection:

1. Landfill construction and operation may not impact any regulated wetlands area until necessary authorization is received from the applicable State and federal wetland authorities. This includes construction of access roads, landfill cells, or other land disturbance, and pertains to wetlands regulated by the State of Maryland and the U.S. Army Corps of Engineers.

2. Landfill construction or facility operations, which may impact upon State or federally regulated endangered species, may not begin unless all necessary permits or authorizations are obtained from the applicable State or federal wildlife regulatory agencies.

Part IV: Standard Conditions (Applicable to All Solid Waste Acceptance Facilities):

A. Supervision:

This facility shall be under the supervision of a responsible individual present at the disposal site at all times during the operation.

B. Right of Entry:

The permittee shall allow the Department's authorized representatives, at reasonable times and upon presentation of credentials:

1. To enter this facility covered under this permit or where any records are required to be kept under the terms and conditions of this permit.

2. To have access to and copy any records required to be kept under the terms and conditions of this permit.

3. To inspect any equipment or process required in this permit.

4. To inspect any collection, treatment, pollution management or control facilities, or transport vehicles, required by this permit.

5. To sample any waste, groundwater, surface water, soil or vegetation on the site.

6. To obtain photographic documentation or evidence.

C. Controlled Access:

Access to this facility shall be controlled at all times. Gates, fencing, and other ingress/egress controls around the perimeter of this facility shall be adequate to control access when this facility is not in operation. All gates shall be locked when this facility is unattended. Access shall be limited to those times when authorized personnel are on duty at this facility.

D. Overall Operation:

The permittee shall take all measures necessary to control pollution, health hazards or nuisances. This facility shall be operated and maintained in such a manner as to prevent air, land, or water pollution, public health hazards or nuisances.

E. As-Built Plans:

The permittee shall submit to the Department 2 hard copies and 1 electronic copy of certified as-built plans no later than 90 days after completion of the work under this permit.

F. Inspection of Incoming Waste:

1. The permittee shall inspect all incoming loads of solid waste material to insure that no unacceptable waste types, as herein defined in Part III of this permit, are included in the load. The permittee may conduct this inspection by observing wastes as they are deposited, transferred or processed.

2. If an unacceptable solid waste is identified during the tipping and/or inspection process, the permittee shall reject the unacceptable solid waste and advise the generator or hauler of the reason for rejection.

3. If the source of an unacceptable solid waste is unknown, the permittee shall dispose off-site all discovered unacceptable solid waste in a manner consistent with all applicable laws and/or regulations.

4. The permittee shall immediately (within 2 hours) report to the Department at (410) 537-3315 or (866) 633-4686 after working hours all incidents of discovery of any unacceptable hazardous waste materials in a load of waste. The permittee shall then submit to the Department a written report within 5 working days following the discovery. When the source of waste is known, the written report shall include the source of the waste, the transporter of the waste, the circumstances of discovery, a description of efforts to secure and control the waste and any release of pollutants from the waste, the current location and if known, the final disposition of the waste. If the source of waste is unknown, the written report shall include the circumstances of discovery, a description of efforts to secure and control the waste and any release of pollutants from the waste, and the current location and final disposition of the waste. If the source of unacceptable hazardous waste is known, the permittee shall reject the waste material and advise the generator or hauler of the reason of rejection. If the source of unacceptable hazardous waste is unknown, the permittee shall separate and handle the waste material in accordance with the applicable requirements of COMAR 26.13.02 "Disposal of Controlled Hazardous Substances".

G. Personnel, Equipment and Maintenance:

The permittee shall provide adequate personnel and equipment to insure proper construction and operation of this facility. Provisions shall be made for equipment repair or replacement as required. Substitute equipment shall be obtained when breakdown or maintenance renders essential operating equipment inoperative for a period in excess of 24 hours during days of operation.

H. Roads:

1. The permittee shall provide all-weather access roads to the disposal site or receiving area, and to all required pollution control and monitoring systems and devices.

