



Michigan Department of Environmental Quality
Waste and Hazardous Materials 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: Holland Public Works Zeeland Township Landfill

LICENSEE/OPERATOR: Holland Board of Public Works

FACILITY OWNER: Holland Board of Public Works

PROPERTY OWNER: Charter Township of Zeeland

FACILITY TYPE(S): Type III Low Hazard Industrial Landfill

FACILITY ID NUMBER: 470344

COUNTY: Ottawa

LICENSE NUMBER: 9193

ISSUE DATE: January 13, 2009

EXPIRATION DATE: January 13, 2009

FACILITY DESCRIPTION: The Holland Public Works Zeeland Township Landfill, a Type III low hazard industrial landfill, consists of 40 acres located in the SW 1/4, of the NW 1/4, and the NW 1/4 of the SW 1/4 of Section 25, T5N, R14W, Zeeland Township, Ottawa County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Cell 1.

RESPONSIBLE PARTY: Mr. Gary N. Brugger, Electric Production Superintendent
Holland Board of Public Works
625 Hastings Avenue
Holland, Michigan 49423
616-355-1201

RENEWAL OPERATING LICENSE: This License Number 9193 supersedes and replaces Solid Waste Disposal Area Operating License Number 9017 issued to Holland Board of Public Works on May 21, 2004.

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, Storage Tank and Solid Waste Section
Waste and Hazardous Materials Division

Licensee: Holland Board of Public Works
Facility Name: Holland Public Works Zeeland Township Landfill
Operating License Number: 9193
Issue Date: January 13, 2009

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 1 were authorized to receive waste by the previous license. This area's total acreage is 5 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:

UNCONSTRUCTED AREA(S) WITHOUT FINANCIAL ASSURANCE: The area(s) identified as Cells 2-4 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 15 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 23, 2008, 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 Waste and Hazardous Materials Division (WHMD), Grand Rapids 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 Holland Board of Public Works, for the Holland Public Works Zeeland Township Landfill, dated October 20, 2008. The Application consists of the following:
 - a. Application Form EQP 5507.
 - b. Application fee in the amount of \$2,500.00.
 - c. Certification of construction by Dell Engineering, dated July 1991.
 - d. Waste Characterization: N/A.
 - e. Restrictive Covenant:

The September 3, 1991, restrictive covenant on 40 acres is on file at the Ottawa County Register of Deeds recorded on May 26, 1992, as Liber 1594 pages 738-743. A copy is on file with the MDEQ.
 - f. Perpetual Care Fund Agreement, established as a trust account, signed by Mr. Albert McGeehan, Mayor, city of Holland on October 29, 1998, was executed by the MDEQ on November 4, 1998.

Licensee: Holland Board of Public Works
Facility Name: Holland Public Works Zeeland Township Landfill
Operating License Number: 9193
Issue Date: January 13, 2009

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 \$100,000.00.

The Facility has provided financial assurance totaling \$110,157.80, 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 \$10,157.80 in the Facility's Perpetual Care Fund as of October 31, 2008. Of this amount, the MDEQ has granted the request to use \$10,157.80 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	\$100,000.00
Total Amount Received:	\$100,000.00

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

8. The following documents approved with Construction Permit Number(s) 0431 issued to city of Holland on February 13, 1990, are incorporated in this license by reference:

- a. "Engineering Plans & Specifications for Holland Board of Public Works Type II Sanitary Landfill, Zeeland Township, Ottawa County, Michigan," dated June 1989.
- b. "Hydrogeological Investigation and Groundwater Monitoring Program for the Proposed Type II Holland BPW Zeeland Township Landfill, Ottawa County, Michigan," dated June 1989.
- c. "Environmental Assessment for the Proposed Type II Holland BPW Zeeland Township Landfill, Ottawa County, Michigan," dated December 1984, revised June 1989.

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:

"Hydrogeological Monitoring Plan for Holland Board of Public Works Zeeland Township Landfill, Ottawa County Michigan," dated June 1996, and revised October 10, 2007, prepared by Dell Engineering.

10. Consent Order/Judgment Number: N/A.

Licensee: Holland Board of Public Works
Facility Name: Holland Public Works Zeeland Township Landfill
Operating License Number: 9193
Issue Date: January 13, 2009

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 WHMD, Grand Rapids District Supervisor, for review and approval.
13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated June 1996 and revised October 10, 2007, prepared by Dell Engineering. The sampling analytical results shall be submitted to the MDEQ's WHMD, Grand Rapids District Office.
14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the WHMD, Grand Rapids 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 Waste and Hazardous Materials Division, Grand Rapids 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 WHMD, Grand Rapids District Supervisor.
17. Requests for alternate daily cover may be approved, in writing, by the Waste and Hazardous Materials Division, Grand Rapids District Supervisor.

18. Leakage Control Criteria:

This Type III Facility is a monitorable unit and, therefore, does not need to be in compliance with the leakage control criteria of R 299.4422 of the Part 115 Rules.

19. **VARIANCES:** None.

