EGLE

Michigan Department of Environment, Great Lakes, and Energy Materials Management Division SOLID WASTE DISPOSAL AREA OPERATING LICENSE

Effective April 22, 2019, the Michigan Department of Environmental Quality, by Executive Order Number 2019-06, became the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Effective April 22, 2019, the Waste Management and Radiological Protection Division became the Materials Management Division (MMD).

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Oakland Heights Development, Inc.

LICENSEE/OPERATOR: Oakland Heights Development, Inc.

FACILITY OWNER: Oakland Heights Development, Inc.

PROPERTY OWNER: Oakland Heights Development, Inc.

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 470494

COUNTY: Oakland

LICENSE NUMBER: 9658

ISSUE DATE: October 6, 2021

EXPIRATION DATE: October 6, 2026

FACILITY DESCRIPTION: The Oakland Heights Development, Inc., a municipal solid waste landfill, consists of 144.16 acres

located in the northwest quarter of Section 2, Township 3 North, Range 10 East, at 2350 Brown Road, Auburn Hills, Oakland County, Michigan, as identified in Attachment A and fully described

in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Identified in Attachment A and Item 2 of this license.

RESPONSIBLE PARTY: Mr. Bill Dolsen, Landfill Manager

Oakland Heights Development, Inc.

2350 Brown Road Auburn Hills, Michigan

248-373-2334

RENEWAL OPERATING LICENSE: This License Number 9658 supersedes and replaces Solid Waste Disposal Area Operating License Number 9478 issued to Oakland Heights Development, Inc. on June 29, 2016.

This license is subject to revocation by the Director of the Michigan Department of Environment, Great Lakes, and Energy, if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Rhonda S. Oyer, Manager, Solid Waste Section

Materials Management Division

Operating License Number: 9658 Issue Date: October 6, 2021

The licensee shall comply with all terms of this license and the provisions of Part 115 and the administrative rules implementing Part 115 (Part 115 Rules). This license includes the license application and any attachments to this license.

- 1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
- 2. The following portions of the Facility are authorized to receive solid waste by this license:

ACTIVE PORTIONS NOT AT FINAL GRADE: The area(s) identified as Cell A and Cell A Berm (0.09 acre), Cell A Overfill (1.98 acres), Cell B South (5.0 acres), Cell B South Berm (0.24 acre), Cell B South Overfill (2.9 acres), Cell B North (4.1 acres), Cell B North Berm (0.11acre), Cell B North Overfill (1.77 acres), Cell C South (4.5 acres), Cell C South Overfill (1.9 acres), Cell C North (5.5 acres), Cell C North Overfill (0.4 acre), and Cell C Berm (0.25 acre), Phase 3 Perimeter Berm Northeast (0.14 acres), Phase 1 Overfill (3.63 acres), Cell E (10.06 acres), Cell E Overfill (5.1 acres), and Cell F (6.23 acres) were authorized to receive waste by the previous license. This area's total acreage is 53.90 acres.

- 3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by EGLE of construction certification: None.
- 4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:
 - a. **UNCLOSED AREA(S):** The area(s) identified as 2010 Final Cover Area (21.99 acres), Phase I North Overfill (0.18 acre), and remaining Phase I area (1.11 acres), and 2019 Final Cover Area (8.80 acres) are at final grade but have not had final cover certification approved by EGLE. This area's total acreage is 32.08 acres.
 - b. CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY EGLE: The following unit(s) and/or portion(s) are closed:

EXISTING UNIT(S): The unit(s) or portion(s) of unit(s) identified as 2001 Phase I Final Cover, 2002 Phase I Final Cover, 2003 Phase I Final Cover, and 2005 Phase I Final Cover had final closure certified on October 26, 2001, October 28, 2002, November 2003, and December 2005, respectively. This certification was reviewed and approved by EGLE on June 14, 2004, for the 2001 and 2002 certifications and September 16, 2009, for 2003 and 2005 certifications. This area's total acreage is 18.91 acres.