2. Roads shall be maintained in a serviceable manner to allow passage by a waste hauling, emergency, or inspection vehicle, and to prevent the tracking of soil, ash, or waste onto any public road and/or to cause a public nuisance. If necessary, vehicles shall be cleaned prior to leaving this facility. Additional actions or facilities may be required at the discretion of the Department in order to control sediment tracking.

I. Dust and Noise Control:

1. Dust shall be controlled through the application of water to roads, operational procedures designed to limit disturbance of bare soils, and other practices approved by the Department. No chemical, oil or petroleum product shall be used for the control of dust without prior written approval from the Department.

2. Operations of the facility shall be conducted in a manner that conforms to the applicable noise provisions of COMAR 26.02.03. This permit does not authorize the violation of any local noise control laws or ordinances which may be enforced by the local government.

J. Litter Control:

1. Scattering of wastes by wind or other means shall be controlled by fencing or other barriers that are engineered and maintained in a manner that prevents litter from leaving the permitted facility.

2. The entire site shall be policed daily or more often, as needed, to prevent nuisance conditions. Litter that has scattered beyond the disposal site or receiving area, entered drainage features or surface water features, or has accumulated along litter fencing or other barriers, shall be picked up daily and placed in the disposal site or receiving area.

K. Liquids Management:

1. Under no circumstances may any collected contaminated liquids be discharged by any means, except to the sanitary sewerage system or any permitted treatment facility, without written authorization from the Department. Any discharge to a sanitary sewerage system shall comply with the applicable provisions of the state's pretreatment program, as described in COMAR 26.08.08.

2. Storm water management at this facility shall be in accordance with the requirements of COMAR 26.17.02. Any point source discharge of pollutants to waters of the state is prohibited unless permitted by the Department. Any pollutants from the handling, transfer, or storage of wastes, including accidental spills and rainfall events, shall be collected or disposed of in a manner approved by the Department.

L. Fuel Storage:

Fueling of equipment and vehicles shall be conducted with care to avoid spilling or overfilling. The storage tanks and fuel distribution facilities shall be installed and maintained in accordance with the applicable requirements of COMAR 26.10.01 through COMAR 26.10.11 inclusive, and with the requirements of local fire prevention agencies. Any spilled fuel shall be cleaned up immediately. Disposal of spilled fuel may only take place at an incinerator, municipal landfill or oil handling facility permitted to accept this material.

M. Fire Control:

1. Solid waste may not be burned at this facility except as permitted by the Department.

2. The permittee shall take suitable measures to control and prevent fires that may occur during the operation of this facility.

N. Removed Pollutant Substances:

Unless previous written approval for disposal has been given by the Department, wastes such as solids, sludge, or other materials removed from or resulting from the treatment or control of waste waters or facility operations, shall be disposed of at a facility approved to accept such materials, and in a manner to prevent any removed substances or runoff from such substances from entering or from being placed in a location where they may enter the waters of the state.

O. Pollution Monitoring and Control Device Requirements:

1. All pollution control and ground and surface water monitoring systems (including storm water management and sediment control systems) shall be installed in accordance with the manufacturer's recommendations and plans and specifications approved by the Department. All pollution control and ground and surface water monitoring systems shall remain operational and shall be maintained in accordance with the provisions of the approved plans and specifications.

2. Any incidence of damage to this facility's monitoring or pollution control systems shall be reported to the Department at (410) 537-3315 within 2 hours of the incident, or within 2 hours of the discovery of the damage if the damage occurred outside of working hours. All repairs needed to correct the damage shall be completed as soon as practical or as specified by the Department.

3. During construction and operation of this facility, the sediment and storm water basins shall be cleaned out whenever (a) a clean-out elevation is reached; (b) construction is completed; (c) the amount of sediment reaches 50% capacity, and/or (d) as specified by the approved Sediment and Erosion Control Plan.

P. Penalties for Tampering:

Section 9-343 of the Environment Article, Annotated Code of Maryland, provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines, or by imprisonment, or by both.

