



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: Delta County Landfill

LICENSEE/OPERATOR: Delta Solid Waste Management Authority

FACILITY OWNER: Delta Solid Waste Management Authority

PROPERTY OWNER: Delta Solid Waste Management Authority and City of Escanaba

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 410730

COUNTY: Delta

LICENSE NUMBER: 9414

ISSUE DATE: November 17, 2014

EXPIRATION DATE: November 17, 2019

FACILITY DESCRIPTION: The Delta County Landfill, a municipal solid waste landfill, consists of 277.90 acres located in the N 1/2 of Section 22 and the S 1/2 of Section 15, T39N, R23W, Wells Township, Delta County, Michigan, as identified in Attachment A and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Cells 4A (Partial), 4B and 5 totaling 14.09 acres.

RESPONSIBLE PARTY: Mr. Donald Pyle  
Delta Solid Waste Management Authority  
5701 19<sup>th</sup> Avenue North  
Escanaba, Michigan 49829  
906-786-9056

**RENEWAL OPERATING LICENSE:** This License Number 9414 supersedes and replaces Solid Waste Disposal Area Operating License Number 9317 issued to Delta Solid Waste Management Authority on September 16, 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: Delta Solid Waste Management Authority  
Facility Name: Delta County Landfill  
Operating License Number: 9414  
Issue Date: November 17, 2014

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 Cells 4A (Partial) and 4B were authorized to receive waste by the previous license. This area's total acreage is 5.27 acres.
  - b. **CONSTRUCTED AREAS CERTIFIED WITH THIS APPLICATION:** The area(s) identified as Cell 5 were not authorized to receive solid waste by the previous license, but are authorized to receive waste by this license. This area's total acreage is 8.82 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 Cells 6A through 9C 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 49.61 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:
    - i. **EXISTING UNIT(S):** The unit(s) or portion(s) of unit(s) identified as Phase 1 East, Phase 1 West; Phase 2; and partial areas of Cells 3A, 3B and 4A had final closure certified on July 15, 1999 (amended January 15, 1999); December 14, 1997; and April 15, 2014, respectively. This certification was reviewed and approved by the MDEQ on April 14, 1999; February 10, 1999, and June 16, 2014, respectively. This area's total acreage is 16.32 acres.
    - ii. **OTHER DISPOSAL AREAS:** This license does not authorize the placement of waste in the closed Type III landfill located on site, which covers an area of 8.37 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 18, 2014, 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.

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7. This license is issued based on the MDEQ's review of the Application, submitted by Delta County Solid Waste Management Authority, for the Delta County Landfill, dated September 18, 2014. The Application consists of the following:

- a. Application Form EQP 5507.
- b. Application fee in the amount of \$500.00.
- c. Certification of construction by Wilcox Professional Services, dated October 31, 2011, and Engineering and Environmental Solutions, dated June 2013.
- d. Waste Characterization: N/A.
- e. Restrictive Covenant:
  - i. The Delta County Landfill restrictive covenant on 63.20 acres is on file at the Delta County Register of Deeds recorded on January 15, 1997, as Liber 471 pages 475-478. A copy is on file with the MDEQ.
  - ii. The Delta County Landfill restrictive covenant on 209.6 acres is on file at the Delta County Register of Deeds, recorded on November 5, 2014, as Liber 1118, pages 148-151. A copy is on file with the MDEQ.
- f. Perpetual Care Fund Agreement, established as an escrow account, signed by Mr. Thomas Vitito, Chairman, Delta County Solid Waste Management Authority, on January 27, 1997, was executed by the MDEQ on February 6, 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 \$3,759,221.78.

The Facility has provided financial assurance totaling \$3,759,266.11, 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 \$865,716.11 in the Facility's Perpetual Care Fund as of September 2, 2014. Of this amount, the MDEQ has granted the request to use \$865,716.11 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	\$2,372,800.00
Total Amount Received:	\$2,372,800.00

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

A financial test may be used by the owner of a Type II landfill as a means to meet an amount up to, but not exceeding, 70 percent of the closure, postclosure, and corrective action cost estimate pursuant to Section 11523a of Part 115. This Facility has provided a financial test in the amount of \$520,750.00.

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Financial capability demonstrated by a financial test must be updated each fiscal year. The next update is due June 30, 2015, and each year thereafter. If the owner/operator fails to update the test, or is no longer able to satisfy the test, the owner/operator must obtain alternate financial assurance within 210 days following the close of the owner/operator's fiscal year.

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, 2014, and each year thereafter.

8. The following documents approved with Construction Permit Number(s) 4103 issued to the Delta County Waste Management Authority on July 9, 2009, are incorporated in this license by reference:
  - a. Construction Permit Application for Delta County Northern Expansion: Engineering Report prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
  - b. Construction Permit Application for Delta County Northern Expansion: Environmental Assessment Report prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
  - c. Construction Permit Application for Delta County Northern Expansion: Construction Quality Assurance Plan prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
  - d. Construction Permit Application for Delta County Northern Expansion: Operational Plan prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
  - e. Construction Permit Application for Delta County Northern Expansion: Hydrogeological Investigation Report, Volumes 1, 2, and 3, prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
  - f. Construction Permit Application for Delta County Northern Expansion: Hydrogeological Monitoring Plan, Volumes 1 and 2 prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
  - g. Construction Permit Application for Delta County Northern Expansion: Engineering Plans (Sheets 1 to 37) prepared by Engineering and Environmental Solutions, LLC, dated February 2009, and amended June 2009.
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. Delta County 2013 Final Cover Construction Certification Report prepared by Bittner Engineering, Inc. for Delta County Waste Management Authority, received on April 16, 2014, and approved by the MDEQ on June 16, 2014.
  - b. Certification Report, Geosynthetic Construction Quality Assurance, Cell 5 Construction prepared by Wilcox Professional Services, LLC for Delta Solid Waste Management Authority, received on June 13, 2013 and approved by the MDEQ on October 16, 2014.
  - c. Certification Report, Cell 5 Construction, prepared by Engineering and Environmental Solutions, LLC for Delta County Landfill, received on June 13, 2013 and approved by the MDEQ on October 16, 2014.
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.

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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 February 2009, and amended June 2009. The sampling analytical results shall be submitted to the MDEQ's OWMRP, Upper Peninsula and Gaylord 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:
  - a. Cell 5 authorized to receive waste by this license is a monitorable unit which is located over a natural soil barrier and that is in compliance with the provisions of R 299.4422(2) of the Part 115 Rules. In addition, the Facility has elected to install a secondary leachate collection system. The action flow rate for each unit is 25 gallons/acre/day.
  - b. Cells 4A and 4B authorized to receive waste by this license and Cells 3A and 3B are unmonitorable unit(s) designed with double-liner systems that are in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that are capable of detecting and collecting leakage through the primary composite liner. The action flow rate for each unit containing a leak detection system is 5 gallons/acre/day. The response flow rate for each unit containing a leak detection 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>
Coal Ash	City of Escanaba Power Plant
Petroleum-Contaminated Soil	Leaking Underground Storage Tank Clean Ups
Woven Geotextile	Various
Fly Ash	L'Anse Warden Power Plant

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

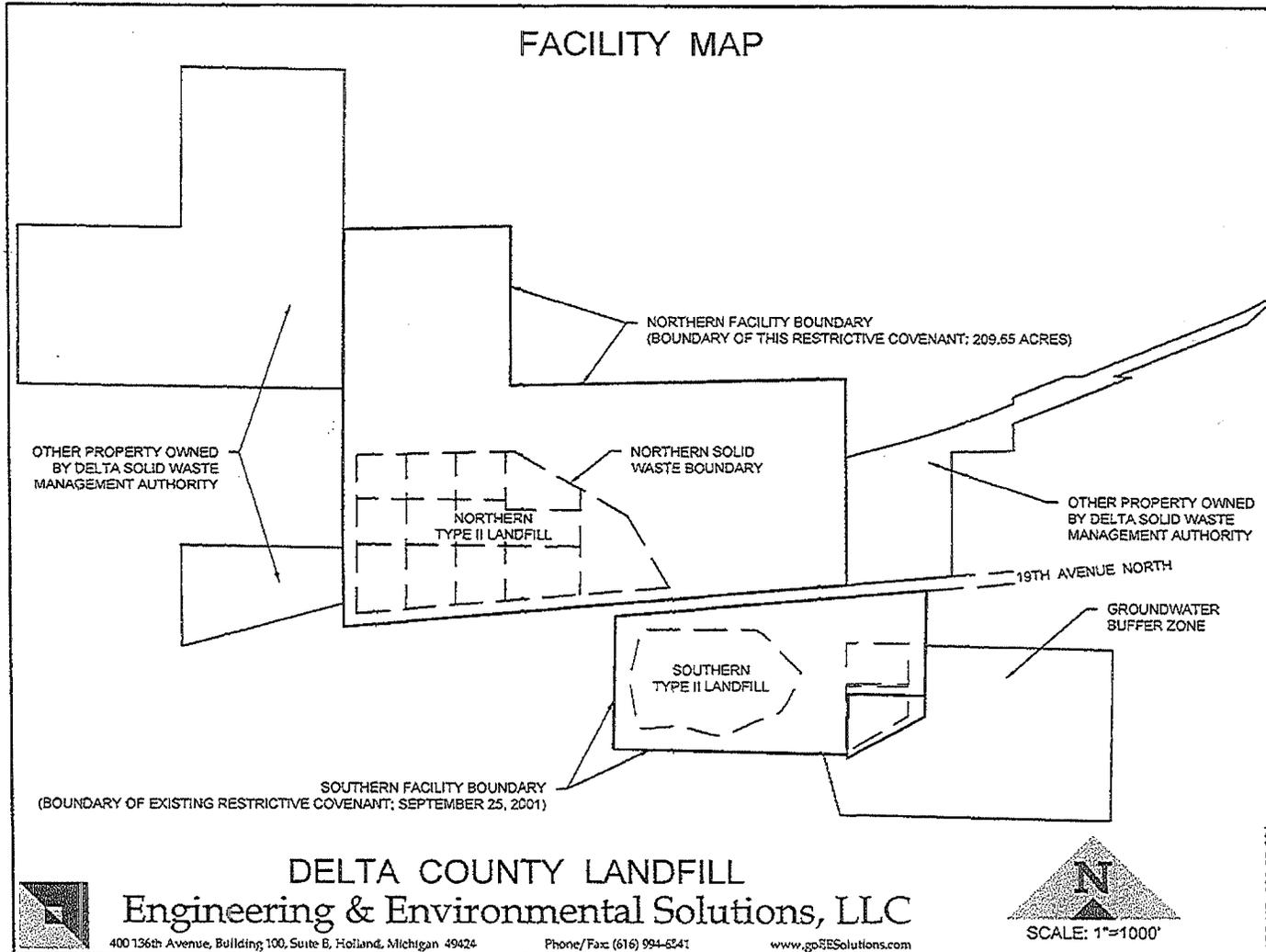
- (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.

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- (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.
- b. The Delta Solid Waste Management Authority also included bonding under this application in the amount of \$167,400.00 to meet the financial assurance requirement for the 8.37 acre closed Type III landfill.
- c. The 24" sand drainage layer in Cell 5 must be verified as fill operations progress from south to north prior to accepting waste in Cell 5. The landfill plans to verify the 24" sand drainage layer in Cell 5 in sections. Verification shall consist of confirmation of the sand drainage layer thickness and hydraulic conductivity in accordance with the provisions of the approved Construction Quality Assurance Plan. Therefore, separate letters and maps are required for each section of the Cell 5 sand drainage layer verification sent to the MDEQ for approval prior to accepting waste in each section of Cell 5.
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**

# FACILITY MAP



OTHER PROPERTY OWNED  
BY DELTA SOLID WASTE  
MANAGEMENT AUTHORITY

NORTHERN FACILITY BOUNDARY  
(BOUNDARY OF THIS RESTRICTIVE COVENANT; 209.65 ACRES)

NORTHERN SOLID  
WASTE BOUNDARY

NORTHERN  
TYPE II LANDFILL

OTHER PROPERTY OWNED  
BY DELTA SOLID WASTE  
MANAGEMENT AUTHORITY

19TH AVENUE NORTH

GROUNDWATER  
BUFFER ZONE

SOUTHERN  
TYPE II LANDFILL

SOUTHERN FACILITY BOUNDARY  
(BOUNDARY OF EXISTING RESTRICTIVE COVENANT; SEPTEMBER 25, 2001)

**DELTA COUNTY LANDFILL**  
**Engineering & Environmental Solutions, LLC**

400 136th Avenue, Building 100, Suite B, Holland, Michigan 49424

Phone/Fax: (616) 994-6241

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ATTACHMENT A

ATTACHMENT A

100'-0"=100' ON B04