- 5. The attached map (Attachment A) shows the Facility, the area permitted for construction, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances.
- 6. Issuance of this license is conditioned on the accuracy of the information submitted by the Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by EGLE on June 14, 2021, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license and may be grounds for enforcement action. The licensee shall inform EGLE's MMD Warren DistrictSupervisor, of any inaccuracies in the information in the Application upon discovery.
- 7. This license is issued based on EGLE's review of the Application, submitted by Oakland Heights Development, Inc., for the Oakland Heights Development, Inc. landfill, dated June 14, 2021, with revisions dated July 13, 2021, July 22, 2021, and October 5, 2021. The Application consists of the following:
 - a. Application Form EQP 5507.
 - b. Application fee in the amount of \$5,000.00.
 - c. Certification of construction by N/A, dated N/A.
 - d. Waste Characterization: N/A.

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e. Restrictive Covenant:

The Oakland Heights Development, Inc. restrictive covenant on 144.17 acres is on file at the Oakland County Register of Deeds recorded on February 18, 2009, as Liber 40903 pages 718. A copy is on file with EGLE.

- f. Perpetual Care Fund Agreement, established as a standby trust account, signed by Ms. Marsha Lacy, Assistant Treasurer, Oakland Heights Development on September 29, 2014, was executed by EGLE on October 30, 2014.
- g. Financial Assurance.
 - i. Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the calculation worksheet form EQP 5507A entitled, "Form A, Financial Assurance Required," and is \$11,913,533.61.

The Facility has provided financial assurance totaling \$11,913,533.61, based on the requirements of Section 11523 of Part 115, consisting of a combination of the Perpetual Care Fund established under Section 11525 of Part 115, bonds, and the financial capability of the Applicant as evidenced by a financial test. The financial assurance mechanisms used by the Facility are summarized below in Items ii, iii, and iv, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

The Perpetual Care Fund Agreement statement showed a balance of \$2,506,000.00 in the Facility's Perpetual Care Fund as of July 19, 2021. Of this amount, EGLE has granted the request to use \$2,506,000.00 toward the total amount of financial assurance required.

iii. Financial Assurance Provided Via Bond:

The following financial assurance has been received from the Applicant to meet the amount of financial assurance required:

Surety Bond \$9,407,533.61

Total Amount Received: \$9,407,533.61

- iv. Financial Assurance Provided Via a Financial Test for a Type II Landfill: N/A.
- v. Financial Assurance Updates Required:

For Type II landfills, the financial assurance cost estimates of closure and postclosure activities must be updated annually and the corresponding requisite amount of financial assurance must be adjusted annually for the costs of inflation. The corresponding financial assurance, as adjusted for inflation and other factors, is due one year from the date of this license, and each year thereafter.

- vi. Other Required Financial Assurance: N/A.
- 8. The following documents approved with Construction Permit Numbers(s) 0073 issued to the Northeast Landfill, Inc., on July 8, 1982, Construction Permit Number 0406 issued to Northeast Landfill, Inc., on February 16, 1989, Construction Permit Number 0315 issued to Wayne Disposal Oakland, Inc., on February 22, 1995, Construction Permit Number 0374 issued to Oakland Heights Development, Inc., on July 16, 1999, Construction Permit Number 4064 issued to Oakland Heights Development, Inc., on June 18, 2004, Construction Permit Number 4091 issued to Oakland Heights Development, Inc., on May 11, 2009, and Construction Permit Number 4118 issued to Oakland Heights Development, Inc. on September 29, 2011, are incorporated in this license by reference:

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a. Engineering plans titled "A proposed Landfill in Pontiac Township, Michigan," prepared by Johnson & Anderson, Inc., dated August 10, 1981, and revised September 13, 1985.