Q. Records Retention:

1. All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, original recordings from continuous monitoring instrumentation, and inspection results shall be retained by the permittee on-site or at another location upon written approval of the Department, for a minimum period of 5 years.

2. All documents listed in Part I: A. Operating Documents of this permit shall be retained by the permittee on-site for the life of the permit. Historical documents listed in Part I may be retained at an off-site location.

R. Annual Report:

An annual report shall be submitted to the Department concerning the operation and status of this facility for each calendar year that this facility is in operation. The annual report shall be for the calendar year ending December 31 and shall be submitted by March 1 of the following year on the form provided by the Department.

S. Duty to Provide Information:

The permittee shall furnish to the Department within a reasonable time, any information that the Department may request, to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit, or to determine compliance with this permit.

T. Alterations:

Any modification to this facility or its operating plans must be approved in writing by the Department prior to implementation. Modifications include, but are not limited to, any changes that alter a significant structural feature, operational procedure, element of design, type of equipment or method of construction described in the approved plans and specifications for this facility and defined herein.

U. Operation and Maintenance Manual:

The permittee shall review the Operation and Maintenance Manual (O&M) for this facility prior to permit renewal. If a change has occurred to the operation or maintenance of the facility, the permittee shall submit to the Department an addendum to the O&M to reflect the change.

V. Application for Renewal:

1. At least 2 weeks before the expiration date of this permit, unless permission for a later date has been granted by the Department, the permittee shall submit a new application for renewal of the authorization to continue to operate under the provision of this permit or notify the Department of the intent to cease operating by the expiration date. In the case of landfill systems, the application shall be submitted in accordance with Section 9-213 of the Environment Article, Annotated Code of Maryland. In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the permittee, to renew this permit before its expiration date, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

2. The Department may refuse to renew this permit if the permittee violates the terms or conditions of this permit or state law and regulations, in accordance with Section 9-214 of the Environment Article, Annotated Code of Maryland.

W. Closure:

1. When operations end, the permittee shall close this facility in a manner that prevents erosion, health and safety hazards, nuisances, and pollution.

2. All remaining solid wastes, not properly disposed of, shall be transferred to a permitted facility for proper disposal.

3. If applicable, the surety bond for this facility as specified in Sections 9-211 or 9-211.1 of the Environment Article, Annotated Code of Maryland or other financial assurance required by State, federal, or local regulations, shall be utilized to the extent necessary to remediate the

facility if the permittee does not close this facility in a proper manner, and the Department:

a. Notifies the permittee and corporate surety on the bond that the facility is not properly closed;

b. Specifies in the notice, the deficiencies that must be addressed;

c. Gives the permittee and the corporate surety a reasonable opportunity to correct the deficiencies and close the facility in accordance with the regulations of the Department; and

d. Authorizes the local governing body or other agency to use the surety bond to close the facility in accordance with the regulations of the Department.

X. Transfer of Permit or Ownership:

1. This permit is valid only for the permittee named and may not be transferred to another entity without first obtaining a new Refuse Disposal Permit from the Department for the new entity.

2. In the event of any change in control or ownership of the property, the permittee shall notify the succeeding owner by certified mail, of the existence of this permit and of any outstanding permit noncompliance, a minimum of 30 days prior to transfer. A copy of this notification shall also be forwarded to the Department at the same time.

Y. Compliance:

1. The permittee shall comply with the terms and conditions of this permit, and with all applicable federal, local and State laws and regulations.

2. If for any reason the permittee does not comply or is unable to comply with any of the terms and conditions of this permit, the permittee shall notify the Department at (410) 537-3315 on the same day or on the next working day, following any noncompliance. Within 5 working days after this notification, the permittee shall provide the Department with the following information in writing:

   a. Descriptions of the noncompliance, including dates, time, and type of noncompliance;

   b. Cause of noncompliance;

   c. Anticipated time the noncompliance is expected to continue or if such condition has been corrected;

d. Steps taken by the permittee to correct the noncompliance; and

e. Steps to be taken by the permittee to prevent recurrence of the noncompliance.

