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State of New Jersey

PHIL MURPHY Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION Site Remediation and Waste Management Program 401 East State Street P.O. Box 420, Mail Code 401-06 Trenton, NJ 08625-0420 Tel: (609) 292-1250

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CATHERINE R. MCCABE Acting Commissioner

SHEILA OLIVER Lt. Governor

> Mr. Ed Trawinski, Administrator Bergen County One Bergen County Plaza Hackensack, N. J. 07601

January 25, 2018

RE:

Modified Closure & Post-Closure Plan Approval

BERGEN COUNTY LANDFILL at OVERPECK PARK - AREAS I, II & IV Township of Teaneck and Boroughs of Leonia and Palisades Park, Bergen County

Preferred ID: 131880

Approval No.: LCC180001

Dear Mr. Trawinski:

The Bureau of Solid Waste Permitting (the Bureau) is in receipt of a letter dated December 15, 2017 prepared and submitted, on your behalf, by Bashar Assadi of CME Associates. The letter includes a request for the addition of crushed glass as a stabilizing layer at Area IV. The Bureau also received supplemental information via emails dated December 14, 2017 and December 15, 2017 respectively, providing specifications as well as quality data on recycled glass aggregate.

The Bureau has reviewed aforesaid submittals and is amenable to the proposed modification. Enclosed please find a modified Closure and Post-Closure Plan Approval (Approval) for the Bergen County Overpeck Park Landfill at Areas I, II and IV (the Site) located in Teaneck, Leonia and Palisades Park, New Jersey, respectively. Conditions have been incorporated within this Approval that must be complied with. The Department will consider amendment or modification of the specific terms of the conditions that are modified as a result of this Approval if the applicant submits a written request by certified mail within twenty (20) calendar dates of receipt of this letter. Said written request must clearly state the proposed amendment or modification and the factual basis for the request. This Approval is non-transferable.

Following the completion of the project, the owner must maintain the landfill in accordance with the conditions of this Approval and the Closure and Post-Closure Care Plan. Any future disruption of the closed landfill shall require prior approval from the Department in accordance with N.J.A.C. 7:26-2A.8(j).

Please note, per Condition A.4.d of the Department issued modified Closure & Post-Closure dated December 8, 2017 required a post-excavation sampling plan for Area I to be prepared and submitted within thirty (30) days of the date of the modified Approval. However, to date, the Department has not received the requested information. Please prepare and submit a post-excavation sampling plan for Area I within ten (10) days of the date of this Approval. Also, in accordance with Condition A.4.f, the Bureau of Solid Waste Compliance and Enforcement must be notified at (609) 292-6305 at least 72 hours prior to initiation of the approved disruption activities at each area.

If you have any questions concerning this matter, please contact Victoria Goldman of my staff at (609) 292-0749 or by email at <u>Victoria.Goldman@dep.nj.gov</u>.

Very truly yours.

Anthony Fontana, Chief

Bureau of Solid Waste Permitting

c: Thomas Farrell, BSWCE

Gary Nickerson, Office of Dredging and Sediment Technology

Bashar Assadi, CME Associates

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File: LCC180001 Modified LF Closure/Post-Closure Approval



State of New Jersey

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Governor

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RAY BUKOWSKI Acting Commissioner

SHEILA OLIVER
Lt. Governor

SANITARY LANDFILL CLOSURE & POST-CLOSURE PLAN APPROVAL

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this Sanitary Landfill Major Disruption Approval & Closure & Post-Closure Plan Approval is hereby issued to:

Bergen County Department of Parks & Recreation

FACILITY:

Bergen County Overpeck Park Landfill

Area I (Township of Teaneck)
Area II (Township of Teaneck)

Area IV (Borough of Palisades Park, Borough of

Leonia)

BLOCK/LOT NOS:

Area I – 3703/11 and 3602/10 Area II – 3501/1 and 3608/1 Area IV – 101/1 and 703/1

131880

PREFERRED ID: APPROVAL NO.:

LCC180001

COUNTY:

Bergen County

This Approval is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This Approval shall not prejudice any claim the State may have to riparian land, nor does it permit the registrant to fill or alter or allow to be filled or altered, in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this state without prior acquisition of the necessary grants, permits or approvals from the Department of Environmental Protection.

Issue Date: April 23, 2014

Anthony Fontana, Chief

Modified: October 3, 2014

Bureau of Solid Waste Permitting

Modified: October 30, 2015
Modified: December 8, 2017
Modified: January 25, 2018

Description

The Overpeck Park Landfill is comprised of approximately 1000 acres and is located in the southern end of Bergen County. The landfill extends across portions of Leonia, Ridgefield Park, Palisades Park, Teaneck, and Englewood. Landfilling of municipal waste began in 1952 and ceased in 1975. The landfill is divided into many areas, namely Overpeck Creek (or Overpeck Lake) and associated wetlands, Area I (or Teaneck Creek Conservancy), Area II, Area III (or Ridgefield Park), Area IV (or Overpeck Preserve), the Overpeck Golf Course, the Aerodrome Facility Area, the Henry Hobel Area, the Overpeck Riding Center (or Bergen Equestrian Center), and the Palisades Park Sports Complex. Portions of the landfill area have been capped and redeveloped in several phases. This Closure and Post-Closure Plan Approval is being issued for Areas I, II, and IV.

Area I

Area I is located on Blocks 3703; Lot 11 and Block 3602; Lot 10 in the Township of Teaneck and occupies approximately 46 acres. The Department issued a Closure & Post Closure Plan Approval dated April 23, 2014 to perform closure activities at the site including the excavation and relocation of waste to Area IV. The final capping in this Area will consist of two-foot of cover material consisting of common fill and a layer of clay material generated on site.