- b. Engineering plans titled "Construction Development Plan, Wayne Disposal Oakland," prepared by Johnson & Anderson, Inc., approved by EGLE on February 16, 1989.
- c. Engineering report titled "Wayne Disposal Oakland, Inc., Type II Sanitary Landfill Phase 2 Expansion Michigan Act 641 Construction Permit Application, Volumes I-V," dated September 1994.
- d. Engineering plans titled "Wayne Disposal Oakland Landfill Phase 2 Expansion Construction Permit Plans, prepared by Midwestern Consulting," dated September 1994.
- e. Engineering plans titled "Oakland Heights Development, Inc., Landfill Phase 3 Expansion, Construction Permit Plans," dated March 1999 and revised January 2003 (Revision A).
- f. Engineering report titled "Oakland Heights Development, Inc., Landfill Part 115 Construction Permit Application, Type II Landfill, Phase 3 Expansion, Volumes 1 and 2", dated March 19, 1999.
- g. Engineering and hydrogeological report contained within documents titled "Oakland Heights Development, Phase 4 Expansion, Volume 1-2," prepared by STS Consultants, Ltd., dated December 2003, and revised February 2004, May 20, 2004, and May 24, 2004.
- h. Engineering plans consisting of 18 sheets titled "Oakland Heights Development, Inc., Construction Permit Application, Phase 4 Expansion, City of Auburn Hills, Oakland County, Michigan," prepared by STS Consultants, Ltd., dated December 2003, revised May 19, 2004, and May 21, 2004.
- Document titled "Solid Waste Disposal Area Construction Permit Application Cell E Expansion" Volumes 1, 2, and 3, prepared by Golder Associates, dated February 2007, and revised in October 2007, January 2008, and February 2008. Revisions were received by EGLE on October 31, 2007, January 22, 2008, January 29, 2008, January 31, 2008, February 7, 2008, February 13, 2008, and February 15, 2008.
- j. Engineering drawings, numbered 1 through 24, in the Engineering Plan Set titled "Construction Permit Application, Oakland Heights Development Landfill, Aubum Hills, Oakland County, Michigan," prepared by Golder Associates, dated February 2007, and revised in January 2008 and February 2008. Revisions were received by EGLE on January 22, 2008, January 29, 2008, February 7, 2008, February 8, 2008, and August 8, 2008, (Sheets 3, 4, and 11 only).
- k. Document titled "Solid Waste Disposal Area Construction Permit Application Cells E2 and F Expansion", Volumes 1, 2, and 3, prepared by Golder Associates, dated December 2008, and revised April 2009. Revisions were received by EGLE on April 10, 2009, April 15, 2009, and April 17, 2009.
- I. Engineering Drawings, numbered 1 through 25, in the Engineering Plan Set titled "Construction Permit Application, Oakland Heights Development Landfill, Auburn Hills, Oakland County, Michigan," prepared by Golder Associates, dated December 2008, and revised April 2009. Revisions were received by EGLE on April 10, 2009, and April 17, 2009.
- m. Supplemental engineering design calculations including a revised HELP Model analysis, dated September 24, 2010, revised leachate mounding calculations for the final cover drainage layer, dated August 11, 2011, and September 9, 2011; and a revised airspace calculation.
- Letter prepared by Golder Associates, Inc., dated August 24, 2011, titled "Response to July 20, 2011, MDEQ Comments, Permit Application for Design Modifications, Oakland Heights Development Landfill, Auburn Hills Michigan."

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> Letter prepared by Golder Associates, Inc., dated September 15, 2011, titled "Response to August 30, 2011, MDEQ comments, Permit Application for Design Modifications, Oakland Heights Development Landfill, Auburn Hills Michigan."

