



**State of Michigan
Department of Environmental Quality
HAZARDOUS WASTE MANAGEMENT FACILITY OPERATING LICENSE**



NAME OF LICENSEE: Dow Corning Corporation
 NAME OF FACILITY OWNER: Dow Corning Corporation
 NAME OF FACILITY OPERATOR: Dow Corning Corporation
 NAME OF TITLEHOLDER OF LAND: Dow Corning Corporation

FACILITY NAME: Dow Corning Corporation Midland Facility
 FACILITY LOCATION: 3901 South Saginaw Road
 Midland, Michigan 48640

EPA IDENTIFICATION (ID) NUMBER: MID 000 809 632 EFFECTIVE DATE: September 21, 2012
 REAPPLICATION DATE: March 25, 2012 EXPIRATION DATE: September 21, 2022

AUTHORIZED ACTIVITIES

Pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), being §§324.11101 to 324.11153 of the Michigan Compiled Laws, and the hazardous waste management administrative rules (hereafter called the "rules") promulgated there under, being R 299.9101 *et. seq.* of the Michigan Administrative Code, by the Michigan Department Environmental Quality (MDEQ), an operating license (hereafter called the "license") is issued to Dow Corning Corporation (hereafter called the "licensee") to operate a hazardous waste management facility (hereafter called the "facility") located at latitude 43°35'030" and longitude 084°11'030". The licensee is authorized to conduct the following hazardous waste management activities:

- | | | | |
|---|--|--|--|
| <input checked="" type="checkbox"/> STORAGE | <input type="checkbox"/> TREATMENT | <input checked="" type="checkbox"/> DISPOSAL | <input type="checkbox"/> POSTCLOSURE |
| <input checked="" type="checkbox"/> Container | <input type="checkbox"/> Container | <input checked="" type="checkbox"/> Landfill | <input type="checkbox"/> Tank |
| <input checked="" type="checkbox"/> Tank | <input type="checkbox"/> Tank | <input type="checkbox"/> Land Application | <input type="checkbox"/> Surface Impoundment |
| <input type="checkbox"/> Waste Pile | <input type="checkbox"/> Surface Impoundment | <input type="checkbox"/> Surface Impoundment | <input type="checkbox"/> Landfill |
| <input type="checkbox"/> Surface Impoundment | <input type="checkbox"/> Incinerator | | <input type="checkbox"/> Waste Pile |
| <input type="checkbox"/> Drip Pad | <input type="checkbox"/> Other: | | |

APPLICABLE REGULATIONS AND LICENSE APPROVAL

The conditions of this license were developed in accordance with the applicable provisions of the rules, effective March 17, 2008. The licensee shall comply with all terms and conditions of this license. This license consists of the 28 pages of conditions attached hereto (including those in Attachments 1 through 13) and the applicable regulations contained in Part 111 and its rules R 299.9101 through R 299.11008, as specified in the license. For purposes of compliance with this license, applicable rules are those that are in effect on the date of issuance of this license in accordance with R 299.9521(3)(a).

This license is based on the information in the license application submitted on March 25, 2010, and any subsequent amendments (hereafter referred to as the "application"). Pursuant to R 299.9519(11)(c), the license may be revoked if the licensee fails, in the application or during the license issuance process, to disclose fully all relevant facts or, at any time, misrepresents any relevant facts. As specified in R 299.9519(1), the facility shall be constructed, operated, and maintained in accordance with Part 111 of Act 451, as amended December 22, 2010, the rules, and this license.

This license is effective on the date of issuance and shall remain in effect for 10 years from the date of issuance, unless revoked pursuant to R 299.9519 or continued in effect as provided by the Michigan Administrative Procedures Act, 1969 PA 306, as amended (Act 306). Pursuant to R 299.9516, this license shall be reviewed by the MDEQ five years after the date of issuance and shall be modified as necessary in accordance with the provisions of R 299.9519 and R 299.9520.

Issued this 21st day of September, 2012

by _____
 Liane J. Shekter Smith, P.E., Chief
 Resource Management Division

**HAZARDOUS WASTE MANAGEMENT FACILITY OPERATING LICENSE
FOR**

**Dow Corning Corporation
MID 000 809 632**

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PART I STANDARD CONDITIONS

A. TERMINOLOGY AND REFERENCES

Throughout this license, the term "Division" means the Resource Management Division within the MDEQ responsible for administering Part 111 of Act 451 and the rules. Throughout this license, "Director" means the Director of the MDEQ or the Director's duly authorized designee such as the Division Chief. All of the provisions of Title 40 of the Code of Federal Regulations (CFR) referenced in this license are adopted by reference in R 299.11003.

B. EFFECT OF LICENSE

Except as otherwise provided by law, any treatment, storage, or disposal of hazardous waste not specifically authorized in this license is prohibited. Issuance of this license does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of federal, state, or local law or regulations {R 299.9516(8)}; nor does it obviate the necessity of obtaining such permits or approvals from other units of government as may be required by law. Compliance with the terms of this license does not constitute a warranty or representation of any kind by the MDEQ, nor does the MDEQ intend that compliance with this license constitutes a defense to any order issued or any action brought under Act 451 or any other applicable state statute or §106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) {42 U.S.C. 9606(a)}, the Resource Conservation and Recovery Act of 1976, as amended (RCRA), and its rules, or any other applicable federal statute. The licensee, however, does not represent that it will not argue that compliance with the terms of this license may be a defense to such future regulatory actions. Each attachment to this license is a part of, and is incorporated into, this license and is deemed an enforceable part of the license.

C. SEVERABILITY

The provisions of this license are severable, and if any provision of this license, or the application of any provision of this license to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this license shall not be affected thereby.