Area II [Teaneck Creek]

Area II is located on Block 3501; Lot 1 and Block 3608; Lot 1 in the Township of Teaneck. The Department issued a Minor Disruption Approval dated May 31, 2016 to perform a geotechnical investigation for future redevelopment at the site. The final capping in this Area will consist of two-foot of cover material consisting of common fill and a layer of clay material excavated from Area I.

Area III [Ridgefield Park Village & Aerodrome]

Area III is located on Block 2403; Lots 1 & 1.01 in Ridgefield Park as well as Block 4306; Lots 1 & 1.02 and Block 4501; Lot 1 in the Township of Teaneck. The Department issued an interim Closure Plan Approval dated July 27, 2005 for capping Area III-A with final cover. The final capping of Area III-A included installation of the two-foot minimum final cover and the bank restoration and stabilization of Overpeck Creek. Area III-A was further developed and transformed into a multi-use recreational facility known as Ridgefield Park. An old building on the site is equipped with a gas monitoring and alarm system. All newly constructed buildings in Area III-A have an active under-slab gas venting system. Construction and implementation of closure was completed in the summer of 2010 and the park was opened for public use.

The Department issued a Disruption Approval dated March 23, 2012 to relocate and cap illegally disposed fill material at the southern portion of Area III-B. The capping of the southern portion of Area III-B included installation of the two-foot minimum final cover and bank restoration and stabilization of the Overpeck Creek.

Area III is not addressed in this Closure and Post-Closure Plan Approval.

Area IV

Area IV is located on Block 101 Lot 1 in the Borough of Palisades Park and Block 703 Lot 1 in the Borough of Leonia. The Department issued a Closure & Post Closure Plan Approval dated April 23, 2014 for closure of the area including the relocation of waste, bank stabilization, and installation of landfill gas monitoring wells. Recreational development of the site including a new pedestrian bridge, pedestrian and cyclist trails, and bridle paths are proposed for this area. Modified Closure and Post-Closure Plan Approvals dated October 3, 2014 and October 30, 2015 were issued to incorporate the acceptance of dredge material from various Bergen County stream cleaning projects for use as fill material.

The final capping in Area IV shall consist of the following in descending order: six (6) inches of vegetative layer, eighteen (18) inches of common fill acting as a free drainage layer, twenty-four (24) inches of barrier layer consisting of compacted processed dredge material. In areas where there is insufficient PDM, a twelve (12) inch clay layer will be used.

Based on site conditions, as well as the characteristics of the PDM and clay material, a maximum twelve (12) inch layer of crushed glass may be incorporated beneath the barrier layer.

October 3, 2014 Modification

The October 3, 2014 modification authorized the acceptance of approximately 15,000 cubic yards of dredge material generated from the Bergen County Glen Rock pond maintenance project to be utilized as fill material as part of the closure work at Overpeck Park Area IV. The Glen Rock dredge material is in addition to the dredge material authorized for acceptance under the approved material acceptance protocol.

October 30, 2015 Modification

The October 30, 2015 modification authorized the acceptance of approximately 36,000 cubic yards of dredge material generated from the South Bergen County Stream Cleaning project to be utilized as fill material as part of the closure work at Overpeck Park Area IV. The material will be dredged from: Losen Slote in Little Ferry and Moonachie, Moonachie Creek in Carlstadt, Moonachie Creek in Little Ferry, Depeyster Creek, Lamker Court Drainage Ditch, Chapman Drive Drainage Ditch, Robby Road/Baily Park Drainage Ditch, and Chamberlain Avenue Drainage Ditch. Dredge material from Losen Slote Creek Park Drainage Ditch (D-1) will be excluded since it exceeds the Non-Residential Direct Contact Soil Remediation Standards (NRDCSRS). The dredge material represented by sample B-12 will need to be further delineated and addressed as stated in Condition A.3.d.iii of this Approval.

December 8, 2017 Modification

The December 8, 2017 modification incorporates changes to the October 30, 2015 Closure and Post-Closure Plan Approval for Areas I & IV. In addition to Areas I & IV, Area II is now included in this Approval. Also, the Approval has been prepared in a new format.

Approved changes are described below:

- Area I: In the October 30, 2015 Closure and Post-Closure Plan Approval, all waste material from Area I was to be relocated to Area IV before final capping. This modification authorizes the relocation of bulky waste materials from Area I to Area IV, while smaller waste material will be re-deposited on Area I and capped as per the approved Closure Plan. Approximately 45,000 cubic yards of clay material has been generated through the enhancement of drainage at the site. This clay material is approved to be used for capping at Area I and IV, respectively.
- Area II: Closure of Area II will consist of capping areas with sparse cover, and construction of parking facilities, a pedestrian bridge, walking trails, and a storm water collection system. The portions of the site with sparse cover will be capped with the approved final cover.
- Area IV: Capping at the site will require an additional 140,000 cubic yards of fill material in order to expand the final cap by approximately five (5) acres. The grading plan was revised to reflect these changes. Area IV will no longer be receiving all waste material from Area I and will be limited to only accepting bulky waste material from Area I.

The banks of the Overpeck Lake will be widened to accommodate rowing competitions. Approximately 24,500 cubic yards of waste material, stone, and soil material will be removed from the shore line. These materials will be redeposited in Area IV and capped with approved final cover. The reconfiguration and bank stabilization will be in accordance with the approved Closure Plan.

This Modification

This modification authorizes the acceptance of approximately 10,000 cubic yards of recycled crushed glass from Sims Municipal Recycling Facility in Jersey City, New Jersey. The material will be used in Area IV to maintain a stable working face and reduce the dragging of mud offsite during the acceptance of dredged material.

Approved Application Documents

This Approval is based on the following application documents:

AREA <u>I & IV</u>

- A. Application documents, prepared by Birdsall Services Group and TRC Solutions and received between August 2012 and in January 2013:
 - "Major Landfill Disruption Approval Application, Overpeck Park Landfill Closure, Palisades Park and Leonia, Bergen County, New Jersey," dated August 16, 2012, attached with Solid Waste Facility Application Form signed by Ronald Kistner, Director of Bergen County Parks, on August 15, 2012.