- P. Revised construction quality assurance plan titled "Oakland Heights Development Landfill Construction Quality Assurance/Quality Control Plan" (CQA Plan), prepared by Golder Associates, Inc., dated August 2011, and revised September 15, 2011. CQA Plan revised further relative to Section 9.0 in May 2014.
- q. Revised engineering plan set (Sheets Numbered 0 through 25) titled "Construction Permit Modification, Oakland Heights Development Landfill, Auburn Hills, Oakland County, Michigan," prepared by Golder Associates, Inc., originally dated December 2008, revised May 2011 and further revised in response to EGLE comments on August 12, 2011. Sheets 3 and 10 were further revised in March 2012 to correct errors in the depicted cell floor grades.
- 9. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 8, are incorporated in this license by reference:
 - a. Engineering Report for the Construction Certification for Cell 1 approved by EGLE on October 18, 1985.
 - b. Engineering Report for the Construction Certification for Cell 2 approved by EGLE on December 15, 1986.
 - c. Engineering Report for the Construction Certification for Cell 3 approved by EGLE on December 23, 1987.
 - d. Engineering Report for the Construction Certification for Cell 4a approved by EGLE on September 30, 1988.
 - e. Engineering Report for the Construction Certification for Cell 4b approved by EGLE on April 10, 1989.
 - f. Engineering Report for the Construction Certification for Cell 5 approved by EGLE on December 15, 1989.
 - g. Engineering Report for the Construction Certification for Cell 6 approved by EGLE on April 8, 1991.
 - h. Engineering "as-built" elevations for fill Areas 1 6, prepared by Johnson & Anderson, Inc., dated July 29, 1985, and revised September 9, 1985, September 29, 1986, November 19, 1986, May 18, 1987, August 21, 1987, July 7, 1988, December 22, 1988, April 3, 1989, August 24, 1989, and November 19, 1990.
 - i. Engineering report titled "Construction Certification Phase 2 Expansion Cell A Type II Sanitary Landfill Wayne Disposal Oakland, Inc., Volumes I-IV", prepared by NTH Consultants, Ltd., dated March 1, 1996.
 - j. Engineering plans titled "Wayne Disposal Oakland Landfill, Phase 2 Expansion, Cell A Record Drawings," prepared by McNeely & Lincoln Associates, Inc., dated March 1, 1996.
 - k. Engineering report titled "Construction Certification Phase 2 Expansion Cell B-South Type II Sanitary Landfill Wayne Disposal Oakland, Inc., Volumes I-III", prepared by NTH Consultants, Ltd., dated March 1997.
 - I. Engineering report titled "Construction Certification Phase 2 Expansion Southern Phase 1 Overfill Area Type II Sanitary Landfill Wayne Disposal Oakland, Inc.," prepared by NTH Consultants, Ltd., dated December 1997.
 - m. Engineering report titled "Construction Certification Phase 2 Expansion Cell B-North Type II Sanitary Landfill Oakland Heights Development, Inc., Landfill, Volumes I and II," prepared by NTH Consultants, Ltd., dated August 1998.
 - n. Revised Intra-well Background Statistical Limits petition prepared by GeoChem, Inc., dated July 13, 1999.
 - o. Engineering report titled "Construction Certification Cell B-North Overfill," prepared by NTH Consultants, Ltd., dated September 3, 1999, revised November 13, 1999.

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- p. Engineering report titled "Proposed Liner Design Modification, Oakland Heights Development, Inc., Type II Landfill", prepared by NTH Consultants, Ltd., dated September 8, 1999.
- q. Engineering plans titled "Oakland Heights Development, Inc., Landfill, Phase 3 Expansion, Revised Construction Permit Plans, Sheet 28", prepared by NTH Consultants, Ltd., dated September 15, 1999.
- r. Engineering report titled "Construction Certification Phase 2 Expansion Cell C South Type II Sanitary Landfill Oakland Heights Development, Inc., Landfill, Volumes I and II," prepared by NTH Consultants, Ltd., dated October 1999.
- s. Engineering report titled "Construction Certification Cell C-North Type II Sanitary Landfill Oakland Heights Development, Inc., Landfill, Volumes I and II," prepared by NTH Consultants, Ltd., dated December 1999.
- t. Engineering report titled "Construction Documentation Report for the Cell C Phase 1 Overfill Area Construction at the Oakland Heights Development, Inc.," prepared by Earth Tech, Inc., dated November 2000.
- u. "Leachate and Gas Condensate Recirculation Plan Oakland Heights Landfill" prepared by NTH, dated December 15, 2000, and received by EGLE on September 12, 2001.
- v. Engineering report titled "Construction Documentation Report for Phase 3 Expansion of the Perimeter Berm of Cells B/C and the Phase 1, Cell C, Slope Overfill Area at Oakland Heights Development, Inc.," prepared by Earth Tech, Inc., dated August 2001.
- w. Engineering report titled "Construction Documentation Report for Phase 3 Expansion of the Perimeter Berm of Cell A," prepared by Earth Tech, Inc., and dated October 2002, and revised December 23, 2002.
- x. Engineering report titled "Design improvements to the approved Phase 3 Expansion Construction Permit Plans," prepared by Earth Tech, dated January 22, 2003.
- y. Engineering report titled "Construction Documentation Report, Oakland Heights Development, Inc., 2003 Final Cover," prepared by Earth Tech, Inc., dated November 2003. The report was submitted to certify the construction of approximately 3.1 acres of final cover over a portion of the Phase 1 Area at the Facility.
- z. Engineering report titled "Construction Documentation Report, Oakland Heights Development, Inc., Cell D, Cell D Overliner, and Phase 1 Overfill Areas" prepared by Earth Tech, Inc., dated October 2003 and revised December 11, 2003.
- aa. Supplemental engineering document (letter report) titled "Oakland Heights Development, Cell D and Overliner Construction, Construction Documentation Report, Gas Vent Repairs", prepared by Earth Tech, dated January 23, 2004.
- bb. Revised engineering plan sheets 6, 7, 10, 12, 13, and 14, dated April 26, 2005, with revisions dated July 7, and 8, 2005, titled "Oakland Heights Development, Auburn Hills, Michigan, Construction Permit Modification," which revise the respective previously approved "Oakland Heights Development Inc., Construction Permit Application, Phase 4 Vertical Expansion" engineering plan sheets.
- cc. Engineering report titled "Construction Certification, Final Cover West Slope, Oakland Heights Development Landfill, Auburn Hills, MI," prepared by NTH Consultants, Ltd., dated December 2005. The report was submitted to certify the construction of approximately 9.2 acres of final cover over a portion of the Phase 1 Area at the Facility.
- dd. A letter request with the subject "Request For Approval of an Alternate Geocomposite Material" prepared by Golder Associates, Inc., dated May 19, 2008, with an attached product specification sheet from Engineered Synthetic Products, Inc. This request was submitted to EGLE via e-mail on May 19, 2008, and a hard copy was received by EGLE on May 20, 2008.