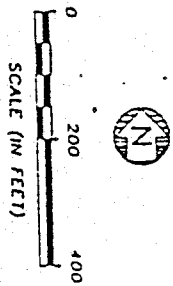
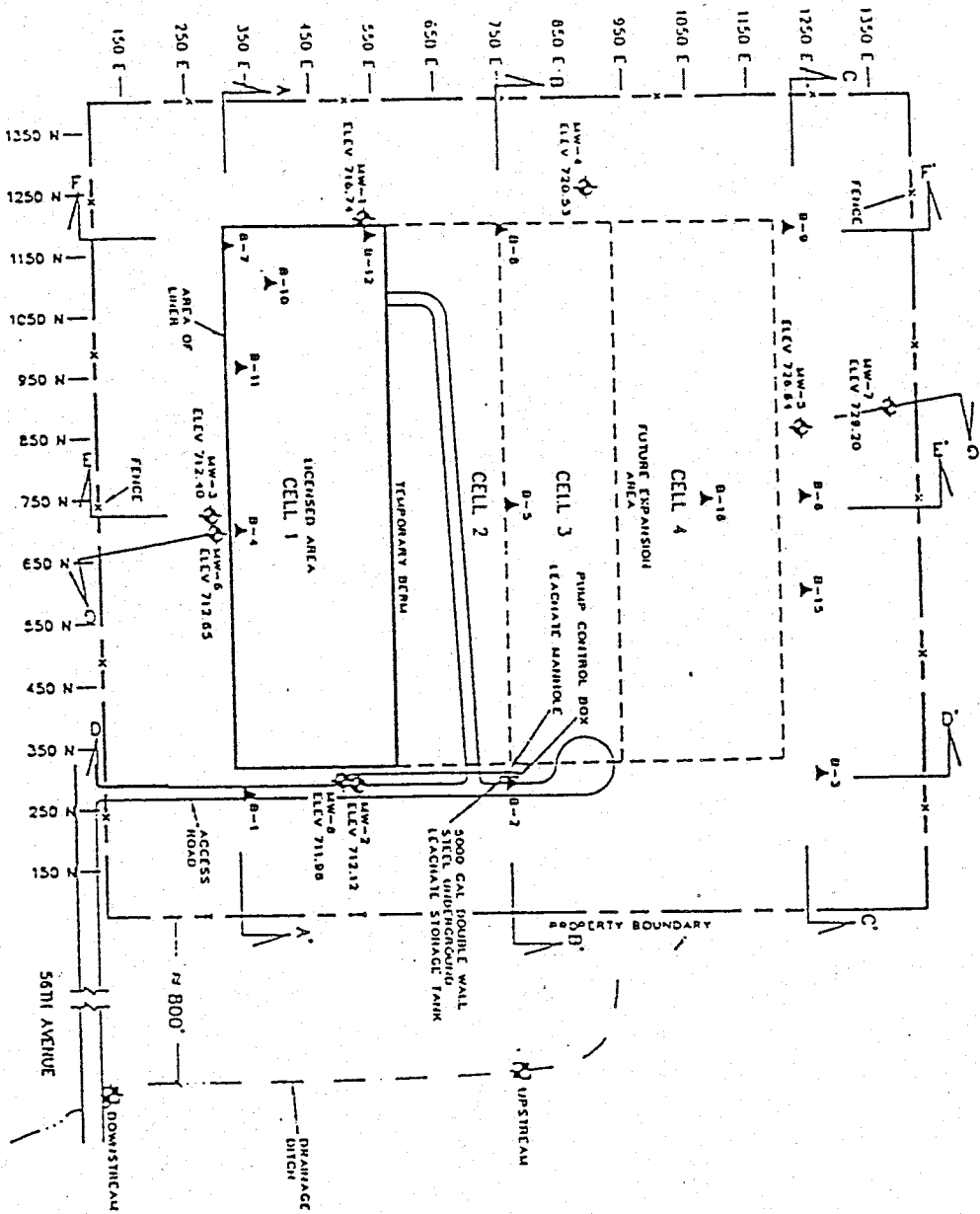
20. **SPECIAL CONDITIONS:**

Leachate shall be reintroduced into the active portion of the facility in accordance with the approved "Leachate Recirculation Procedure," dated June 6, 2006, and contained in Appendix G of the approved "Hydrogeological Monitoring Plan For Holland Board of Public Works Zeeland Township Landfill Ottawa County, Michigan."

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

MONITORING WELL LOCATION MAP



- LEGEND**
- ◊ MONITORING WELL LOCATION
 - ▲ OBSERVATION WELL OR SOIL BORING
 - ↔ LINE OF GEOLOGIC CROSS SECTION
 - ⊕ SURFACE WATER MONITORING STATION

- NOTES:**
1. MONITORING WELLS 4 AND 5 WERE PREVIOUSLY INSTALLED ON-13 AND ON-14 RESPECTIVELY.
 2. ELEVATIONS SHOWN AT THE MONITORING WELLS REPRESENT TOP OF CASINGS.
 3. SEE FIGURES 4 THROUGH 8 FOR CROSS SECTIONS A-A THROUGH F-F.
 4. SEE FIGURE 11 FOR CROSS SECTION C-C.

HOLLAND BPW
TYPE II SANITARY LANDFILL
ZEELEAND, MICHIGAN

DELL ENGINEERING, INC.
Civil Engineering & Environmental Consulting
3337 170th Avenue, Hudson, Michigan 48431-9163

960088
FIGURE 2

PROJ: 010101, 8008101, 3/27/78
APPROX. 1/4" TO 1/8" SCALE BY MC CAD 1/27/78