



Michigan Department of Environmental Quality
Resource Management Division

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 of Michigan, Inc.

PROPERTY OWNER: K&W Landfill, Inc.

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 408328

COUNTY: Ontonagon

LICENSE NUMBER: 9321

ISSUE DATE: November 17, 2011

EXPIRATION DATE: November 17, 2016

FACILITY DESCRIPTION: The K&W Landfill, 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 I, Section 2; Phase II, Cells 1 and 2; and Phase III, Cells 1-3 for a total of 37 acres.

RESPONSIBLE PARTY: Greg Johns
K&W Landfill, Inc.
11877 Highway M-38
Ontonagon, Michigan 49953
906-883-3504

RENEWAL OPERATING LICENSE: This License Number 9321 supersedes and replaces Solid Waste Disposal Area Operating License Number 9146 issued to K&W Landfill, Inc. on October 27, 2006.

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 and Land Application Section
Resource Management Division

Licensee: K&W Landfill, Inc.
Facility Name: K&W Landfill, Inc.
Operating License Number: 9321
Issue Date: November 17, 2011

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 I, Section 2; Phase II, Cell 1 and 2; and Phase III, Cells 1 to 3 were authorized to receive waste by the previous license. This area's total acreage is 37 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: None.
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 Phase III, Cells 4 and 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 14.1 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) identified as Phase I, Section 1 had final closure certified on August 23, 1994. This certification was reviewed and approved by the MDEQ on October 26, 1994. This area's total acreage is 5.7 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 September 16, 2011, 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 Resource Management Division (RMD), 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, for the K&W Landfill, Inc., dated September 12, 2011. The Application consists of the following:
 - a. Application Form EQP 5507.
 - b. Application fee in the amount of \$1,000.00.
 - c. Certification of construction by N/A.
 - d. Waste Characterization: N/A.

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e. Restrictive Covenant:

The K&W Landfill's 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 \$6,668,022.00.

The Facility has provided financial assurance totaling \$6,669,022.00, 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, iii, and iv, 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 \$1,568,485.34 in the Facility's Perpetual Care Fund as of August 31, 2011. Of this amount, the MDEQ has granted the request to use \$1,568,485.00 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	\$5,100,537.00
Total Amount Received:	\$5,100,537.00

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 on November 17, 2012, and each year thereafter.

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

- a. Construction permit application prepared for K&W Landfill, Inc., Volume 1, by Wenck Associates, Inc., and dated March 1997. Volume 1 contains the Hydrogeological Investigation Report, the Landfill Environmental Assessment, the

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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.

- b. Construction Permit Application prepared for K&W Landfill, Inc., Volume 2, 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.
 - c. Hydrogeological Monitoring Plan prepared for K&W Landfill, Inc. by Wenck Associates, Inc., and dated March 1997. The Hydrogeological Monitoring Plan was revised on July 1, 1997, February 10, 1999, and April 30, 2001.
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, Inc., and dated July 17, 1997.
 - b. Design Modification prepared by Wenck Associates, Inc., received by the Department on April 12, 2002, and approved by the Department on May 28, 2002.
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 RMD, Upper Peninsula District Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated March 1997 and revised on July 1, 1997, February 10, 1999, and April 30, 2001. The sampling analytical results shall be submitted to the MDEQ's RMD, Upper Peninsula District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the RMD, 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 RMD, 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 RMD, Upper Peninsula District Supervisor.
17. Requests for alternate daily cover may be approved, in writing, by the RMD, 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

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R 299.4429(1) of the Part 115 Rules. Suitable cover shall be either uncontaminated soil or an alternate cover approved by the RMD, 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:

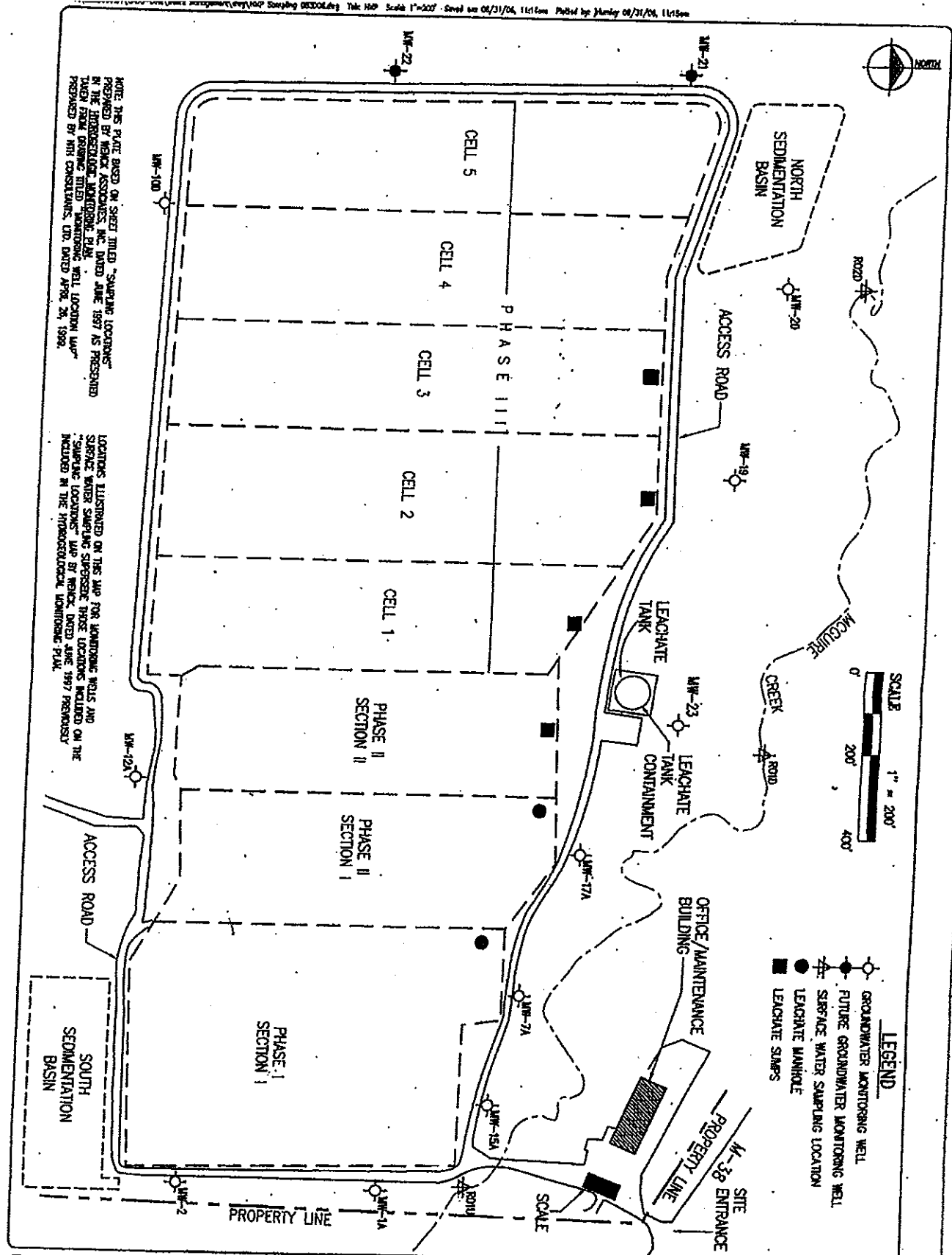
<u>Product/Waste Material</u>	<u>Source</u>
Woven Geotextile	
Woven-coated geotextile	
Petroleum impacted soil	Removal of UST's
Chipped Tires	
Biofuel fly ash	L'Anse Warden Electric Co.

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 Operational Memo 115-10, Revision 2, 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 on the 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



NOTE: THIS PLAN, BASED ON SHEET TITLED "SAMPLING LOCATIONS" PREPARED BY NICK ASSOCIATES, INC. DATED JUNE 1997 AS PRESENTED IN THE HYDROGEOLOGICAL MONITORING PLAN FOR THE K & W LANDFILL, TAKEN FROM DRAWING TITLED "MONITORING WELL LOCATION MAP" PREPARED BY NIK CONSULTANTS, LTD. DATED APRIL 26, 1999.

LOCATIONS LISTED ON THIS MAP FOR MONITORING WELLS AND SURFACE WATER SAMPLING STATIONS THOSE LOCATIONS INCLUDED ON THE "SAMPLING LOCATIONS" MAP BY NICK, DATED JUNE 1997 PREVIOUSLY INCLUDED IN THE HYDROGEOLOGICAL MONITORING PLAN.

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

Hydrogeological Monitoring Plan
Sampling Location Map
K & W Landfill

As No. 0003060.00
Date 02/21/2000
Scale 1" = 200'
Drawn JH
Checked JH
Date 06/30/99

Geotek Geotechnical, Inc.
Engineers Surveyors Planners Environmental Services
1200 Michigan St. S.W.
Grand Rapids, MI 49508
224-242-1100
224-242-1101