Z. Local Solid Waste Management Plan/Zoning and Land Use Requirements:

1. Nothing in this permit authorizes the construction or the operation of this facility when it is not in conformance with the local solid waste management plan, or zoning or land use requirements. The issuance of this permit does not prevent any duly authorized local authority from taking action to enforce applicable zoning, planning and land use requirements, or provisions of the local solid waste management plan.

2. This permit may be suspended or revoked upon a final, unreviewable determination that the permittee lacks, or is in violation of, any federal, State or local approval necessary to conduct the activity authorized by this permit.

AA. Civil and Criminal Liability:

Nothing in this permit shall be construed to neither preclude the institution of any legal action nor relieve the permittee from civil or criminal responsibilities and/or penalties for non-compliance with Title 9 of the Environment Article, Annotated Code of Maryland, or any federal, local or other State laws or regulations.

BB. Penalties for Violations of Permit Conditions:

Section 9-268 of the Environment Article, Annotated Code of Maryland, provides that, except for violations of Part III of that subtitle and violations enforced under Section 9-267 of that subtitle, the provisions of Sections 9-334 through 9-342 of Subtitle 3 of that title shall be used and shall apply to enforce violations of:

1. That subtitle;

2. Any regulation adopted under that subtitle; or

3. Any permit issued under that subtitle.

CC. Property Rights:

The issuance of this permit does not intend to convey any property rights in either real or personal property, or any exclusive privilege or franchise, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.

DD. Severability:

If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect, and such invalid provision shall be considered severed and deleted from this permit.

EE. Signatory Requirements:

All applications, request for alterations, renewal requests, or monitoring reports submitted to the Department shall be signed and verified in accordance with Section 1-201 of the Environment Article, Annotated Code of Maryland, by the permittee or authorized representative of this facility as being true.

APPENDIX B
Annual Inspection Form and Photolog

Unit ID	Cells 1 – 3	Unit Name	Lot 15 Landfill
Unit Location	Baltimore, MD		
Date of Previous Inspection	11 December 2024	Date of Inspection	4 December 2025
Owner/Operator	Talen Energy	Engineer	Davis R. Garrett
Contact Person	Danielle Formato, Environmental Compliance Professional	PE License	MD 55501
Address	2030 Brandon Shores Rd Baltimore, MD 21226	Address	10211 Wincopin Circle, 4th Floor Columbia, MD 21044
Phone	410.787.6417	Phone	410.381.4333

REVIEW OF AVAILABLE DESIGN AND CONSTRUCTION INFORMATION

CFR §257.84(b)(1)(i) – Annual inspection must include, at a minimum, *a review that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards.*

Documentation	Review Summary/Comments
Design Documentation	Reviewed Phase II and III Design reports for MDE permitting
Construction Documentation	Reviewed Cell 1 & Cell 2 CQA Reports
Construction Documentation	Reviewed Cell 3 CQA Reports
Operations Plan	Reviewed Lot 15 Landfill Operations Plan
Weekly Inspections	Reviewed 2025 inspections provided by Talen Energy
Previous Annual Inspection	Reviewed 2024 Annual Inspection Report

VISUAL INSPECTION OF CCR LANDFILL

Inspect the landfill and associated structures for any of the conditions described below. Indicate any changes since the previous inspection or issues that may adversely impact the operation or safety of the CCR impoundment.

Visual Inspection of Fill Areas and Base Liner

CFR §257.84(b)(2)(ii) – An annual inspection must include *a visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures.*