- 2. "Closure and Post-Closure Care Plan Application, Overpeck Park Landfill Closure for Area I and IV, Teaneck, Palisades Park and Leonia, Bergen County, New Jersey," dated June 2012, prepared by Birdsall Services Group.
- 3. "Health and Safety Plan, Landfill Disruption Operations for Overpeck Park Landfill, Area IV, Palisades Park and Leonia, Bergen County, New Jersey," dated May 2012, prepared by Birdsall Services Group.
- 4. Set of 42 drawings with cover sheet entitled "Construction Contract Drawings for Overpeck Preserve, Lot 1, Block 703, Borough of Leonia, Lot 1, Block 101, Borough of Palisades Park," dated June 18, 2012.
- 5. "Subsurface Investigation, Overpeck County Park Landfill, Area IV, Leonia and Palisades Park, Bergen County, New Jersey," dated May 3, 2009, prepared by Birdsall Services Group.
- "Site/Remedial Investigation Report and Remedial Action Workplan, Overpeck Park Area 1, Teaneck Creek Conservancy Park, Teaneck, New Jersey," dated February 2010, prepared by TRC.
- 7. "Site Investigation Report (SIR), Overpeck Park Landfill Closure, Leonia and Palisades Park, Bergen County, New Jersey," Volume I, dated June 1, 2012, prepared by Birdsall Services Group.
- 8. "Site Investigation Report (SIR), Overpeck Park Landfill Closure, Leonia and Palisades Park, Bergen County, New Jersey," Volume II Part 1 to Part 5, dated June 1, 2012, prepared by Birdsall Services Group, containing analytical results provided by Aqua Pro-Tech Laboratories.
- 9. "Financial Closure and Post Closure Plan for Areas I & IV," dated January 8, 2013.
- B. Revised application documents prepared by Birdsall Services Group and received during the February 5, 2013 meeting and via emails on February 6, 2013:
 - 1. Major Landfill Disruption Approval Application, Closure and Post-Closure Care Plan Application, Health and Safety Plan, revised February 2013, attached with a report of Slope Stability Analyses conducted in 2012 and 2013 for Area IV waterfront development project.
 - 2. Closure and Post-Closure Financial Plan, revised February 5, 2013.
 - 3. Construction contract drawing, DT-1, containing "Waterfront Walkway Typical Cross Section" and "Cover Detail," last revised February 1, 2013, with the rip-rap stone size added, the extent of the filter fabric placement clearly depicted and the LFG Monitoring Well Detail added.
 - 4. Construction contract drawings, PP-1, PP-4, PP-5, PP-6, last revised February 1, 2013, with the locations of LFG Monitoring Wells depicted.

- C. Revised application documents prepared by CME Associates and received during December 2013:
 - 1. Letter dated December 17, 2013 signed by Bashar Assadi of CME Associates stating that the County will pursue the use of PDM and is exempt from local municipal approval for county projects on County owned properties.
 - 2. Set of three drawings, signed and sealed by David J, Samuel, P.E. on December 13, 2013.
 - DT-1 entitled "Construction Details," containing "Waterfront Walkway Typical Cross Section" and "Cover Detail," replacing the previously submitted DT-1, with walkways and paths removed and proposed grade revised.
 - LP-1 and LP-2 entitled "Landscape Plan," showing locations of trails and paths, submitted for the Land Use Permit application. LP-2 was revised by CME Associates on December 26, 2013 to depict fifteen (15) gas monitoring points within Area IV.
 - 3. Section 8 Landfill Cover of the application document "Major Landfill Disruption Approval Application, Overpeck Park Landfill Closure, Palisades Park and Leonia, Bergen County, New Jersey" revised with the reference of the imported restricted use fill material removed.
- D. "Materials Acceptance Protocol for the Overpeck Park Landfill Area IV, Townships of Leonia & Palisades Park, Bergen County, New Jersey," prepared for County of Bergen Department of Parks, by CME Associates in January 2014, with a cover letter signed by Ronald Kistner, Director of Bergen County Department of Parks on January 24, 2014.
- E. "Materials Acceptance Protocol for the Overpeck Park Landfill Area IV, Townships of Leonia & Palisades Park, Bergen County, New Jersey," prepared for County of Bergen Department of Parks, by CME Associates in March 2014.
- F. E-mail from Bashar Assadi of CME Associates dated September 10, 2014, requesting to accept the dredge material from the County's Glen Rock pond maintenance project and attached with "Analytical Result Summary Table, July 30, 2014 Soil Sampling, Glen Rock Pond, Glen Rock, New Jersey."
- G. Letter from Bashar Assadi of CME Associates dated August 21, 2015, requesting to accept dredged material from South Bergen County Stream Cleaning project. Attached to this letter includes:
 - 1. Sediment Sampling Report dated August 2014 prepared by Frank Rossi, LSRP of Boswell Engineering.
 - 2. Copies of the two emergency permits from the Army Corps of Engineers dated May 19, 2014 and June 16, 2014.
 - 3. Table entitled "Summary of Data for the South Bergen Sediment Cleaning Project."
- H. Letter from Bashar Assadi of CME Associates dated December 12, 2016 requesting a modification of the Major Disruption & Closure Plan Approval for Area I & IV.

- I. Letter from Bashar Assadi of CME Associates dated April 21, 2017 providing additional information in response to the February 28, 2017 Department issued Notice of Deficiency (NOD).
- J. Letter from Bashar Assadi of CME Associates dated August 3, 2017 requesting a modification to the Major Disruption-Closure Plan Approval for Areas I & IV for the widening of Overpeck Lake.
- K. Letter from Bashar Assadi of CME Associates dated August 16, 2017 requesting a modification to the Major Disruption-Closure Plan Approval for Areas I & IV to expand capping in Area IV and make changes to the material management in Area I.
- L. Letter from Bashar Assadi of CME Associates dated September 23, 2017 requesting a modification to the Major Disruption-Closure Plan Approval for Areas I & IV for the inclusion of crushed glass for beneficial reuse.
- M. Email correspondence from Bashar Assadi of CME Associates dated December 14 and 15, 2017, including a letter dated December 15, 2017, providing supplemental information for the acceptance of crushed glass for beneficial reuse in Area IV.

