



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: K&W Landfill, Inc.

LICENSEE/OPERATOR: K&W Landfill, Inc.

FACILITY OWNER: Waste Management, Inc.

PROPERTY OWNER: K&W Landfill, Inc.

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 408328

COUNTY: Ontonagon

LICENSE NUMBER: 9362

ISSUE DATE: November 21, 2013

EXPIRATION DATE: November 21, 2018

FACILITY DESCRIPTION: The K&W Landfill, Inc., a municipal solid waste landfill, consists of 85.17 acres located in the S 1/2 of the NE 1/4 and the N 1/2 of the SE 1/4, Section 28, T51N, R38W, Greenland Township, Ontonagon County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Phase II, Cell 2 (7 acres); Phase III, Cells 1-3 (21 acres) for a total of 28 acres.

RESPONSIBLE PARTY: Greg Johns  
K&W Landfill, Inc.  
11877 Highway M-38  
Ontonagon, Michigan 49953

**RENEWAL OPERATING LICENSE:** This License Number 9362 supersedes and replaces Solid Waste Disposal Area Operating License Number 9321 issued to K&W Landfill, Inc. on November 17, 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: K&W Landfill, Inc.  
Facility Name: K&W Landfill, Inc.  
Operating License Number: 9362  
Issue Date: November 21, 2013

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 Phase II, Cell 2 (7 acres) and Phase III, Cells 1-3 (21 acres) were authorized to receive waste by the previous license. This area's total acreage is 28 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:

**UNCONSTRUCTED AREA(S) WITH FINANCIAL ASSURANCE:** The area(s) identified as Cell 4, totaling 6.7 acres, are included in the calculation of financial assurance as required by Section 11523 of Part 115. This portion(s) of the Facility shall be authorized to receive waste, as part of this license, when acceptable certification is submitted to the MDEQ, as required by Section 11516(5) of Part 115, and determined by the MDEQ to be consistent with Part 115 and the Part 115 Rules. The certification shall verify that construction of this area(s) was in accordance with the Construction Permit(s) listed in Item 8 of this license, Part 115, and the Part 115 Rules.

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 Cell 5 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 7.4 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 Phase I - Section 1 and Phase II - Cell 1 had final closure certified on August 23, 1994, (Phase I, 5.7 acres of Section 1) and October 2012 (Phase I, 3.9 acres of Section 1 and Phase II - Cell 1, 5.1 acres). This certification was reviewed and approved by the MDEQ on October 26, 1994, and November 27, 2012, respectively. This area's total acreage is 14.7 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 October 1, 2013, 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), Upper Peninsula 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 Mr Robert Pliska, P.E., for the K&W Landfill, Inc., dated September 25, 2013, and revised October 8, 2013. The Application consists of the following:
  - a. Application Form EQP 5507.
  - b. Application fee in the amount of \$1,250.00.
  - c. Certification of construction by N/A.
  - d. Waste Characterization: N/A.

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e. Restrictive Covenant:

The K&W Landfill, Inc., February 22, 1999, restrictive covenant on 85.17 acres is on file at the Ontonagon County Register of Deeds recorded on June 15, 1999, as Liber 68 pages 97-99. A copy is on file with the MDEQ.

f. Perpetual Care Fund Agreement, established as an escrow account, signed by Mr. Robert S. Durkin, Vice President, K&W Landfill, Inc. on June 13, 1997, was executed by the MDEQ on August 5, 1997.

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 \$7,489,749.00.

The Facility has provided financial assurance totaling \$7,489,749.00, 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 and iii, respectively.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

- (1) The amount of the required financial assurance can be reduced pursuant to Section 11524 of Part 115, if the amount of money in the Perpetual Care Fund plus the amount of the reduced financial assurance equals the amount of financial assurance required in Section 11523 of Part 115 and is approved by the MDEQ.
- (2) The Perpetual Care Fund Agreement statement showed a balance of \$1,714,121.44 in the Facility's Perpetual Care Fund as of August 31, 2013. Of this amount, the MDEQ has granted the request to use \$1,714,121.00 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	\$5,775,628.00
Total Amount Received:	\$5,775,628.00

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 November 21, 2014, and each year thereafter.