D. RESPONSIBILITIES

1. The licensee shall comply with Part 111 of Act 451, the rules, and all conditions of this license, except to the extent authorized by the MDEQ pursuant to the terms of an emergency operating license. Any license noncompliance, except to the extent authorized by the MDEQ pursuant to the terms of an emergency operating license, constitutes a violation of Part 111 of Act 451 and is grounds for enforcement action, license revocation, license modification, or denial of a license renewal application. {§§11148, 11150, and 11151, R 299.9521(1)(a) and (c) and (3)(a) and (b), and 40 CFR §270.30(a)}
2. If the licensee wishes to continue an activity regulated by this license after the expiration date of this license, the licensee shall submit a complete application for a new license to the Division Chief at least 180 days before this license expires, **March 25, 2022**, unless an extension is granted pursuant to R 299.9510(5). To the extent the licensee makes a timely and sufficient application for renewal of this license, this license and all conditions herein will remain in effect beyond the license expiration date and shall not expire until a decision on the application is finally made by the MDEQ, and if the application is denied or the terms of the new license are limited, until the last day for applying for judicial review of the new license or a later date fixed

by order of the reviewing court consistent with §91(2) of Act 306. {R 299.9521(1)(a) and (c) and (3)(a) and 40 CFR §270.30(b)}

3. The licensee shall comply with the conditions specified in R 299.9521(1)(b)(i) to (iii) and 40 CFR §270.30(c) through (k), (l)(2), (3), (5), (7), and (11), and (m). {§§11123(3), 11146(1) and (2), and 11148(1) of Act 451 and R 299.9501(1), R 299.9516, R 299.9519, R 299.9521(1)(a) and (b) and (3)(a) and (b), R 299.9522, and R 299.9525}
4. The licensee shall give notice to the Division Chief as soon as possible prior to any planned physical alterations or additions to the licensed facility. (R 299.9519(1))

E. SUBMITTAL DEADLINES

When the deadline for submittals required under this license falls on a weekend or legal state holiday, the deadline shall be extended to the next regular business day. This extension does not apply to the deadline for financial mechanisms and associated renewals, replacements, and extensions of financial mechanisms required under this license. The licensee may request extension of the deadlines for submittals required under this license. The licensee shall submit such requests at least five business days prior to the existing deadline for review and approval by the Division Chief. Written extension requests shall include justification for each extension. {R 299.9521(3)(a)}

**PART II
GENERAL OPERATING CONDITIONS**

A. GENERAL WASTE ANALYSIS

1. The licensee shall ensure that any waste managed at the facility has been properly characterized pursuant to R 299.9302 and comply with the procedures described in the attached Waste Analysis Plan, Attachment 1, of this license. {R 299.9605(1), and 40 CFR §264.13}
2. The licensee may receive hazardous waste from off-site facilities that are majority owned by Dow Corning Corporation and located in the United States subject to the following:
 - a. The waste must be characterized and managed pursuant to the Waste Analysis Plan, Attachment 1, of this license.
 - b. The waste must be identified in the List of Acceptable Hazardous Wastes, Attachment 8, of this license.
 - c. Upon receipt at the facility, the waste must be stored in the 801 or 809 Building, or the 806 Tank Farm, subject to the terms of this license.

B. SECURITY

The licensee shall comply with the barrier, surveillance, and signage requirements of R 299.9605(1) and 40 CFR §264.14.

C. GENERAL INSPECTION REQUIREMENTS

The licensee shall inspect the facility in accordance with the Inspection Requirements, Attachment 2, of this license, and comply with the inspection requirements of R 299.9605(1) and 40 CFR §264.15.

D. PERSONNEL TRAINING

The licensee shall comply with the personnel training requirements of R 299.9605 and 40 CFR §264.16. The Personnel Training Program, Attachment 3, of this license, shall, at a minimum, cover all items in R 299.9605 and 40 CFR §264.16.

E. PREPAREDNESS AND PREVENTION

The licensee shall comply with the preparedness and prevention requirements of R 299.9606 and 40 CFR Part 264, Subpart C.

F. CONTINGENCY PLAN

The licensee shall comply with the contingency plan requirements of R 299.9607 and 40 CFR Part 264, Subpart D. The Contingency Plan, Attachment 4, of this license, and the prescribed emergency procedures shall be immediately implemented by the licensee whenever there is a fire, explosion, or other release of hazardous waste or hazardous waste constituents that threatens or could threaten human health or the environment, or if the licensee has knowledge that a spill has reached surface water or groundwater.

G. DUTY TO MITIGATE

Upon notification from the Division Chief or his or her designee that an activity at the facility may present an imminent and substantial endangerment to human health or the environment, the licensee shall immediately comply with an order issued by the Division Chief pursuant to §11148(1) of Act 451 to halt such activity and conduct other activities as required by the Division Chief to eliminate the said endangerment. The licensee shall not resume the halted activity without the prior written approval from the Division Chief. {§11148 of Act 451 and R 299.9521(3)(b)}

H. MANIFEST SYSTEM

The licensee shall comply with the manifest requirements of R 299.9304, R 299.9305, and R 299.9608.

I. RECORD KEEPING AND REPORTING

1. The licensee shall comply with the written operating record and monthly operating report (EQP 5142 form) requirements of R 299.9609 and 40 CFR §264.73 and Part 264, Appendix I, and R 299.9610(3), respectively. The monthly operating report shall be submitted on EQP 5142 form provided by the Division Chief, or an equivalent form that has been approved by the Division Chief.
2. The licensee shall comply with the biennial report requirements of R 299.9610. {R 299.9521(1)(a) and 40 CFR §270.30(l)(9)}
3. The licensee shall submit the results of all environmental monitoring required by this license and any additional environmental sampling or analysis conducted beyond that required by this license, in the form of an Environmental Monitoring Report to the Division Chief within 60 days after any sample collection. {R 299.9521(1)(a) and R 299.9521(3)(b) and 40 CFR §270.30(l)(4)}
4. The licensee shall provide environmental monitoring information or data that is required pursuant to this license, to an authorized representative of an environmental or emergency response department of the city of Midland or county of Midland, who requests such information or data and that has jurisdiction over the facility. Such information or data shall be made available on the same day the licensee forwards this information to the Division Chief. {R 299.9521(3)(b)}
5. The licensee shall immediately report to the Division Chief any noncompliance with the license that may endanger human health or the environment by doing both of the following:
 - a. The licensee shall immediately notify the Division Chief at 517-335-2690, if the noncompliance occurs Monday through Friday during the period of 8:00 a.m. to 5:00 p.m., except state holidays, or by calling the MDEQ Pollution Emergency Alerting System (PEAS) at 1-800-292-4706 during all other times. This notice shall include the following:
 - (i) Information concerning the fire, explosion, release, or discharge of any hazardous waste or hazardous waste constituent that could threaten human health or the environment, that has reached surface water or groundwater, or that may endanger public drinking water supplies or the environment; and