AREA II:

- A. Letter from Bashar Assadi of CME Associates dated May 21, 2017 requesting a Major Disruption and Closure Plan Approval for Area II along with a report entitled "Request for Modification of Major Disruption/Closure Approval Preferred ID 131880 Approval NO. LCC15001 Area II-Former Overpeck County Park Landfill, Fort Lee Road, Township of Teaneck."
- B. A letter from Bashar Assadi of CME Associates dated July 7, 2017 providing additional information for the Overpeck Area II Major Disruption Closure Plan Approval Modification Request.

Approval Conditions

The conditions of this Approval are found in the attached document entitled "BERGEN CNTY SLF 131880 LCC180001 SW Landfill (Class C) Closure – Closure Plan Minor Modification Requirements Report."

In case of conflict, the provisions of N.J.A.C. 7:26-1 *et seq.* shall have precedence over the conditions of this Approval, and the conditions of this Approval shall have precedence over plans and specifications listed above.

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

A. CLOSURE AND POST-CLOSURE PLAN APPROVAL CONDITIONS [N.J.A.C. 7:26-2A]

1. Duty to Comply [N.J.A.C. 7:26-2A]

a. The owner or operator shall close and maintain the landfill in accordance with N.J.A.C. 7:26-2A.9, the conditions of this Approval, and the approved Closure and Post-Closure Plan as referenced herein. [N.J.A.C. 7:26-2A.9(c)1]

2. Professional Engineer [N.J.A.C. 7:26-2A]

a. The owner or operator shall hire a New Jersey licensed professional engineer to oversee closure and any other activities at the sanitary landfill. [N.J.A.C. 7:26- 2A.9(c)4]

3. Material Acceptance [N.J.A.C. 7:26-2A]

- a. No material shall be accepted at the sanitary landfill except as authorized by the Department in accordance with an approved material acceptance protocol. [N.J.A.C. 7:26- 2A.9(d)2ii]
- b. In accordance with the approved material acceptance protocol, all material used in the final cover shall meet the New Jersey Residential Direct Contact Soil Remediation Standards and consist of either certified clean material or clean tested soils. [N.J.A.C. 7:26-2A.9(e)4xx]
- c. In accordance with the approved material acceptance protocol, the owner is authorized to accept the following materials for use in Area IV as barrier, subgrade or fill material below the two-foot final cover: [N.J.A.C. 7:26-2A.9(e)4xx]
 - i. Dredge materials from maintenance projects in fresh water ponds, lakes or streams within the County of Bergen and Processed Dredge Materials (PDM) from tidal dredging projects in the New Jersey/New York Harbor as approved by the Office of Dredging and Sediment Technology (ODST). Dredge material and PDM shall be evaluated and only accepted in accordance with the approved "Material Acceptance Protocol for the Overpeck Park Landfill Area IV, Townships of Leonia & Palisades Park, Bergen County, New Jersey" (MAP), dated March 2014. The sampling and testing of PDM shall be performed in accordance with ODST's requirements. PDM and any other dredge material accepted under the MAP shall not contain contaminants that exceed the NJDEP Non-Residential Direct Contact Soil Remediation Standards; [N.J.A.C. 7:26-2A.9(e)4xx]
 - ii. Approximately 36,000 CY of dredge material generated from South Bergen County Stream cleaning project with the exclusion of material from Losen Slote Creek Park Drainage Ditch (D-1) as identified in the letter from Bashar Assadi of CME Associates dated August 21, 2015. Dredge material represented by sample B-12 must be further delineated to determine areas that specifically contain elevated lead and/or arsenic concentrations. Material that exhibits elevated concentrations above NRDCSRS per N.J.A.C. 7:26-4.3 must be properly disposed; and. [N.J.A.C. 7:26-2A.9(e)4xx]
 - iii. Approximately 15,000 CY of dredge material generated from the County's Glen Rock pond maintenance project as identified in the email from Bashar Assadi of CME Associates dated September 10, 2014, including the attached "Analytical Result Summary Table, July 30, 2014 Soil Sampling, Glen Rock Pond, Glen Rock, New Jersey." [N.J.A.C. 7:26-2A.9(e)4xx]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

iv. Approximately 10,000 CY of recycled crushed glass from Sims Municipal Recycling Facility as identified in the December 15, 2017 email from Bashar Assadi of CME Associates. The crushed glass shall only be used to maintain a stable working face and reduce the dragging of mud offsite during the acceptance of dredged material. [N.J.A.C. 7:26-2A.9(e)4]