8. The following documents approved with Construction Permit Number(s) 0353 issued to the K&W Landfill, Inc. on July 21, 1997, are incorporated in this license by reference:

- a. Construction Permit Application Volume 1, prepared for K&W Landfill, Inc. by Wenck Associates, Inc., and dated March 1997. Volume 1 contains the Hydrogeological Investigation Report, the Landfill Environmental Assessment, the Design Report, Operations Plan, Closure and Post-Closure Plan, Construction Quality Assurance Plan and Engineering Plan Sheets 1-3. Volume 1 was revised on June 20, 1997.

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- b. Construction Permit Application Volume 2, prepared for K&W Landfill, Inc. by Wenck Associates, Inc., and dated March 1997. Volume 2 contains references and attachments cited in various sections of Volume 1. Volume 2 was revised on June 20, 1997.
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. Leachate Recirculation Plan prepared for K&W Landfill, Inc. by Wenck Associates, and dated July 17, 1997.
  - b. Design Modification prepared for K&W Landfill, Inc. by Wenck Associates, Inc., received by the MDEQ on April 12, 2002, and approved by the MDEQ on May 28, 2002.
  - c. Construction Quality Assurance Plan prepared for K&W Landfill, Inc. by Wenck Associates, Inc., dated May 2012 and approved by the MDEQ on May 11, 2012.
  - d. Design Modification prepared for K&W Landfill, Inc. by Wenck Associates, Inc., dated May 16, 2013 and approved by the MDEQ on May 29, 2013.
  - e. Revised Hydrogeological Monitoring Plan prepared for K&W Landfill, Inc. by Gosling Czubak Engineering Sciences, Inc., dated April 2013, and approved by the MDEQ on June 14, 2013.
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 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, Upper Peninsula District Office Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated April 2013 and approved by the MDEQ on June 14, 2013. The sampling analytical results shall be submitted to the MDEQ's OWMRP, Upper Peninsula and Cadillac District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the OWMRP, Upper Peninsula 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, Upper Peninsula 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, Upper Peninsula District Supervisor.
17. Requests for alternate daily cover may be approved, in writing, by the OWMRP, Upper Peninsula District Supervisor.
18. Leakage Control Criteria:

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 unit containing a secondary collection system is 25 gallons/acre/day.

19. **VARIANCES:** 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 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>Source</u>
Woven Geotextile	
Woven-coated geotextile	
Petroleum impacted soil	Removal of USTs
Chipped Tires	
Biofuel fly ash	L'Anse Warden Electric Co.