- (ii) A description of the occurrence and its cause, including all of the information outlined in R 299.9607(2)(a)-(i).
- b. The licensee shall also follow up the verbal notice by providing a written report to the Division Chief within five days of the time the licensee becomes aware of the circumstances. The written report shall contain all of the information in Condition II.1.5.a.(i)-(ii) of this license along with a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance and when those activities occurred or will occur. The Division Chief may waive the 5-day written notice requirement in favor of submittal of a written report within 15 days of the time the licensee becomes aware of the circumstances.

{R 299.9521(1)(a) and R 299.9607 and 40 CFR §270.30(l)(6)}

- 6. The licensee shall report all other instances of noncompliance with this license, Part 111 of Act 451, the rules, and any other applicable environmental laws or rules that apply to the licensed facility, at the time monitoring reports required by this license are submitted or within 30 days, whichever is sooner. The reports shall contain the information listed in Condition II.1.5. of this license. {R 299.9521(1)(a) and 40 CFR §270.30(l)(10)}
- 7. The licensee may make minor modifications to the forms contained in the attachments to this license. The modifications may include changing the format, updating existing references and information, adding necessary information, and changing certification and notification information in accordance with Part 111 of Act 451 and its rules and RCRA and its regulations. The licensee shall submit the modifications to the Division Chief prior to implementing the use of the modified form(s). If the Division Chief does not reject or require revision of the modified form(s) within 14 days of receipt, the licensee shall implement use of the modified form(s) and the form(s) shall be incorporated into this license as a replacement for the existing form(s).

J. CLOSURE

The licensee shall comply with the closure requirements of R 299.9613. The licensee shall close the facility in accordance with the Closure Plan, Attachment 5, of this license, all other applicable requirements of this license, and all other applicable laws. {R 299.9613 and 40 CFR Part 264, Subpart G, except 40 CFR §§264.112(d)(1), 264.115, and 264.120}

K. POSTCLOSURE

The licensee shall comply with the postclosure monitoring requirements of R 299.9613, and monitor and maintain the facility in accordance with the Postclosure Plan, Attachment 6, of this license. The licensee shall submit a certification of postclosure in accordance with R 299.9613(5). {R 299.9613 and 40 CFR §§264.116 through 264.119}

L. FINANCIAL ASSURANCE FOR CLOSURE

- 1. On the effective date of this license, the facility closure cost estimate is \$7,888,360. The licensee shall keep this estimate current as required under R 299.9702 and 40 CFR §264.142.
- 2. The licensee shall continuously maintain financial assurance for the current closure cost estimate as required under R 299.9703.

M. FINANCIAL ASSURANCE FOR POSTCLOSURE

1. On the effective date of this license, the facility postclosure cost estimate is \$ 8,063,340. The licensee shall keep this estimate current as required under R 299.9702 and 40 CFR §264.144.
2. The licensee shall continuously maintain financial assurance for the current postclosure cost estimate as required under R 299.9703.

N. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. On the effective date of this license, the cost of performing corrective action at the facility is as follows:

Interim Response Activities	\$ 2,224,950.00
Remedial Investigation	\$ 0.00
Feasibility Study	\$ 0.00
Remedial Action Plan Implementation	\$ 0.00
Total	\$ 2,224,950.00

The licensee shall keep this estimate current as required under R 299.9712.

2. The licensee shall continuously maintain financial assurance for corrective action as required under R 299.9713.

O. FINANCIAL RESPONSIBILITY FOR LIABILITY COVERAGE

The licensee shall continuously maintain liability coverage for sudden and accidental occurrences and non-sudden accidental occurrences, as required by R 299.9710.

P. WASTE MINIMIZATION

The licensee shall certify, at least annually, that the licensee has a hazardous waste minimization program in place. {R 299.9609(1)(a), 40 CFR §264.73(b)(9), and §3005(h) of RCRA, 42 U.S.C. §6925(h)}

Q. LAND DISPOSAL RESTRICTIONS

The licensee shall comply with all of the requirements of 40 CFR Part 268. {R 299.9627 and 40 CFR Part 268}

R. AIR EMISSION STANDARDS

1. The licensee shall comply with the requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment leaks, and Subpart CC regarding air emission standards for tanks, surface impoundments, and containers.
2. The licensee shall notify the Division Chief of any waste management units that become subject to the requirements of 40 CFR Part 264, Subparts AA, BB, and/or CC within 30 days of the start of the regulated activity.

{R 299.9630, R 299.9631, and R 299.9634, and 40 CFR Part 264, Subparts AA, BB, and CC}

S. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The licensee shall maintain at the facility the following documents and amendments required by this license, until closure/postclosure is completed, certified by an independent registered professional engineer, and the facility is released from financial assurance requirements for closure/postclosure by the Director:

1. Waste Analysis Plan, including Quality Assurance/Quality Control (QA/QC) Plans.
2. Inspection Schedules and records.
3. Personnel Training Program documents and records.
4. Contingency Plan.
5. Closure and Postclosure Plans.
6. Cost estimates for facility closure, postclosure, and corrective action and copies of related financial assurance documents.
7. Operating record.
8. Site Security Plan.
9. Facility engineering plans and specifications.
10. Record keeping procedures.
11. Environmental monitoring plans, including Sampling and Analysis Plans and QA/QC Plans.
12. Environmental monitoring data and statistical records.
13. Preventative procedures (Personnel Protection Plan).
14. Hazardous waste minimization program certification.

{R 299.9521(3)(a)}

T. ENGINEERING PLANS

The licensee shall construct, operate, and maintain the facility in accordance with the Engineering Plans, Attachment 7, of this license, and any modifications to those plans shall be made in accordance with this license.