4. Closure Activities [N.J.A.C. 7:26-2A]

- a. The owner shall conduct the following activities for the closure and redevelopment of Area I: [N.J.A.C. 7:26- 2A.9(e)4]
 - i. Installation of Soil Erosion and Sediment Control Measures; [N.J.A.C. 7:26-2A.9(e)4]
 - ii. Excavation and relocation of small waste material to areas as shown on the approved site plans; [N.J.A.C. 7:26-2A.9(e)4]
 - iii. Relocation of bulky waste material to Area IV; [N.J.A.C. 7:26- 2A.9(e)4]
 - iv. Site clearing and re-grading; [N.J.A.C. 7:26-2A.9(e)4]
 - v. Enhancing the Site's existing landfill cover, and. [N.J.A.C. 7:26-2A.9(e)4]
 - vi. Generation of clay material from drainage enhancement project for use as capping material. [N.J.A.C. 7:26-2A.9(e)4]
- b. The owner shall conduct the following activities for the closure and redevelopment of Area II: [N.J.A.C. 7:26-2A.9(e)4]
 - i. Installation of Soil Erosion and Sediment Control Measures; [N.J.A.C. 7:26-2A.9(e)4]
 - ii. Capping of areas with sparse cover material; [N.J.A.C. 7:26-2A.9(e)4]
 - iii. Redevelopment of the site to include parking facilities, a pedestrial bridge, and walking trails; and. [N.J.A.C. 7:26- 2A.9(e)4]
 - iv. Installation of a stormwater collection system as per the approved Soil Erosion and Sediment Control Plan. [N.J.A.C. 7:26- 2A.9(e)4]
- c. The owner shall conduct the following activities for the closure and redevelopment of Area IV: [N.J.A.C. 7:26- 2A.9(e)4]
 - i. Installation of Soil Erosion and Sediment Control Measures; [N.J.A.C. 7:26-2A.9(e)4]
 - ii. Relocation of exposed waste material from the banks of the Overpeck Lake fronting Area IV and subsequent bank stabilization; [N.J.A.C. 7:26-2A.9(e)4]
 - iii. Excavation and relocation of exposed construction debris from Area I to Area IV; [N.J.A.C. 7:26-2A.9(e)4]
 - iv. Placement of relocated debris from Area I and waste material from the banks of the Overpeck Lake into the low lying area within Area IV; [N.J.A.C. 7:26-2A.9(e)4]
 - v. Site clearing and re-grading; [N.J.A.C. 7:26- 2A.9(e)4]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

- vi. Placement of processed dredge material for the barrier layer, re-grading and filling below the two-foot final cover to accommodate the final closure and redevelopment of the Site; [N.J.A.C. 7:26-2A.9(e)4]
- vii. Enhancing the Site's existing landfill cover where sufficient cap is not available; [N.J.A.C. 7:26- 2A.9(e)4]
- viii. Construction of a new pedestrian bridge, pedestrian and cyclist trails and bridle paths in Area IV; and. [N.J.A.C. 7:26-2A.9(e)4]
- ix. Construction of landfill gas monitoring wells in Area IV. [N.J.A.C. 7:26-2A.9(e)4]
- d. Within 10 (ten) days of the date of issuance of this modified Approval, the owner shall submit a plan for post-excavation soil sampling of Area I to the Division of Solid and Hazardous Waste. [N.J.A.C. 7:26-2A.9(e)]
- e. The excavated material from Area I shall be relocated at Area IV with the following limitations: [N.J.A.C. 7:26-2A.9(e)]
 - i. Material shall be covered throughout the transport from Area I to Area IV; [N.J.A.C. 7:26-2A.9(e)]
 - ii. Material shall be shipped by a licensed solid waste hauler; [N.J.A.C. 7:26-2A.9(e)]
 - iii. Material delivery trucks traveling between Areas I and IV shall be limited to local roads; and. [N.J.A.C. 7:26-2A.9(e)]
 - iv. Material received shall be placed at the low lying area within Area IV and covered with approved landfill cap material. [N.J.A.C. 7:26-2A.9(e)]
- f. The Bureau of Solid Waste Compliance and Enforcement shall be notified at (609) 292-6305 at least 72 hours prior to initiation of any closure disruption activities at each area. [N.J.A.C. 7:26-2A.9]
- g. The disposal of all solid waste resulting from disruption activities shall be in conformance with the requirements of N.J.A.C. 7:26-2.11. Any excavated material which is not redeposited on-site in the manner described in the application shall be disposed of off-site at a licensed solid waste facility. [N.J.A.C. 7:26-2A.8(j)]
- h. The disruption of waste during closure operations shall be conducted in accordance with N.J.A.C. 7:26-2A.8(j). [N.J.A.C. 7:26- 2A.8(j)]
- i. A minimum of 6 inches of clean soil shall be placed over any exposed waste at the end of each workday or more frequently if odors or vectors are a problem. A minimum of 12 inches of clean soil shall be applied to all waste exposed for any period exceeding 24 hours and extending up to six months. Thereafter, a minimum of two feet of cover material shall be applied and maintained over the waste material until installation of the final cover system required by this Approval. [N.J.A.C. 7:26- 2A.8(b)7-19]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

- j. The disruption activities shall not cause any air contaminant to be emitted in violation of N.J.A.C. 7:27-5.2(a). Malodorous emissions shall be controlled by the use of daily, intermediate, and final cover material. Malodorous solid waste shall be covered immediately after excavation, unloading or re-deposition with a minimum of six inches of cover material. In the event that cover material is not satisfactory, other means of air contaminant emission control approved by the Department shall be used. [N.J.A.C. 7:26-2A.8(j)4]
- k. Methods of effectively controlling dust shall be implemented in order to prevent offsite migration. [N.J.A.C. 7:26-2A.8(j)]
- 1. Noise control measures shall be implemented so that noise levels generated by site activities do not exceed the standards set forth by the New Jersey Noise Control Regulations under N.J.A.C. 7:29-1.2. [N.J.A.C. 7:26-2A.8(j)]
- m. Vectors shall be controlled by the application of cover soil. If vectors persist, a control program shall be implemented in compliance with the requirements of the New Jersey Pesticide Control Code, N.J.A.C. 7:30, by an applicator of pesticides, certified in accordance with the New Jersey Pesticide Control Code, N.J.A.C. 7:30. [N.J.A.C. 7:26-2A.8(j)]
- n. An adequate water supply and adequate fire-fighting equipment shall be maintained at the facility or be readily available to extinguish any and all types of fires. The telephone numbers of local fire, police, ambulance and hospital facilities shall be known in advance. [N.J.A.C. 7:26-2A.8(j)]
- o. In the event that chemical or hazardous waste materials are encountered during closure activities, operations shall cease immediately and the area shall be secured. The owner and/or contractor shall notify the Department by calling the Environmental Action Hot Line at 1-877-WARN DEP and take all necessary precautions for the safe removal and disposal of the waste to an approved facility under the direction of the Department. [N.J.A.C. 7:26- 2A.4(q)]
- p. The owner or operator and all contractors shall follow the Occupational Safety and Health Administration (OSHA) standards and the Health and Safety Plan submitted as part of the application during all on-site activities for the safety of employees and for others entering the site. A copy of the operating procedures shall be posted on-site. On-site air monitoring shall be provided to ensure worker safety during all disruption activities. [N.J.A.C. 7:26-2A.9]
- q. Soil erosion and sediment control shall be achieved in accordance with the Soil Erosion and Sediment Control Plan certified by the Bergen County Soil Conservation District. The plan shall be certified by the District prior to the start of construction. [N.J.A.C. 7:26-2A.9(e)4]
- r. The owner shall restrict access by the public to the landfill during closure construction. Upon completion of the closure, Area I, Area II and Area IV will be open to the public. [N.J.A.C. 7:26-2A.8(j)]
- s. The closure work approved herein shall be completed by December 31, 2018. [N.J.A.C. 7:26-2A.9(e)5]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