CCR Fill Areas	*Changes/Issues*
a. Appropriate Fill Slopes	Fill slopes appeared to be within required steepness. 2V:1H for temporary interior CCR fill slopes, 3H:1V for exterior slopes.
b. Erosion	Surficial erosion rills that were contained within the limits of the cell. No erosion was observed that would suggest distress, malfunction or the escape of liquids from the cell.
c. Settlement/Cracking	None observed.
d. Seepage	None observed.
e. Vegetation	Vegetation was established on outer slopes of Cells 1 and 2. Interior slopes that drain to Cell 3 were covered with textured scrim reinforced polyethylene (temporary HDPE tarp). All side slopes were recently mowed. Vegetation (saplings) were growing within the Cell 3 fill area (where the Cell 1 and 2 side slope meet the Cell 3 floor) which should be removed to prevent potential damage that can be caused by the sapling root system. Some (minimal) bare areas were observed on top of Cell 1 which should be reseeded.
f. Stormwater benches/downchutes	Not applicable. CCR fill has not reached a height above the perimeter berm that benches/downchutes are required. Temporary stormwater berms were constructed to contain water within the cell and the CCR is placed such that any side slope runoff enters the leachate collection system.
g. Animal Burrows	None observed.
Liner/leachate removal	*Changes/Issues*
a. Alterations	A textured scrim reinforced polyethylene temporary cover was still in place within the remainder of Cell 3 to prevent stormwater from entering the leachate system. Some areas of the temporary cover were removed to make room for more CCR placement which is part of the facilities operation. A small section of the temporary tarp on the side slope near the Cell 1 side slope was damaged and should be repaired.
b. Erosion	None observed.
c. Settlement/Cracking	None observed.
d. Seepage	None observed.

e. Leachate removal	Leachate removal system appeared to be functioning properly and the leachate storage basin appeared to have available storage capacity to handle additional leachate volume.
Leachate Storage	*Changes/Issues*
a. Alterations	None observed.
b. Damage to liner	None observed.
c. Loadout area	Appeared to be functioning properly, no evidence of major spills.
d. High level alarm	Observed to be in-place.
Other items	*Changes/Issues*
a. Groundwater monitoring wells	None observed.
b. Operations equipment	Heavy equipment required by the Operations Manual (bulldozer, compactor, pickup truck, hyrdoseeder, and a water truck) on-site and appeared to be functioning.
c. Housekeeping	No issues observed. The site appeared to be well maintained.

OVERALL ASSESSMENT, CONCLUSION, AND RECOMMENDATIONS

Based on a review of relevant documentation and the visual inspection described above, the following overall assessment, conclusion and recommendations are made.

Overall Assessment

1. SATISFACTORY
   No existing or potential structural or stability deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the applicable regulatory criteria or tolerable risk guidelines.
2. FAIR
   No immediate structural or stability deficiencies are recognized under normal loading conditions, Rare or extreme hydrologic and/or seismic events or lack of repairs to identified issues may result in a deficiency. Risk may be in the range to require further action.
3. POOR
   A structural or stability deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. POOR may also be used when uncertainties exist as to critical analysis parameters which identify a potential deficiency. Further investigations and studies are necessary.
4. UNSATISFACTORY
   A structural or safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution.

Conclusion

Design, construction, operation, and maintenance of the CCR Unit appeared to be consistent with recognized and generally accepted good engineering standards.

Recommendations for Repair/Remedial Work

1. Repair damaged temporary HDPE tarp on the Cell 1 side slope.
2. Remove the saplings growing on the floor of Cell 3.
3. Re-establish vegetation on top of Cell 1 where necessary.

GEOSYNTEC CONSULTANTS
Photographic Record

Client: Talen Energy	**Project Number: MR1352J**
Site Name: Lot 15 Landfill	**Site Location: Baltimore, Maryland**

Photograph 1 **Date: 4 December 2025** **Direction: East** **Comments: Leachate storage pond located at the front of the Facility near the office trailer and truck wash.**	
Photograph 2 **Date: 4 December 2025** **Direction: South** **Comments: Western side slope and access road to the top of Cells 1 and 2.**	

GEOSYNTEC CONSULTANTS Photographic Record	
Client: Talen Energy	**Project Number: MR1352J**
Site Name: Lot 15 Landfill	**Site Location: Baltimore, Maryland**

Photograph 3 **Date: 4 December 2025** **Direction: East** **Comments: Cell 1 side slope into Cell 3.**	

Photograph 4 **Date: 4 December 2025** **Direction: Southeast** **Comments: Active face in the southeastern corner of Cell 3.**	