**PART III
CONTAINER STORAGE CONDITIONS**

A. COVERAGE OF LICENSE

The hazardous waste container storage areas at the facility shown in Drawings X1-35726 Revision G, Y1-35727 Revision B, and X1-38058 Revision C are covered by this license. Any expansion or enlargement beyond the facility boundary shown on the drawings referenced above or beyond the 85,000 gallon storage design capacity requires a new license from the Division Chief. Drawings X1-35726 Revision G, Y1-35727 Revision B, and X1-38058 Revision C are incorporated into this license as part of the Engineering Plans, Attachment 7. {R 299.9521(1)(b)}

B. WASTE IDENTIFICATION AND QUANTITY

1. The licensee may store no more than a total volume of 85,000 gallons of the hazardous wastes in the List of Acceptable Hazardous Wastes, Attachment 8, of this license, in containers at the facility, subject to the terms of this license.
2. The maximum volume and number of 55-gallon containers, or an equivalent volume in other size containers, of hazardous waste that may be stored in the individual container storage areas at the facility shall be restricted as follows: {R 299.9521(2)(d)}

Container Storage Areas	Hazardous Waste Container Storage Capacity Irrespective of Container Size	Number of 55-gallon Containers
801 Building	26,400 gallons	480
809 Building	85,000 gallons	1,546

3. The total facility authorized container storage design capacity is less than the sum of the individual container storage capacities allowed in each container storage area. The licensee shall ensure that the total facility authorized container storage design capacity is not exceeded at any time, regardless of how much capacity may be available in any single storage area.

C. USE AND MANAGEMENT OF CONTAINERS

1. The licensee shall manage all containers in compliance with R 299.9521(3)(b), R 299.9614, and R 299.9627 and 40 CFR §§264.171, 264.172, 264.173, and 268.50(a)(2)(i).
2. The licensee shall only place containers into the hazardous waste container storage areas referenced in Condition III.A. of this license in accordance with the configuration shown in Figure C1-1 and Figure C1-2 in the Engineering Drawings, Attachment 7, of this license, or an alternate configuration approved by the Division Chief. {R 299.9521(3)(b)}
3. The licensee may stack containers of hazardous waste in the container storage areas referenced in Condition III.A. provided that such stacking is in compliance with the following:
 - a. The maximum height that containers may be stacked is 72 inches high.
 - b. Stacked containers are considered to be containers placed on top of each other. Single containers with a height greater than 72 inches shall not be considered as a stacked container and thereby not subject to the 72-inch height limitation.

- c. Stacking containers shall in no way constitute approval to increase or expand the maximum volume capacities in any of the licensed storage areas.
 - d. Dow Corning shall take precautions to properly place, support, and balance stacked containers so that they do not constitute any kind of hazard.
 - e. The licensee shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility operation in an emergency as required by R 299.9606 and 40 CFR§264.35, which is adopted by reference in R 299.11003. {R 299.9521(3)(b)}
4. The licensee shall operate and maintain the containment system in accordance with the requirements of R 299.9614 and 40 CFR §264.175, and the plans and specifications in the the Engineering Plans, Attachment 7, and Containers, Attachment 9, of this license.

D. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The licensee shall locate containers holding ignitable or reactive wastes in accordance with R 299.9614 and 40 CFR §264.176.
2. The licensee shall take precautions to prevent the accidental ignition or reaction of ignitable or reactive wastes by following the procedures specified in the Waste Analysis Plan, Attachment 1, and Containers, Attachment 9, of this license. The licensee shall document compliance with this condition and place this documentation in the operating record. {R 299.9605 and 40 CFR §264.17(a) and (c)}

E. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES OR MATERIALS

1. Prior to placing incompatible wastes or incompatible wastes and materials in the same container, the licensee shall comply with R 299.9605 and 40 CFR §264.17(b) by following the procedures specified in Containers, Attachment 9, of this license. {R 299.9521(2)(d) and (3)(b)}
2. The licensee shall prevent the placement of hazardous waste in an unwashed container that previously held an incompatible waste or material. {R 299.9614 and 40 CFR §264.177(b)}
3. The licensee shall document compliance with Conditions III.E.1. and III.E.2. of this license and place this documentation in the operating record. {R 299.9605 and 40 CFR §264.17(c)}
4. The licensee shall separate containers of incompatible wastes as indicated in the procedures contained in Containers, Attachment 9, of this license. {R 299.9614 and 40 CFR §264.177(c)}

F. DISPOSITION OF ACCUMULATED LIQUIDS

The licensee shall remove all liquids accumulated in the containment system within 24 hours of detection and manage the liquids in accordance with the requirements of Part 111 of Act 451 and the rules, as specified in Containers, Attachment 9, of this license. {R 299.9521(3)(b) and R 299.9614(1)(a) and 40 CFR §264.175(b)(5)}

**PART IV
TANK SYSTEM STORAGE CONDITIONS**

A. COVERAGE OF LICENSE

The hazardous waste tank system storage area at the facility shown in Drawing W1-71228 is covered by this license. Any expansion or enlargement beyond the facility boundary shown in Drawing W1-71228 or beyond the 60,000 gallon tank system storage design capacity requires a new license from the Division Chief. Drawing W1-71228 is incorporated into this license as a part of the Engineering Plans, Attachment 7. {R 299.9521(1)(b)}

B. WASTE IDENTIFICATION AND QUANTITY

1. The licensee may store no more than a total volume of 60,000 gallons of the hazardous wastes in the List of Acceptable Hazardous Wastes, Attachment 8 in Tanks 19781, 19782, 19783, 19784, 19785, and 19786 at the facility, subject to the terms of this license. {R 299.9521(2)(d)}
2. The licensee may store a maximum of 40,000 gallons of Silicone Based/Solvent Waste in the four hazardous waste storage tanks designated as Tanks 19781, 19782, 19783, and 19786.
3. The licensee may store a maximum of 10,000 gallons of Alkoxy Silane Waste in the hazardous waste storage tank designated as Tank 19784.
4. The licensee may store a maximum of 10,000 gallons of Chlorosilane Waste in the hazardous waste storage tank designated as Tank 19785.