5. Closure Reports/Certifications [N.J.A.C. 7:26-2A]

- a. Within 15 days of the end of each calendar quarter during the closure period, the owner or operator shall submit a quarterly report of closure and other activities performed at the sanitary landfill. The quarterly reports shall be certified by a New Jersey licensed professional engineer, who shall certify that all materials accepted at the site for any purpose were weighed, sampled, and tested in accordance with the approved material acceptance protocol and all provisions and prohibitions of this Approval were complied with during that quarter. [N.J.A.C. 7:26-2A.9(c)5]
- b. Within six months of completion of closure of each area of the landfill, the owner or operator of the landfill shall obtain and submit to the Division of Solid and Hazardous Waste an as-built certification by a New Jersey licensed professional engineer, certifying that the provisions of the Closure and Post-Closure Plan have been implemented as designed and approved, with exceptions noted. The certifications shall meet the following requirements: [N.J.A.C. 7:26-2A.9(c)6]
 - i. The New Jersey licensed professional engineer shall certify, in writing, that he or she has supervised the construction of each major phase of the sanitary landfill's closure. He or she shall further certify that each phase has been prepared and constructed in accordance with the closure design approved by the Department. The certification shall include as-built drawings. [N.J.A.C. 7:26-2A.9(c)6i]
 - ii. The New Jersey licensed professional engineer shall certify that the materials utilized in the closure of the sanitary landfill are in conformance with and meet the specification of the approved closure design and materials accepted at the site for any purpose were weighed, sampled, and tested according to a protocol approved in advance by the Department. [N.J.A.C. 7:26-2A.9(c)6ii]
 - iii. No work performed under this Approval shall be considered complete until such engineer's certification has been submitted to and accepted by the Division of Solid and Hazardous Waste. In the event that said certification is not received or is not accepted, the work shall be considered incomplete. [N.J.A.C. 7:26-2A.9(c)]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

c. All certifications required by this Approval shall bear the raised seal of the New Jersey licensed professional engineer, his or her signature, and the date of certification. The certification shall include the following statement: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals under my supervision, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to criminal penalties, I may be liable for civil administrative penalty pursuant to N.J.A.C. 7:26-5 and that submitting false information may be grounds for denial, revocation or termination of any solid waste facility permit or vehicle registration for which I may be seeking approval or now hold." [N.J.A.C. 7:26- 2A.9(c)7]

6. Deed Notice [N.J.A.C. 7:26-2A]

a. Upon closure of each area of the sanitary landfill, the owner shall have recorded a detailed description of the landfill, along with the deed, with the appropriate recording office. The description shall include the general types, locations, and depths of wastes on the site, the depth and types of cover material, the dates the landfill was in use and all such other information as may be of interest to potential landowners, and shall remain in the record in perpetuity. The deed shall also provide notice that any future disruption of the closed landfill shall require prior approval from the Department in accordance with N.J.A.C. 7:26-2A.8(j). The owner shall submit a copy of the recorded deed descriptions to the Division of Solid and Hazardous Waste within six months of completion of closure of each area. [N.J.A.C. 7:26-2A.9(c)8]

7. Filing of Plan [N.J.A.C. 7:26-2A]

a. A copy of the approved Closure and Post-Closure Plan shall be filed with the municipal clerk after closure is complete. [N.J.A.C. 7:26-2A.9(d)10]

8. Final Cap/Cover [N.J.A.C. 7:26-2A]

- a. The final cover systems shall completely isolate the landfilled solid waste from the surrounding environment. The final cover shall be graded in accordance with the approved Closure and Post-Closure Plan. [N.J.A.C. 7:26- 2A.9(e)4ii]
- b. The final cover in vegetated areas of Area I shall meet the following design criteria in descending order: [N.J.A.C. 7:26-2A.9(e)4ii]
 - i. Six (6) inches of vegetative layer consisting of silt loam; [N.J.A.C. 7:26-2A.9(e)4]
 - ii. Eighteen (18) inches of common fill; and. [N.J.A.C. 7:26-2A.9(e)4ii]
 - iii. Twelve (12) inches of clay. [N.J.A.C. 7:26-2A.9(e)4ii]
- c. The final cover in vegetated areas of Area II shall meet the following design criteria in descending order: [N.J.A.C. 7:26- 2A.9(e)4ii]
 - i. Six (6) inches of vetetative layer consisting of silt loam; [N.J.A.C. 7:26-2A.9(e)4ii]
 - ii. Six (6) inches of common fill; and, [N.J.A.C. 7:26-2A.9(e)4ii]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