GEOSYNTEC CONSULTANTS Photographic Record	
Client: Talen Energy	**Project Number: MR1352J**
Site Name: Lot 15 Landfill	**Site Location: Baltimore, Maryland**

Photograph 5 **Date: 4 December 2025** **Direction: Southeast** **Comments: Side slope of Cell 4 (permitted) into Cell 3, covered with a temporary HDPE tarp.**	

Photograph 6 **Date: 4 December 2025** **Direction: North** **Comments: Cell 3 sump on the southwestern end of the active fill area. Minor damage to temporary tarp.**	

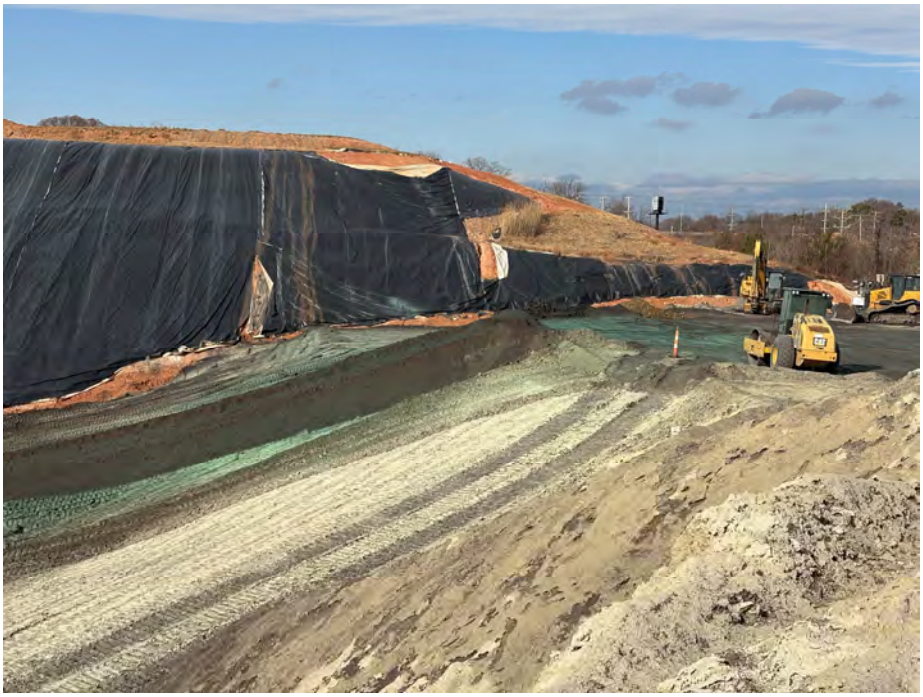
GEOSYNTEC CONSULTANTS Photographic Record	
Client: Talen Energy	**Project Number: MR1352J**
Site Name: Lot 15 Landfill	**Site Location: Baltimore, Maryland**

Photograph 7	
Date: 4 December 2025	
Direction: Southwest	
Comments: Access road to the top of the Cell 3 active area located in the southeast corner of the Facility.	

Photograph 8	
Date: 4 December 2025	
Direction: West	
Comments: Eastern edge of active area of Cell 3. CCR is kept below the anchor trench to contain stormwater runoff.	

GEOSYNTEC CONSULTANTS
Photographic Record

Client: Talen Energy	**Project Number: MR1352J**
Site Name: Lot 15 Landfill	**Site Location: Baltimore, Maryland**

Photograph 9	
Date: 4 December 2025	
Direction: West	
Comments: Cell 3 active face. Cell 1 side slope in the background. Note damaged HDPE temporary tarp.	

Photograph 10	
Date: 4 December 2025	
Direction: South	
Comments: Active area slope into Cell 3.	

GEOSYNTEC CONSULTANTS Photographic Record	
Client: Talen Energy	**Project Number: MR1352J**
Site Name: Lot 15 Landfill	**Site Location: Baltimore, Maryland**

Photograph 11	
Date: 4 December 2025	
Direction: North	
Comments: Top of Cell 1 and access road.	