C. DESIGN, CONTAINMENT, AND ASSESSMENT OF TANK SYSTEMS

The licensee shall operate and maintain all tank systems in accordance with the applicable requirements of R 299.9615 and 40 CFR §§ 264.193 and 264.194, and in accordance with the attached plans and specifications in the Engineering Plans, Attachment 7, and Tank System, Attachment 10, of this license.

D. MANAGEMENT OF TANK SYSTEMS

The licensee shall label and manage the tank systems in accordance with the requirements of R 299.9615 and R 299.9627; 40 CFR §§264.194, 264.196, and 268.50(a)(2)(ii); R 29.4101 to R 29.4504 pursuant to the provisions of the Fire Prevention Act, 1941 PA 207, as amended; National Fire Protection Association (NFPA) Standard No. 704; and the spill and overfill prevention procedures specified in the Tank System, Attachment 10 of this license. {R 299.9615}

E. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The licensee shall not place ignitable or reactive waste in a tank system unless the procedures described in Tank System, Attachment 10, of this license are followed. The licensee shall document compliance with this condition and place this documentation in the operating record. {R 299.9605, R 299.9609, and R 299.9615 and 40 CFR §§264.17(c), 264.73(b)(3), and 264.198(a)}
2. The licensee shall maintain the protective distances between the tank systems and any public ways, streets, alleys, or adjoining property lines that can be built upon, as required in Tables 2-1 through 2-6 of the NFPA's "Flammable and Combustible Liquids Code" (1977 or

1981) as specified in Tank System, Attachment 10, of this license, and as required by R 299.9615 and 40 CFR §264.198(b).

F. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES OR MATERIALS

The licensee shall not place incompatible wastes or incompatible wastes and materials, in the same tank system or place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material unless the procedures specified in Tank System, Attachment 10, of this license, are followed, as required by R 299.9615 and 40 CFR §264.17(b). The licensee shall document compliance with this condition and place this documentation in the operating record. {R 299.9609 and R 299.9615 and 40 CFR §§264.17(c), 264.73(b)(3), and 264.199}

G. DISPOSITION OF ACCUMULATED LIQUIDS

The licensee shall remove spilled or leaked waste and accumulated precipitation from the tank system within 24 hours of detection and manage it in accordance with the requirements of Part 111 of Act 451 and the rules and the procedures in Tank System, Attachment 10, of this license. {R 299.9521(3)(b) and R 299.9615 and 40 CFR §264.193(c)(4)}

**PART V
LANDFILL DISPOSAL CONDITIONS**

A. COVERAGE OF LICENSE

The hazardous waste landfill and related appurtenances (piping, pumps, operation and maintenance buildings, etc.) at the facility shown in Drawing Y1-31900 Revision V are covered by this license. Any expansion or enlargement beyond the design capacity of 453 acre-feet (730,844 cubic yards) or beyond the area shown in Drawing Y1-31900 Revision V requires a new license from the Division Chief. Drawing Y1-31900 Revision V and the attached plans and specifications are incorporated into this license as a part of the Engineering Plans, Attachment 7. {R 299.9521(1)(b)}

B. WASTE IDENTIFICATION AND QUANTITY

1. The licensee, except to the extent prohibited under Condition V.B.2. below, may dispose a total volume of 453 acre-feet (730,844 cubic yards) of hazardous waste exhibiting the characteristic of toxicity for Lead (D008) and compatible nonhazardous waste in the landfill, subject to the terms of this license. The license shall not dispose of any hazardous waste not designated as D008 waste, unless the Division Chief approves the disposal of such waste types through an amendment to this license. {R 299.9521(2)(d)}
2. The licensee shall not accept for disposal any hazardous waste not designated as D008 waste or any incompatible nonhazardous wastes or materials that meet any of the following criteria {R 299.9521(2)(d)}:
 - a. Ignitable wastes as described in R 299.9212(1). {R 299.9619}
 - b. Corrosive waste as described in R 299.9212(2). {R 299.9521(3)(b)}
 - c. Reactive wastes as described in R 299.9212(3), unless the provisions of 40 CFR §264.312 are met. {R 299.9619}
 - d. Bulk or noncontainerized liquid waste or waste containing free liquids. {R 299.9619(2) and 40 CFR §264.314(b)}
 - e. Containers holding free liquids. {R 299.9619(5) and 40 CFR §264.314(d)}
 - f. Waste that will:
 - (i) Adversely affect the permeability of the clay liner. {R 299.9521(3)(b), R 299.9619, and R 299.9620 and 40 CFR §264.301}
 - (ii) Produce a leachate that is incompatible with the clay liner, leachate collection system piping, or the off-site sewer system. {R 299.9521(3)(b), R 299.9619, and R 299.9620(3) and 40 CFR §264.301}
 - (iii) Generate gases that will adversely affect the permeability of the clay cap or create a violation of Part 55, Air Pollution Control, of Act 451. {R 299.9602 and R 299.9619(5)(c)}

3. The licensee shall not accept hazardous wastes for landfilling unless the wastes are placed in closed containers or otherwise totally contained or covered during transportation. {R 299.9521(3)(b)}

