



Michigan Department of Environmental Quality
Office of Waste Management and Radiological Protection

SOLID WASTE DISPOSAL AREA OPERATING LICENSE

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: Orchard Hill Sanitary Landfill

LICENSEE/OPERATOR: Landfill Management Co.

FACILITY OWNER: Landfill Management Co.

PROPERTY OWNER: Hennesey Land Company

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 458867

COUNTY: Berrien

LICENSE NUMBER: 9433

ISSUE DATE: April 22, 2015

EXPIRATION DATE: April 22, 2020

FACILITY DESCRIPTION: The Orchard Hill Sanitary Landfill, a municipal solid waste landfill, consists of 283 acres located in the SE 1/4 of Section 28, T3S, R17W, Watervliet Township, and the East 1/2 of Section 33, T3S, R17W, Coloma Township, Berrien County, Michigan, as identified in Attachment A and fully described in this license.

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

RESPONSIBLE PARTY: Mr. Michael Balkema, Vice President
Landfill Management Co.
3290 Hennesey Road
Watervliet, Michigan 49098
269-226-9200

RENEWAL OPERATING LICENSE: This License Number 9433 supersedes and replaces Solid Waste Disposal Area Operating License Number 9300 issued to Orchard Hill Sanitary Landfill on January 19, 2011.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality, 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.

Steven R. Sliver, Chief, Solid Waste Section
Office of Waste Management and Radiological Protection

Licensee: Landfill Management Co.
Facility Name: Orchard Hill Sanitary Landfill
Operating License Number: 9433
Issue Date: April 22, 2015

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:
 - a. **ACTIVE PORTIONS NOT AT FINAL GRADE:** The area(s) identified as area contained by a portion of Parcel A, Parcel B and the overfill portion of Parcel B, Parcel C-Cells 5, 1A, 1B, and Parcel D-6A and 7A were authorized to receive waste by the previous license. This area's total acreage is 77.6 acres.
 - b. **CONSTRUCTED AREAS CERTIFIED WITH THIS APPLICATION:** The area(s) identified as Parcel D- Cell 7B were not authorized to receive solid waste by the previous license, but are authorized to receive waste by this license subject to special condition 20b. This area's total acreage is 14.332 acres.
3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by the Michigan Department of Environmental Quality (MDEQ) of construction certification: N/A.
4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:
 - a. **UNCONSTRUCTED AREA(S) WITHOUT FINANCIAL ASSURANCE:** The area(s) identified as Parcel C-Cells 2, 3, 4, Parcel D-Cells 6B, 8, 9, and 10 are not constructed and are not included in the calculation of financial assurance as required by Section 11523 of Part 115. This area's total acreage is 86.268 acres.
 - b. **CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY THE MDEQ:** The following unit(s) and/or portion(s) are closed:

EXISTING UNIT(S): The unit(s) or portion(s) of unit(s) identified as area contained by a portion of Parcel A had final closure certified on December 26, 2008. This certification was reviewed and approved by the MDEQ on February 19, 2009. This area's total acreage is 24.667 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 the MDEQ on January 5, 2015, 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 the MDEQ's Office of Waste Management and Radiological Protection (OWMRP), Kalamazoo District Supervisor, of any inaccuracies in the information in the Application upon discovery.
7. This license is issued based on the MDEQ's review of the Application, submitted by Landfill Management Co., for the Orchard Hill Sanitary Landfill, dated January 5, 2015, and March 16, 2015. The Application consists of the following:
 - a. Application Form EQP 5507.
 - b. Application fee in the amount of \$3,875.00.
 - c. Certification of construction by Golder Associates Inc., dated December 2014.
 - d. Waste Characterization: N/A.

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e. Restrictive Covenant:

A restrictive covenant on 116.599 acres signed by the Applicant on December 30, 2014 was included in the Application and will be signed by the MDEQ and filed with the Berrien County Register of Deeds.

f. Perpetual Care Fund Agreement, established as a standby trust account, signed by Michael Balkema, Vice President, on October 14, 2014, was executed by the MDEQ on December 2, 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 \$9,683,966.67.

The Facility has provided financial assurance totaling \$9,999,852.89, 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 \$2,187,152.74 in the Facility's Perpetual Care Fund as of December 2, 2014. Of this amount, the MDEQ has granted the request to use \$2,187,152.74 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:

Irrevocable Letter of Credit	\$7,812,700.15
Total Amount Received:	\$7,812,700.15

iv. 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 on April 22, 2016, and each year thereafter.

8. The following documents approved with construction permit 4083 issued to the Landfill Management Co. on November 27, 2006, are incorporated in this license by reference:

- a. Construction Permit Application Volumes 1-3, June 2006- Rev. 1, October 24, 2006
- b. Hydrogeological Monitoring Plan, Orchard Hill Sanitary Landfill, June 2006- Rev. 1, October 24, 2006
- c. Engineering Plan Sheets 1-37 entitles, "Construction Permit Application Orchard Hill Sanitary Landfill."