- iii. Twelve (12) inches of clay. [N.J.A.C. 7:26-2A.9(e)4ii]
- d. The final cover in paved parking areas in Area II shall meet the following design requirements in descending order: [N.J.A.C. 7:26-2A.9(e)4ii]
 - i. Two (2) inches of hot mix asphalt 12.5M64 surface coat; [N.J.A.C. 7:26-2A.9(e)4ii]
 - ii. Tack coat; [N.J.A.C. 7:26-2A.9(e)4ii]
 - iii. Four (4) inches of hot mix asphalt 19M64 base course; [N.J.A.C. 7:26-2A.9(e)4ii]
 - iv. Six (6) inches of densely graded aggregate; and. [N.J.A.C. 7:26-2A.9(e)4ii]
 - v. A minimum of one foot of clean soil. [N.J.A.C. 7:26-2A.9(e)4ii]
- e. The final cover for the quarry stone dust trail in Area II shall meet the following design requirements in descending order: [N.J.A.C. 7:26- 2A.9(e)4ii]
 - i. Four (4) inches of quarry/stone dust; [N.J.A.C. 7:26-2A.9(e)4ii]
 - ii. Non-woven geotextile; [N.J.A.C. 7:26- 2A.9(e)4ii]
 - iii. Four (4) inches of densely graded aggregate; and. [N.J.A.C. 7:26- 2A.9(e)4ii]
 - iv. A minimum of sixteen (16) inches of clean soil. [N.J.A.C. 7:26-2A.9(e)4ii]
- f. The final cover for the paved sidewalk in Area II shall meet the following design requirements in descending order: [N.J.A.C. 7:26- 2A.9(e)4ii]
 - i. Concrete; [N.J.A.C. 7:26-2A.9(e)4ii]
 - ii. Four (4) inches of densely graded aggregate; and. [N.J.A.C. 7:26-2A.9(e)4ii]
 - iii. A minimum of sixteen (16) inches of clean soil. [N.J.A.C. 7:26-2A.9(e)4ii]
- g. The bank stabilization along the Overpeck Lake shoreline in Area IV shall meet the following design requirements: [N.J.A.C. 7:26-2A.9(e)4ii]
 - i. For Rock Toe Protection area: a two-foot layer of riprap stones D50 = 18" anchored into the ground, Filter Fabric and Base Soil. [N.J.A.C. 7:26-2A.9(e)4ii]
 - ii. For the bank above the Rock Toe Protection area: a two-foot layer of riprap stones D50 = 12", Filter Fabric, 12" Cobble/Gravel Soil Fill and 18" Base Soil. [N.J.A.C. 7:26-2A.9(e)4ii]
 - iii. The bottom end of the riprap placement is the Mean Low Water elevation, and the top end is one foot higher than the Mean High Water elevation, totaling approximately 19 feet in width. [N.J.A.C. 7:26-2A.9(e)4ii]
- h. The final cover in other areas of Area IV shall meet the following design requirements in descending order: [N.J.A.C. 7:26- 2A.9(e)4ii]
 - i. Six (6) inches of vegetative layer consisting of silt loam; [N.J.A.C. 7:26-2A.9(e)4ii]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

- ii. Eighteen (18) inches of common fill; and. [N.J.A.C. 7:26-2A.9(e)4ii]
- iii. Two feet of barrier layer consisting of compacted processed dredge material (PDM) with a hydraulic conductivity of 1 x 10 -5 cm/sec or less. When insufficient approved PDM is available, a 12 inch clay layer (from Area I) shall be used as barrier layer. [N.J.A.C. 7:26-2A.9(e)4ii]
- i. There shall not be any future use of the landfill that may result in the alteration of the final cover, subsequent to closure activities, without review and approval by the Department. [N.J.A.C. 7:26-2A.9(d)6]

9. Groundwater Monitoring System [N.J.A.C. 7:26-2A]

a. The owner shall establish a groundwater monitoring system consisting of six wells designated as MW1 to MW6 in Area I, six wells designated as MW1 to MW6 in Area II, and nine wells designated as PMW-21 through PMW27, PMW-29 and PMW-30 in Area IV. [N.J.A.C. 7:26-2A.9(e)4viii]

10. Conformance with Surrounding Area [N.J.A.C. 7:26-2A]

a. Areas I, II, and IV will be appropriately vegetated to be aesthetically compatible with the rest of Overpeck Park. Area II & IV will incorporate passive recreation including walking trails, bridle paths, and pedestrian bridges. [N.J.A.C. 7:26-2A.9(e)4xvii]

11. Post-Closure Requirements [N.J.A.C. 7:26-2A]

- a. The owner or operator shall continue to monitor and maintain the landfill in accordance with this Approval during the post-closure care period, which continues for 30 years after the date of completing closure. The Department may reduce the post-closure care period to less than thirty (30) years when it has been adequately demonstrated that the reduced period is sufficient to protect human health and the environment. Prior to the time that the post-closure care period is due to expire, the Department may extend the post-closure care period upon a finding that such extended period is necessary to protect human health and/or the environment. Any aggrieved person may petition the Department for an extension or reduction to the post-closure care period, based on good cause. [N.J.A.C. 7:26-2A.9(c)9]
- b. The owner or operator shall monitor and maintain the landfill in accordance with the Closure and Post-Closure Plan through implementation of the following maintenance programs: (a) A program for the maintenance of final cover and final cover vegetation; (b) A program for the maintenance of side slopes; (c) A program for the maintenance of run-on and run-off controls; (d) A program for the maintenance of groundwater monitoring wells; and (e) A program for the maintenance of measures to conform the site to the surrounding areas. [N.J.A.C. 7:26-2A.9(4)]
- c. The final cover shall be maintained to minimize infiltration and ponded water. All cracks, erosion swales and rills shall be repaired by the replacement of cover material and reseeding. Settled areas shall be filled to promote run-off. The final cover vegetation shall be fertilized, limed and mowed to promote growth of the planted species and discourage weed infestation. Material used to maintain the final cover shall comply with the Department-approved material acceptance protocol. [N.J.A.C. 7:26- 2A.9(e)4iv]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