C. DESIGN AND RUN-ON, RUNOFF, AND CONTAMINANT CONTROL

1. The licensee shall maintain a liner system in accordance with R 299.9619 and R 299.9620. {R 299.9619 and R 299.9620 and 40 CFR §§264.301}
2. The licensee shall operate and maintain a run-on control system capable of preventing storm water flow onto the active portions of the landfill during peak discharge from at least a 24-hour, 25-year storm. {R 299.9604(1)(a)}
3. The licensee shall operate and maintain a runoff management system to collect and control the storm water volume resulting from at least a 24-hour, 100-year storm. {R 299.9604(1)(b)}
4. The licensee shall divert runoff from non-active portions of the landfill to drainage ditches shown in drawing Y1-36625 in Closure Plan, Attachment 5, of this license. {R 299.9619 and 40 CFR 264.301(g)}
5. The licensee shall expeditiously empty or otherwise manage collection and holding facilities (e.g., tanks or catch basins) associated with run-on and runoff control systems after storms to maintain the design capacity of the system. {R 299.9619 and 40 CFR §264.301(h)}
6. The licensee shall place daily cover of at least six inches of soil or other material approved by the Division Chief over all noncontainerized hazardous and nonhazardous waste at the end of each working day to control dispersal of particulate matter and fugitive emissions. Containerized waste shall be covered frequently enough so that no more than 1,000 square feet of container top surface area is exposed at any one time. In the event that a filled lift will be exposed for a period of three months or more prior to the construction of the subsequent lift, the surface of the exposed lift shall be covered with 12 inches of compacted cover material. {R 299.9619 and 40 CFR 264.301(i)}
7. The licensee shall effectively control fugitive air emissions from construction activities, internal roads, and vehicle wash facilities at the landfill in such a manner that air emissions generated therefrom do not result in a violation of Part 55 of Act 451. {R 299.9602(1)(b)}
8. No waste material, including treated corrosive gels or ash resulting from burning wood for steam generation, or any combination of waste materials may be used by the licensee as landfill cover material unless it has been approved by the Director. {R 299.9521(3)(b)}
9. The licensee shall treat landfill cover and all internal roads with either calcium chloride brine or water to effectively control fugitive dust emissions, if necessary. {R 299.9602(1)(b)}
10. The licensee shall operate and maintain a vehicle wash facility. The licensee shall ensure that all vehicles traveling on active portions of the site are cleaned and decontaminated at this facility before leaving the active area. {R 299.9521(3)(b)}
11. The licensee shall operate all vehicles in a manner that will minimize the contamination of internal haul roads. The licensee shall ensure that hauling vehicles minimize driving on waste, and any trackout of waste from the landfill shall be returned to the landfill immediately. {R 299.9521(3)(b) and R 299.9604(1)(c)}

12. The licensee shall manage any waste generated at the vehicle wash facility in accordance with all applicable generator requirements under Part 111 of Act 451 and the rules. {R 299.9301(2)}
13. The licensee shall operate and maintain a leachate collection and removal system in accordance with R 299.9619, 40 CFR §264.301(a)(2), and the plans and specifications in Landfill, Attachment 11 of this license. The leachate captured by this system shall be discharged to the chemical sewer.
14. The licensee shall submit an ambient air monitoring plan to the Division Chief prior to actively disposing of hazardous waste in the landfill.

D. WASTE PLACEMENT

1. The licensee shall not place small containers of hazardous waste in over-packed drums (lab packs) in the landfill unless the provisions of 40 CFR 264.316 are met. {R 299.9619 and 40 CFR 264.316}
2. The licensee shall ensure that the placement of all hazardous waste in the landfill is conducted in accordance with 40 CFR §§264.17(b), 264.313, 264.315, and 264.316. If containers of hazardous waste are crushed at the facility, the containers shall be crushed only inside the active landfill cell. {R 299.9521(2)(d) and (3)(b) and R 299.9619}
3. The licensee shall record the contents, quantity, and location of each daily waste deposit and place this documentation in the operating record. This information shall be recorded on a map or diagram of the landfill and shall include cross references to specific manifest document numbers, if the waste was accompanied by a manifest. {R 299.9609 and R 299.9619 and 40 CFR §§264.73(b)(2) and 264.309}
4. After waste placement reaches the grade of the perimeter of the active landfill cell, the licensee shall annually survey and record the elevations of waste in the cell to insure that final grades as shown in Drawing Y1-36625 of the Closure Plan, Attachment 5, of this license, are not exceeded. The results of the survey shall be submitted to the Division Chief within 30 days of completion of the survey. {R 299.9521(1)(b) and (3)(a)}

E. CLOSURE

1. The licensee shall complete closure in accordance with the engineering plans and specifications, and the construction quality assurance plan in the approved Closure Plan, Attachment 5, of this license. {R 299.9613 and R 299.9619(1) and (5) and 40 CFR §264.310}
2. The licensee shall notify the Division, Saginaw Bay District staff, and Lansing Hazardous Waste Section staff, at least one week in advance of key events, to enable staff to be present to observe and/or take samples during the final cover placement activities. Key events include test fill construction, placement of clay liner, placement and seaming of synthetic liner, and placement of drainage media and topsoil. {R 299.9521(1)(a) and (3)(a) and 40 CFR §270.30(i)}
3. The licensee shall construct the clay component of the final cover by using the same materials, equipment, and methods used in constructing the test fill. If the materials, equipment, or methods change significantly, a new test fill shall be constructed. {R 299.9521(3)(a) and (b), R 299.9619(5), R 299.9620, and R 299.9621}

4. The license shall use Textured Very Flexible Polyethylene (VFPE) geomembrane in the final cover to ensure that the interface friction angle between geomembrane and compacted clay liners can meet the requirement used in the slope stability analysis of the Closure Plan, Attachment 5, of this license.
5. The licensee shall conduct large-deformation direct shear tests to measure the interface friction angle between the VFPE geomembrane and its underlain compacted clay liner before placement of the geomembrane to ensure that the large-deformation interface friction angle between the geomembrane and clay is equal to or larger than 24 degrees that was assumed in the final cover stability analysis.
6. After completion of the final cover, the licensee shall survey the benchmarks and final cover once every two years. A contour map of the final cover shall be submitted to the Division within 30 days of the completion of the survey. {R 299.9619 and 40 CFR §264.310(b)(1), (5), and (6)}

F. ADDITIONAL REPORTING

The licensee shall submit an annual inspection and maintenance summary report to the Division by December 15th of each year during the active life of the landfill and the postclosure care period. The annual inspection and maintenance report shall include a summary of all maintenance activities performed by the licensee to maintain the integrity of the active landfill and the final cover such as mowing, fertilization, and liming, and a copy of the associated inspection logs.

{R 299.9521(2)(a) and (b) and 40 CFR §270.31}

**PART VI
ENVIRONMENTAL MONITORING CONDITIONS**

A. GROUNDWATER MONITORING PROGRAMS

1. Detection Monitoring Program.

The licensee shall conduct a detection monitoring program in the deep monitoring wells for primary and secondary parameters in accordance with the Groundwater Monitoring Program Sampling and Analysis Plan (SAP), in the Environmental Monitoring Program, Attachment 12, of this license and as specified below.