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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. Construction Quality Assurance Plan updates, dated 2008 and 2010.
 - b. Leachate Recirculation Plan, Amendment 1, dated August 8, 2011.
 - c. Proposed Leachate Forcemain Design dated May 2013, with additional clarification plans submitted July 2013.
10. Consent Order/Judgment Number: OWMRP Consent Order Number FTO-115-02-15 entered on April 15, 2015, is incorporated into this license by reference.
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 the MDEQ.
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 the MDEQ before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to the MDEQ's OWMRP, Kalamazoo District Office Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated October 24, 2006. The sampling analytical results shall be submitted to the MDEQ's OWMRP, Kalamazoo District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the OWMRP, Kalamazoo District Supervisor. Proposed revisions must be submitted in a format specified by the MDEQ.
15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the OWMRP, Kalamazoo District Supervisor.
16. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(l) of the Part 115 Rules, may be approved, in writing, by the OWMRP, Kalamazoo District Supervisor.
17. Requests for alternate daily cover may be approved, in writing, by the OWMRP, Kalamazoo District Supervisor.
18. Leakage Control Criteria:

The active portions of the unit(s) authorized to receive waste by this license is an unmonitorable unit(s) designed with a double-liner systems 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 Parcel B and Cell 5 of Parcel C is 50 gallons/acre/day and the response flow rate for Parcel B and Cell 5 of Parcel C is 200 gallons/acre/day. The action flow rate for Parcel C- Cell 1A and 1B and Parcel D-Cells 6A and 7A is 5 gallons/acre/day. The response flow rate for Parcel C, Cell 1A and 1B and Parcel D- Cells 6A and 7A is 25 gallons/acre/day.
19. **VARIANCES:** None.

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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 OWMRP, 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.

i. Approved alternate cover shall be any of the following:

<u>Product/Waste Material</u>	<u>Monthly Volume</u>
Posi-Shell	N/A

ii. The above materials are approved for daily cover when used in the following manner:

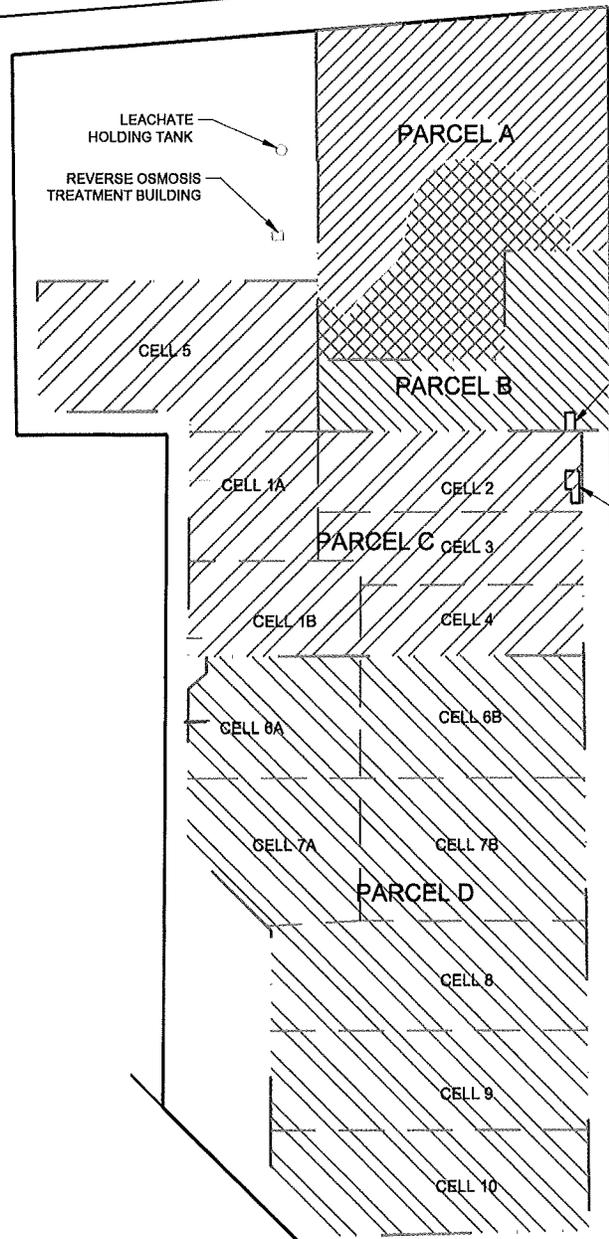
- (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
- (2) The licensee shall maintain copies of the testing performed on Class B and Class C materials in the facility operating record.
- (3) The 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 the MDEQ 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 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. Cell 7B is not authorized to accept waste with this license until such time as the licensee demonstrates for 60 consecutive days that the secondary collection system has less than 5 gallons/acre/day of collected liquid (non-averaged data). The OWMRP will approve or deny any demonstration regarding the acceptance of waste into Cell 7B based on flow rates within 7 days of receipt. In the event the flow rate in the Cell 7B secondary collection system exceeds 5 gallons/acre/day, licensee will submit a work plan to address the flow, identify the source, perform repairs as necessary, and confirm that the actions taken were successful. The work plan will be implemented upon approval by the OWMRP. After successful completion of the work plan, the OWMRP will review the work plan results and authorize the disposal of waste in Cell 7B.

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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



LEGEND

	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	CELL BOUNDARY
	PARCEL A 25.8 ACRES
	OVERLINED PORTION OF PARCEL A 12.7
	PARCEL B 14.5 ACRES
	PARCEL C 64.0 ACRES
	PARCEL D 87.0 ACRES

LEACHATE TANK BUILDING

DAN SMITH ROAD

OFFICE

HENNESEY ROAD

ANGLING ROAD

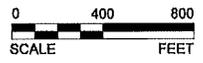
CLIENT
ORCHARD HILL SANITARY LANDFILL
WATERVLIET, MICHIGAN

PROJECT
OPERATION LICENSE MAP

TITLE
ATTACHMENT A

CONSULTANT	YYYY-MM-DD	2014-12-10
	PREPARED	BJK
	DESIGN	TDJ
	REVIEW	TDJ
	APPROVED	PTS

PROJECT No. 043-8983	FILE 0438983JJ003	Rev. 0	ATTACHMENT A
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI A