



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: DTE Energy Sibley Quarry Landfill

LICENSEE/OPERATOR: DTE Electric Company

FACILITY OWNER: DTE Electric Company

PROPERTY OWNER: DTE Electric Company

FACILITY TYPE(S): Existing Type III Industrial Waste Landfill

FACILITY ID NUMBER: 392616

COUNTY: Wayne

LICENSE NUMBER: 9394

ISSUE DATE: June 23, 2014

EXPIRATION DATE: June 23, 2019

FACILITY DESCRIPTION: The DTE Energy Sibley Quarry Landfill, an existing Type III industrial waste landfill, consists of 207 acres located at 502 Quarry Road/801 Fort Street, City of Trenton, Wayne 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 and Attachment A.

RESPONSIBLE PARTY: Mr. Dennis Leonard, Technology Specialist
DTE Electric Company
One Energy Plaza, 655 G.O.
Detroit, Michigan 48226
313-235-8714

RENEWAL OPERATING LICENSE: This License Number 9394 supersedes and replaces Solid Waste Disposal Area Operating License Number 9204 issued to Detroit Edison Company on March 6, 2009.

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: DTE Electric Company
Facility Name: DTE Energy Sibley Quarry Landfill
Operating License Number: 9394
Issue Date: June 23, 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:

ACTIVE PORTIONS NOT AT FINAL GRADE: The area(s) identified as Area 1 were authorized to receive waste by the previous license. This area's total acreage is 92.1 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 Unconstructed, totaling 18.9 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:

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 Area 3 (41 acres) and Area 4 (49 acres) had reached final grade and received final cover prior to September 2, 1999, and are, therefore, considered to be closed in accordance with the Proposal for Decision for Range Road and Sibley Quarry dated October 17, 2001, issued by Mr. Chris A. Shafer, Administrative Law Judge. This area's total acreage is 90 acres.
- ii. **OTHER DISPOSAL AREAS:** The portion of the unit identified as "SDF" has been included in the calculation for financial assurance, but is not currently authorized to receive waste because it houses the dewatering process for the quarry/landfill which is necessary to maintain groundwater isolation as provided for in Item 19.a. of this license. This area's total acreage is six 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 March 5, 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), Southeast Michigan 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 DTE Electric Company, for the DTE Energy Sibley Quarry Landfill, dated February 28, 2014 and revised May 30, 2014, and June 5, 2014. 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 NA.
- d. Waste Characterization: The licensee shall submit the annual waste characterization results required under R299.4302 to the OWMRP in the MDEQ's Southeast Michigan District Office.
- e. Restrictive Covenant:

The DTE Energy Sibley Quarry Landfill restrictive covenant on 207.018 acres is on file at the Wayne County Register of Deeds recorded on February 7, 1989, as Liber 24067 pages 423-426. A copy is on file with the MDEQ.

- f. Perpetual Care Fund Agreement, established as a trust account, signed by Mr. C. C. Arvani, Assistant Treasurer, Detroit Edison Company on March 10, 1998, was executed by the MDEQ on April 10, 1998.
- 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 includes a bond of \$20,000.00 per acre of licensed landfill, and the Perpetual Care Fund requirement.

The Facility has provided financial assurance totaling \$2,280,818.37, 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, and the bonding requirements of Section 11523 (1)(a) of Part 115. The financial assurance mechanisms used by the Facility are summarized below in items ii and iii.

ii. Financial Assurance Provided Via a Perpetual Care Fund:

The Perpetual Care Fund Agreement statement showed a balance of \$1,280,118.37 in the Facility's Perpetual Care Fund as of May 27, 2014.

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	\$1,000,000.00
Total Amount Received:	\$1,000,000.00

8. This previously "grandfathered" facility did not have a construction permit, but the following documents are incorporated in this license by reference:

- a. Drawing Number 6C620-3, dated December 5, 1979.
- b. Drawing Number 6C620-9, dated March 28, 1983.
- c. Surface Water Monitoring Plan for Sampling Sibley Quarry Landfill, dated May 21, 1997.

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- d. "Construction Certification and Request for Active Fill Designation of 15 Additional Acres at the Sibley Quarry Landfill" dated January 9, 2007, including Drawing Number 6C620-18 titled "2006 Site Plan for Solid Waste Disposal Area License Renewal" dated September 19, 2006, and certified on December 22, 2006.
 - e. "Construction Certification and Request for Active Fill Designation of 6.7 Additional Acres at the Sibley Quarry Landfill, 801 Fort Street Trenton, Michigan" dated November 16, 2009, including Drawing Number 6C620-18 titled "2009 Site Plan for Construction Certification and Request for Active Fill Designation of 6.7 Additional Acres", dated November 13, 2009 and certified on November 17, 2009
 - f. "Construction Certification and Request for Active Fill Area Designation of 41.4 Additional Acres at the Detroit Edison Company Sibley Quarry Landfill, 801 Fort Street Trenton, Michigan" dated January 29, 2013, including Drawing Number 6SE 0620-019, titled "2012 Site Plan for Construction Certification and Request for Active Fill Area Designation of 41.4 Additional Acres", dated October 12, 2012, revised January 15, 2013 and January 25, 2013, and certified on January 28, 2013.
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: NA.
 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, Southeast Michigan District Office Supervisor, for review and approval.
 13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated May 21, 1997. The sampling analytical results shall be submitted to the MDEQ's OWMRP, Southeast Michigan District Office.
 14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the OWMRP, Southeast Michigan 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, Southeast Michigan 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, Southeast Michigan District Supervisor.
 17. Requests for alternate daily cover may be approved, in writing, by the OWMRP, Southeast Michigan 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:** The licensee is granted the following variance(s) from Part 115 and/or the Part 115 Rules: *or None*
 - a. Previous approval of a variance to R 299.4310(3) continues in effect and allows the licensee to continue mechanical dewatering of the quarry to control the groundwater level. This mechanical dewatering must continue until the licensee receives a variance to R 299.4310(1).

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- b. Previous approval of a variance to R 299.4306(1) continues in effect to allow an alternative boundary that is 250 feet downstream of the quarry to be used in lieu of the solid waste boundary. A monitoring program must be developed to provide monitoring at this alternative boundary when dewatering operations cease.

20. SPECIAL CONDITIONS:

- a. A variance to R 299.4310(1) will not be granted until the licensee either receives a groundwater discharge permit issued pursuant to Part 31, Water Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, or the aquifer is determined unusable under Part 31.
- b. The licensee shall revise and submit an updated hydrogeologic monitoring plan for Department review and approval prior to discontinuing the dewatering process. The updated hydrogeologic monitoring plan, which must include a revised groundwater monitoring plan, shall be reviewed for consistency with the laws and technology that are current at the time of the submittal. After the Department approval of the revised hydrogeologic monitoring plan, the licensee shall implement, maintain, and operate the approved groundwater monitoring program if the dewatering program is discontinued.

- c. The licensee shall dispose of only the following wastes at the Sibley Quarry:

- i. Detroit Edison Trenton Channel Plant coal ash
Detroit Edison River Rouge Plant coal ash
General Motors Hamtramck Assembly Plant coal ash
General Motors Pontiac Plant coal ash
City of Wyandotte Power Plant coal ash and tire ash
City of Trenton sewage sludge incinerator ash
General Motors Saginaw/Detroit forge coal ash
Monroe Paper Company ash
Michigan South Central Litchfield Power Plant coal ash
Michigan South Central Litchfield waste gypsum
Marble Head Lime Company kiln dust
U.S. Gypsum Detroit Plant waste gypsum
Guardian Industries Carleton Plant glass cullet
Detroit Edison Connors Creek Power Plant
Ford Motor Company Rouge Plant coal ash
Detroit Edison Monroe Power Plant waste gypsum

- ii. Coal ashes approved by the Department's Waste and Hazardous Materials Division as not causing any adverse change in the fill's leachate characteristics. The leachate characteristics as described in the licensee's March 29, 1983, demonstration are listed below:

Parameter	Concentration-mg/l
Arsenic	0.182
Barium	1.0000
Cadmium	0.010
Chromium (Hex)	0.050
Lead	0.050
Mercury	0.002
Selenium	1.4230
Silver	0.050

- iii. Inert material
- iv. Other materials upon written approval by the Department.

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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