- a. The licensee shall establish background groundwater quality values at monitoring wells for the parameters specified in the Groundwater Monitoring Program SAP, of the Environmental Monitoring Program, Attachment 12, of this license. {R 299.9612(1)(c), (d), and (e) and 40 CFR §264.97(a) and (g)}
- b. Within 60 days of each sampling of each monitoring well, the licensee shall determine if a statistically significant increase (or change in pH) has occurred compared to background levels for each primary and secondary parameter listed in the Groundwater Monitoring Program SAP, of the Environmental Monitoring Program, Attachment 12, of this license. For the nonnaturally occurring primary parameters, any occurrence above the laboratory detection limit(s) for the parameter(s) shall be considered statistically significant. {R 299.9612(1)(c) and (e) and 40 CFR §264.97(h) and (i)}
- c. If a statistically significant increase (or change in pH) is detected for any primary or secondary parameter, the licensee shall notify the Division, Hazardous Waste Section, by telephone within one working day and arrange a resampling as soon as possible to confirm if a statistically significant increase (or change in pH) exists. Resampling must include not less than four replicate samples at the affected well(s) for the parameter(s) in question. A statistically significant increase shall be confirmed if at least two of the four resample results are detected above the background concentration for the parameter(s), or if at least one of the resample results is detected at five times the background concentration. {R 299.9612 and 40 CFR §264.97(g)}
- d. If the licensee determines pursuant to Conditions VI.A.1.b. and VI.A.1.c. of this license that a statistically significant increase has occurred for any primary or secondary parameter, the licensee shall address the increase in accordance with R 299.9612 and 40 CFR §264.98(f) and (g) and:
 - (i) Notify the Division Chief, within one business day, by contacting the Division project geologist or permit engineer for the site, or the appropriate Division District Supervisor, or if unavailable, the MDEQ PEAS at 1-800-292-4706.
 - (ii) Provide written notification to the Division Chief within seven days of the determination. The written notification shall indicate what parameters have shown statistically significant changes and the well(s) in which the changes have occurred.
 - (iii) As soon as possible, sample the groundwater in the well where the statistically significant increase occurred and other glacial till and regional aquifer detection monitoring wells within 1,000 feet of the affected well to determine the concentration of all parameters identified in Appendix IX of 40 CFR, Part 264,

that are present in groundwater and for which approved analysis methods exist. However, the Division Chief may allow sampling for a site-specific subset of parameters from the Appendix IX list and other representative/related waste constituents. For parameters detected, the licensee may resample within one month or at an alternative schedule approved by the Director and repeat the analysis. If the results of the second analysis confirm the initial results, then these parameters will be included as primary parameters. If the licensee does not resample, the detected parameters will be included as primary parameters. The licensee shall also establish background values for the Appendix IX constituents detected pursuant to R 299.9612 and 40 CFR §264.98(g)(3).

- (iv) Immediately take steps to determine the cause of the contamination and eliminate the source of discharge.
 - (v) Within 90 days after the confirmation of a statistically significant increase, submit to the Division Chief an application for a license modification to establish a compliance monitoring or corrective action program meeting the requirements of R 299.9612 and 40 CFR §264.98(g)(4).
 - (vi) Within 180 days after the determination, submit to the Division Chief a detailed description of corrective actions that shall achieve compliance with applicable laws and rules, including a schedule of implementation. Corrective action shall also meet the requirements of R 299.9629 and include a plan for a groundwater monitoring program that shall demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of 40 CFR §264.99.
 - (vii) Prior to a license modification requiring a compliance monitoring and corrective action program, the licensee shall provide the Division Chief, or his or her designee, with weekly telephone updates and written reports every two weeks regarding the progress to date in determining the cause of contamination and eliminating the discharge. The written report shall include the results of all samples from environmental monitoring conducted by the licensee.
{R 299.9521(3)(b)}
- e. If the licensee determines pursuant to Conditions VI.A.1.b. and VI.A.1.c. of this license that a statistically significant increase in primary parameters has been confirmed in groundwater, the licensee may demonstrate that a source other than the licensed facility or an error in sampling, analysis, or evaluation solely caused the identification of a statistically significant increase. While the licensee may make a demonstration under this condition in addition to, or in lieu of, submitting a license modification application and implementing corrective action within the time specified in Conditions VI.A.1.e.(v) and VI.A.1.e.(vi), the licensee is not relieved of the requirement to submit a license modification application and implement corrective action within the time specified, unless the MDEQ finds that the demonstration made under this condition successfully shows that a source other than the licensed facility caused the statistically significant increase or that the statistically significant increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under this condition, the licensee shall:

- (i) Notify the Division Chief in writing within seven days of determining a statistically significant increase pursuant to Condition VI.A.1.c. of this license that it intends to make a demonstration under this condition.
- (ii) Within 90 days after the determining a statistically significant increase pursuant to Condition VI.A.1.c. of this license, submit a report to the Division Chief that demonstrates a source other than the licensed facility solely caused the statistically significant increase, or that the statistically significant increase was caused by an error in sampling, analysis, or evaluation.
- (iii) Within 90 days of determining a statistically significant increase pursuant to Condition VI.A.1.c. of this license, submit to the Division Chief an application for a license modification to make any appropriate changes to the groundwater monitoring program at the facility.
- (iv) Continue to monitor groundwater in compliance with this license.