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

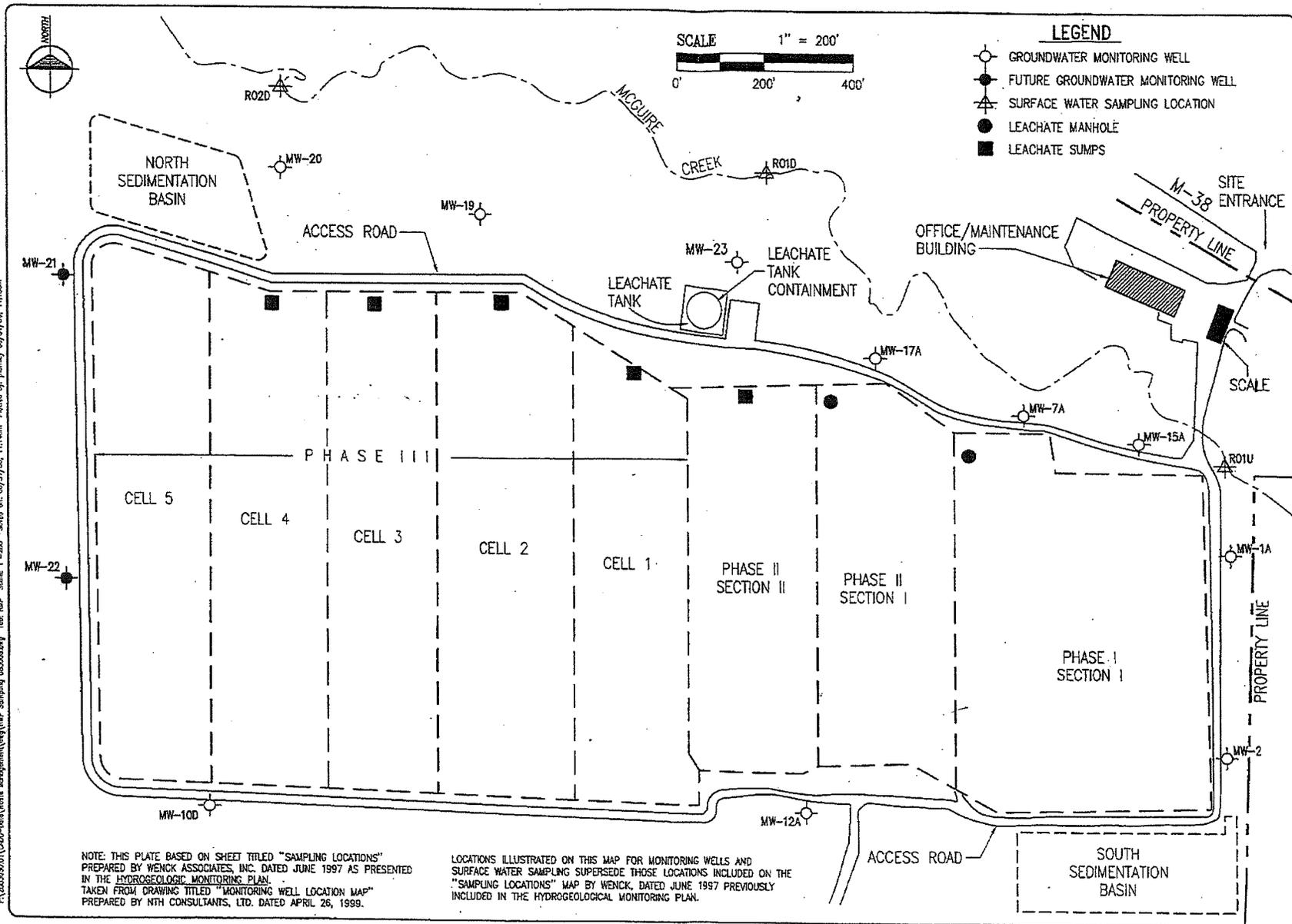
- (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
- (2) The licensee shall maintain copies of the testing performed on Class B and Class C materials in the facility operating record.
- (3) The 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 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.

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**

ATTACHMENT A

F:\20030501\CD0-DWA\Work Management\Map\Map Sampling 082008.dwg Tek: 10P Scale: 1"=200' Saved on: 08/31/06, 11:15am Plotted by: Jumbo 08/31/06, 11:55am



**Gosling & Zank**  
 Engineers & Surveyors  
 engineering associates, inc.  
 1200 Lakeside Park Drive  
 211-114-3111 Fax: 211-111-1811  
 211-114-3111 Fax: 211-111-1811  
 Stoughton, Massachusetts

Job No:	20030501	DCS
Date:	02/21/2003	JH
Scale:	1" = 200'	DCS
Drawn:	CHD	Rev:
		08/30/2005

**Hydrogeological Monitoring Plan  
 Sampling Location Map  
 K & W Landfill**

**Location:**  
 T 51 N, R 38 W,  
 GREENLAND TOWNSHIP,  
 ONTARIO COUNTY, MICHIGAN