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ee. Engineering report titled "Oakland Heights Development Landfill Cell E1 Construction Quality Assurance Report," prepared by Golder Associates, Inc., dated August 2008, and revised October 2008.

- ff. "Construction Permit Application Additional Information" prepared by Golder Associates, Inc., dated April 17, 2009.
- gg. Letter report (with attachments) titled "Cell E1 Protective Layer Repair Certification, Oakland Heights Development, Inc.; WDS No. 470494, Auburn Hills, Michigan" prepared by Golder Associates Inc., dated May 28, 2009.
- hh. Engineering report titled "2009 Landfill Gas System Construction CQA Report, Oakland Heights Development Landfill, Auburn Hills, Michigan", prepared by The Mannik & Smith Group, Inc., dated February 26, 2010, received by EGLE on March 9, 2010, and revised on July 1, 2010, (via letter submittal with attachments) to address EGLE comments.
- ii. Engineering report titled "Oakland Heights Development Landfill Cell E Phase I Overliner Construction Certification Report," prepared by Golder Associates, Inc., dated September 15, 2010.
- jj. Letter titled "Request for Approval of an Alternate Baseliner Subgrade," prepared by Golder Associates Inc., dated November 16, 2010.
- kk. Letter titled "Request for Approval of Toe Drain Design," prepared by Golder Associates Inc., and dated November 22, 2010, with attached engineering drawing titled Leachate Toe Drain, prepared by Golder Associates Inc., and dated November 18, 2010.
- II. Letter titled "Request for Approval of an Alternate Geocomposite Drainage Outlet," prepared by Golder Associates, Inc., dated November 16, 2010, with attached Figure 1 titled Final Cover Tie-In, prepared by Golder Associates Inc., dated November 5, 2010.
- mm. Figure 1 titled "Cell E Leachate System Modification," prepared by Midwestern Consulting, Inc., dated January 18, 2011, and approved by EGLE on January 19, 2011.
- nn. Letter report with attachments titled "Request for Approval of Phase I Overliner Construction Oakland Heights Development, Inc.," prepared by Golder Associates, Inc., dated February 11, 2011, and revised February 17, 2011.
- oo. Engineering report titled "Oakland Heights Development Landfill, Cell E East Construction Certification Report," prepared by Golder Associates, Inc., dated December 28, 2010, and revised March 9, 2011.
- pp. Certification letter (including Attachments A through C) titled "Oakland Heights Development, Inc., Auburn Hills, Michigan, Cell F-West/Cell E-East Leachate Collection System Tie-In, Rain Flap Removal and Geosynthetic Repairs", prepared by CTI and Associates, Inc., dated November 9, 2012, and submitted to the EGLE via electronic mail on November 9, 2012.
- qq. Certification letter (including Attachments A through E) titled "Oakland Heights Development, Phase 1 Overliner Geomembrane Repair," prepared by Cornerstone Environmental Group, LLC, dated November 13, 2012, and received by the EGLE on November 14, 2012.
- rr. Engineering detail (sheet number 1) titled 2013 Cell F Leachate System Modification, Leachate Riser Modification Details, prepared by Midwestern Consulting, dated March 18, 2013, and submitted to the OWMRP via electronic mail on March 18, 2013.
- ss. Certification letters titled "Oakland Heights Development Landfill, Aubum Hills, Michigan, Cell F-West Drainage Sand Replacement," prepared by BEL Environmental Engineering, dated July 12, 2013, August 20, 2013, and September 12, 2013.

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tt. Certification letter (including Attachments A through D) titled "Oakland Heights Development Landfill, Auburn Hills, Michigan, Cell F-West Geosynthetic Repairs and Temporary Rain Flap Repair", prepared by BEL Environmental Engineering, dated October 9, 2013.

- uu. Engineering plan set (drawings numbered 1N, 1S, 2, 3, 4, and 5) titled "Construction Drawings for 2013 LFG Collection System Expansion at Oakland Heights Landfill," prepared by Cornerstone Environmental Group, LLC, dated October 2013 and received by EGLE via electronic mail submittal on October 15, 2013.
- vv. Engineering drawing (showing Detail #1 and Detail #2) titled "Alternate Well Seal/Cap Repair for Deep Cap," prepared by Cornerstone Environmental Group, LLC, dated November 12, 2013, and received by EGLE on November 12, 2013, via electronic mail submittal.
- ww. Certification letter (including Attachments A through E) titled "Oakland Heights Development, Final Cover Geomembrane Repairs," prepared by Cornerstone Environmental Group, LLC, dated January 6, 2014.
- xx. Letter submittal titled "Oakland Heights Development Landfill, Auburn Hills, Michigan, CQA Plan Addendum for Cell F-East Granular Soils Placement," including a revised Section 12.3 of the previously approved CQA Plan, prepared by BEL Environmental Engineering, LLC, dated August 12, 2014.
- yy. Letter report titled "Results of Veneer Slope Stability Evaluation, 2014 Cell F East Access Road, Oakland Heights Development, Inc.," prepared by The Mannik & Smith Group, Inc., dated August 15, 2014.
- zz. Letter report (including Appendix A, Figures 1 and 2) titled "Buttress Removal Guidelines, Oakland Heights Development Cell F, Auburn Hills, Michigan", prepared by The Mannik & Smith Group, Inc., dated February 9, 2015.
- aaa. Certification letter (including attached soil testing data and figures depicting soil depths) titled "Cell F-West Drainage Sand Replacement," prepared by Republic Services, dated November 17, 2015.
- bbb. Letter request (including attached construction details) with the subject "Oakland Heights Development Landfill, Gas Construction Final Cover Repairs," prepared by Cornerstone Environmental Group, LLC, dated November 18, 2015, and submitted to EGLE via electronic mail submittal on November 18, 2015.
- ccc. Engineering plan set (drawings numbered 1 through 5) titled "Construction Plans for the 2016 Landfill Gas System, Oakland Heights Landfill," prepared by Cornerstone Environmental Group, LLC, dated May 2016, and received by EGLE via electronic mail submittal on May 26, 2016.
- 10. Consent Order/Judgment Number: N/A.
- 11. The licensee shall repair any portion of the certified liner or leachate collection system that is found to be deficient or damaged during the term of this license unless determined otherwise by EGLE.
- 12. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer in accordance with R 299.4921 of the Part 115 Rules and approved by EGLE before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to EGLE's MMD Warren District Supervisor, for review and approval.
- 13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated December 2008, and revised April 2009. The sampling analytical results shall be submitted to EGLE's MMD Warren District office.
- 14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by EGLE's MMD Warren District Supervisor. Proposed revisions must be submitted in a format specified by EGLE.

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- 15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by EGLE's MMD Warren District Supervisor.
- 16. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(I) of the Part 115 Rules, may be approved, in writing, by EGLE's MMD Warren District Supervisor.
- 17. Requests for alternate daily cover may be approved, in writing, by EGLE's MMD Warren District Supervisor.
- 18. Leakage Control Criteria:

With the exception of Cell F, the active portions of the unit(s) authorized to receive waste by this license is a monitorable unit(s) designed with a double-liner system that is in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that is capable of detecting and collecting leakage through the primary composite liner. The action flow rate for each cell containing a secondary collection system is 200 gallons/acre/day for Cells A and B, and 25 gallons/acre/day for Cells C, D, and E. Cell F is currently treated as an unmonitorable portion of the landfill unit due to volatile organic compound (VOC) detections at the adjacent MW-47S monitoring well location that is screened in a perched water zone with limited extent at the Facility. The Facility has provided an alternate source demonstration for the VOC detections at MW-47S. Cell F is designed with a double liner system that is in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that is capable of detecting and collecting leakage through the primary composite liner. The action flow rate for the Cell F leak detection system is 5 gallons/acre/day. The response flow rate for the Cell F leak detection system is 25 gallons/acre/day. The Phase I area has a single liner system consisting of a compacted soil liner. All portions of the Phase I area have either: received final cover, been equipped with a composite overfill liner system which drains leachate to areas constructed in compliance with R 299.4422(3), or have otherwise been excluded from the active portions of the unit.

19. VARIANCES: The licensee is granted the following variance(s) from Part 115 and/or the Part 115 Rules: None.

20. SPECIAL CONDITIONS:

- a. The licensee shall place a compacted layer of not less than six inches of earthen material, unless an exemption is granted, of suitable cover material on all exposed solid waste by the end of each working day, as required by R 299.4429(1) of the Part 115 Rules. Suitable cover shall be either uncontaminated soil or an alternate cover approved by the MMD, listed in Item i, below. Alternate cover shall be restricted as indicated in Item ii and applied as per the approved operational plan submitted by the licensee.
 - Approved alternate cover shall be any of the following:

Product/Waste Material	Source	Monthly Volume
(1) Fabrisoil, a non-woven polypropylene fabric	Phillips Fibers Corporation	Varies
(2) Sanifoam, a foam resin mixture	3M Company	Varies
(3) Concover, a resonated product of paper, wood fibers, and chips	Nicolon Corporation	Varies
(4) Procover, a non-woven fabric	Nicolon Corporation	Varies
(5) Amoco 2001, and Amoco 2006, woven polypropylene fabrics	Amoco Oil Company	Varies
(6) Rusfoam, a spray-on foam	Rusmar Incorporated	Varies

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Product/Waste Material	Source	Monthly Volume
(7) Environfoam, a resinated foam mixture	Environmental Systems, Ltd.	Varies
(8) Plastic sheeting	Varies	Varies
(9) Geotextiles	Varies	Varies
10) Woven mats	Varies	Varies
11) Contaminated Soil	Varies (GM Tech Center, Birmingham, St Lawrence cemetery dump site)	Varies

- ii. The above materials are approved for daily cover when used in the following manner:
 - (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
 - (2) The licensee shall maintain copies of the testing performed on Class B and Class C materials in the facility operating record.
 - (3) The licensee shall only stockpile material in a secure manner within the active cell.
 - (4) This approval does not preclude the licensee from disposing of the material as waste in the active fill area instead of using the material as daily cover.
 - (5) This approval shall immediately become void upon documentation by EGLE that the alternative cover is not being used in accordance with listed conditions, that the alternative cover is not providing the necessary protection, that the material no longer meets the alternative daily cover guidelines, or that the process producing the waste material has changed.
 - (6) If the material does not meet the guidelines from Attachment 2 of Policy and Procedure OWMRP-115-10, for nonvolatiles, the licensee shall ensure that fugitive dust emissions from this material do not occur. Acceptable methods to ensure fugitive emissions do not occur are:
 - (a) Implement a schedule to wet down material; or
 - (b) Cover the material with a tarp; or
 - (c) Apply an approved foam or other appropriate commercial dust control product.
 - (7) This approval to use alternative cover shall expire upon expiration of this operating license.
- b. The licensee may recirculate leachate pursuant to a plan titled "Leachate and Gas Condensate Recirculation Plan, Oakland Heights Landfill." dated December 15, 2000.
- c. Any fire incidents that occur at the Facility must be reported to EGLE within 48 hours.
- d. The final cover soils and geosynthetics in the areas of the boreholes for landfill gas extraction wells GW-4A, GW-7A, and GW-8A will be repaired and re-certified upon removal of the soil stockpile present in the area of these wells and before final closure of the landfill unit.

-10- EQP 5203e (Rev 05/2019)

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21. **TERM**: This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by, the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

END OF LICENSE

-11- EQP 5203e (Rev 05/2019)