- d. The structural integrity and erosion protection of surface run-on/run-off structures shall be maintained to ensure the stability of the slope and prevent excess erosion. The top grades shall be maintained at their proper slopes to minimize ponding. The structures shall be kept clear of excessive vegetation, sediment, and other obstructions to ensure the structures operate as designed. [N.J.A.C. 7:26- 2A.9(e)4vii]
- e. The groundwater monitoring system shall be maintained in proper working order that allows for the collection of a representative sample of groundwater as required by this Approval. The Department-assigned well number shall be permanently attached to each well casing and shall be maintained in a legible condition. All well caps shall be kept locked at all times unless the well is in use by authorized personnel. [N.J.A.C. 7:26-2A.9(e)4ix]
- f. Landscaping shall be maintained to conform with the approved closure design. [N.J.A.C. 7:26-2A.9(e)4xviii]
- g. Inspections, Monitoring and Reporting [N.J.A.C. 7:26-2A]
 - i. Periodic inspections of the facility, as presented in the Closure and Post-Closure Plan and as needed to maintain the sanitary landfill in accordance with this Approval, shall be conducted. Inspections shall be conducted on a quarterly basis at a minimum. Quarterly reports of inspections shall be submitted to the Division of Solid and Hazardous Waste within 30 days of the end of each calendar quarter. The reports shall include, but not be limited to, the results of all inspections, recommendations for required maintenance, and a description of any maintenance performed. [N.J.A.C. 7:26-2A.9(e)4]
 - ii. A program for monitoring of groundwater shall be established. Wells MW1 through MW6 in Area I, wells MW1 through MW6 in Area II, and wells PMW-21 through PMW27, PMW-29 and PMW-30 in Area IV shall be sampled and analyzed on a quarterly basis. Groundwater elevation and flow direction shall be determined each quarter. Samples from each well shall be collected and analyzed for the Target Compound List + 30, the Target Analyte List, hexavalent chromium, Extractable Petroleum Hydrocarbons, and pH. Reports on the results of the quarterly monitoring events shall be submitted to the Division of Solid and Hazardous Waste within 30 days of the sampling event. [N.J.A.C. 7:26- 2A.9(e)4x]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

- iii. A methane gas survey shall be performed along the western and northern perimeter of Area 1 and along the eastern and southeastern perimeter of Area IV on a quarterly basis. Surveys shall be performed at times when barometric pressure is falling. The surveys shall be performed with a hand-held portable explosimeter or equivalent and the minimum sampling depth shall be three feet below the ground surface or above the water table, whichever is higher. The maximum interval between sampling points shall be 300 feet. Sampling shall be performed around the perimeter of all on-site structures. The maximum interval between sampling points for structures shall be 50 feet; however, there shall be at least one sampling point along each side of the structure. Where methane is detected, additional points at 25 foot intervals surrounding the point of detection shall be surveyed to delineate the methane plume. Reports of survey results shall be submitted to the Division of Solid and Hazardous Waste within 30 days of completion of each survey. Reports shall include the location of each survey point and the associated measured methane concentrations. The report shall also include hourly barometric pressure readings for the day of the survey. Pressure data may be obtained from an on-site weather station or from a nearby weather station with publicly available data. [N.J.A.C. 7:26-2A.8(h)9]
- iv. During the post-closure care period, the owner or operator shall submit post-closure evaluation reports to the Division of Solid and Hazardous Waste as required by N.J.A.C. 7:26-2A.9(c)11. Submittal of a post-closure evaluation report is due every 10 years from the date of completion of closure of the sanitary landfill. A post-closure evaluation report is also due at least two, but not more than three, years prior to the scheduled end of the post-closure care period. If the owner or operator does not timely submit a complete post-closure evaluation report between two and three years prior to the scheduled end of the post-closure care period, the post-closure care period shall be extended until no less than two years from the Department's receipt of a complete report. [N.J.A.C. 7:26-2A.9(c)11]

12. Closure and Post-Closure Plan Modifications [N.J.A.C. 7:26- 2A.9(d)]

- a. The owner or operator shall apply for and obtain Department approval to modify the Closure and Post-Closure Plan prior to undertaking any activity that is not included in the approved Closure and Post-Closure Plan, or changing any portion of the approved Closure and Post-Closure Plan. [N.J.A.C. 7:26-2A.9(d)6]
- b. The Department may require the modification of an engineering design and a Closure and Post-Closure Plan at any time it is deemed necessary during the sanitary landfill's operation, closure or post-closure care period. [N.J.A.C. 7:26- 2A.9(d)8]

13. Transfer of Ownership [N.J.A.C. 7:26-2A]

a. In accordance with N.J.A.C. 7:26-2A.9(d)6, changes in ownership or operational control are considered modifications to the Closure and Post-Closure Plan. Therefore, prior to transfer of ownership or operational control, the new party must submit and obtain Department approval of an application for modification of the Closure and Post-Closure Plan. [N.J.A.C. 7:26-2A.9(d)6x]

131880 LCC180001 SW Landfill (Class C) Closure -Closure Plan Minor Modifi Requirements Report

14. Right to Inspect [N.J.A.C. 7:26-2]

a. Department inspectors shall have the right to enter and inspect the facility at any time. The right to inspect includes, but is not limited to: (a) sampling materials on site; (b) photographing any portion of the facility; (c) investigating an actual or suspected source of pollution of the environment; (d) ascertaining compliance or non-compliance with the statues, rules or regulations of the Department, including conditions or any permit or approval issued by the Department; (e) reviewing and copying all applicable records, which shall be furnished upon request and made available at all reasonable times for inspection. [N.J.A.C. 7:26-2.11(d)]

15. Other Permits/Approvals [N.J.A.C. 7:26-2]

a. The issuance of this Approval does not exempt the applicant from obtaining all other permits or approvals required by law or regulations. [N.J.A.C. 7:26-2.8(h)]