{40 CFR §264.98(g)(6)}

- f. In the event that the Division Chief determines from the findings of Condition VI.A.1.c. of this license that a statistically significant increase in hazardous constituents has occurred in the groundwater and the Director finds, in accordance with §11148 of Act 451, that the increase may present an imminent and substantial hazard to the health of persons or to the natural resources, or is endangering or causing damage to public health or the environment, the licensee shall immediately comply with an order issued by the Director pursuant to §11148(1) of Act 451 to cease waste receipt, storage, and treatment at the affected unit(s) and conduct other activities as required by the Director to eliminate the said endangerment. {R 299.9611(2)(a) and (b), R 299.9612, and R 299.9629 and 40 CFR Part 264, Subpart F, excluding 40 CFR §§264.94(a)(2) and (3), 264.94(b) and (c), 264.100, and 264.101}

2. Supplemental Groundwater Monitoring Program.

The licensee shall conduct a supplemental monitoring program in the shallow monitoring wells in accordance with the Groundwater Monitoring Program SAP, of the Environmental Monitoring Program, Attachment 12, of this license. {R 299.9611(2)(a) and (b), R 299.9612, and R 299.9629 and 40 CFR Part 264, Subpart F, excluding 40 CFR §§264.94(a)(2) and (3), 264.94(b) and (c), 264.100, and 264.101}

3. Corrective Action Groundwater Monitoring Program.

The licensee shall conduct a corrective action monitoring program for the Site Interceptor System (SIS), the 604 Area Vaults, and the Quench Pond in accordance with the Groundwater Monitoring Program SAP, of the Environmental Monitoring Program, Attachment 12, of this license and as specified below. {R 299.9611(2)(a) and (b), R 299.9612, and R 299.9629 and 40 CFR Part 264, Subpart F, excluding 40 CFR §§264.94(a)(2) and (3), 264.94(b) and (c), 264.100, and 264.101}

- a. The licensee shall conduct a hydraulic monitoring program for the SIS in accordance with the Groundwater Monitoring Program SAP, of the Environmental Monitoring Program, Attachment 12, of this license in order to demonstrate that an inward hydraulic gradient is being maintained through operation of the SIS. An inward hydraulic gradient is required to demonstrate that the SIS is capturing potentially contaminated shallow groundwater and that it is not migrating off-site. If the results of

the quarterly hydraulic monitoring reveal that the static water elevation in the SIS is higher than the static water elevation in Lingle Drain or any piezometer, then the inward hydraulic gradient that documents containment of the on-site shallow contaminated groundwater is not being maintained. Based on the results of the quarterly hydraulic monitoring the licensee shall:

- (i) If the results of the quarterly hydraulic monitoring of the SIS determine that the inward hydraulic gradient is not being maintained at any location, then the licensee shall immediately (within 24-hours) resample the hydraulic monitoring points in question to confirm the apparent outward hydraulic gradient.
- (ii) If the outward hydraulic gradient is confirmed, the licensee shall address the outward gradient in accordance with R 299.9629 and:
 - (a) Notify the Division Chief within 24 hours.
 - (b) Immediately take steps to determine the cause of the outward gradient and take whatever steps that are necessary to implement its repair and restore the inward hydraulic gradient if possible.
 - (c) Within 180 days after the determination, submit to the Division Chief detailed description of corrective actions that shall achieve compliance with applicable laws and rules, including a schedule of implementation. Corrective action shall also meet the requirements of R 299.9629 and if necessary, include a plan for a groundwater and/or surface water monitoring program that shall demonstrate the effectiveness of the corrective action.
 - (d) Prior to a license modification requiring a corrective action program, the licensee shall provide the Division Chief, or his or her designee, with weekly telephone updates and written reports every two weeks regarding the progress to date in determining the cause of outward gradient and eliminating any discharge of contaminated groundwater. The written report shall include the results of all samples from environmental monitoring related to the corrective action conducted by the licensee. {R 299.9521(3)(b)}

4. Reporting.

- a. The licensee shall report groundwater monitoring results as defined in the Groundwater Monitoring Program SAP of the Environmental Monitoring Program, Attachment 12, of this license and as required by Condition II.I.4. of this license.
- b. The licensee shall submit an annual groundwater report to the Division Chief no later than March 1st of each year for the previous calendar year's activities. In addition to the information specified to be provided in the Groundwater Monitoring Program SAP, the report shall include the following information:
 - (i) A narrative summary of the previous calendar year's sampling events, including sampling event dates, the identification of any significant problems with respect to SAP procedures, and copies of field log sheets.

- (ii) An analysis and discussion of laboratory and field related QA/QC information. This shall include the results of equipment, field, and trip blanks, and discussion and evaluation of the adequacy of the data with respect to SAP specifications and requirements.
- (iii) A summary of the effectiveness of the corrective action and corrective action monitoring activities, and if necessary, recommendations for modifications to the corrective action and/or corrective action monitoring program. {R 299.9521(3)(b) and R 299.9612(1) and 40 CFR §264.97(j)}

B. SURFACE WATER MONITORING PROGRAM

1. The licensee shall conduct a semiannual surface water monitoring program as described in the Surface Water Monitoring Program SAP of the Environmental Monitoring Program, Attachment 12, of this license.
2. Within 60 days of each sampling, the licensee shall determine if a confirmed statistically significant increase has occurred compared to background levels for each parameter listed in the Surface Water Monitoring Program SAP of the Environmental Monitoring Program, Attachment 12, of this license. A significant increase shall be confirmed using the statistical evaluation method specified in the SAP, Attachment 12, of this license.
3. Duplicate samples shall be collected on a semiannual basis from each sampling location. Initially, the licensee is required to analyze only one of the two samples. The licensee shall hold the duplicate sample pending the results of the initial sample. If a statistically significant increase is detected in a monitoring parameter(s), the duplicate sample shall be analyzed for confirmation purposes.
4. If statistically significant increases of monitored parameters are confirmed, the licensee must notify the Division Chief immediately by telephone and within seven days in writing.
5. Within 30 days of the determination of a statistically significant increase, the licensee shall determine whether a discharge to surface waters is occurring, determine the source, and take immediate steps to eliminate and prevent any such discharge.
6. The licensee shall report the surface water monitoring results as defined in the Surface Water Monitoring Program SAP of the Environmental Monitoring Program, Attachment 12, of this license, and as required by Condition II.I.4. of this license.

{R 299.9521(3)(a) and (b) and R 299.9611(5)}

C. LEACHATE MONITORING PROGRAM

1. The licensee shall conduct a quarterly leachate monitoring program as described in the Leachate Monitoring Program SAP of the Environmental Monitoring Program, Attachment 12, of this license.
2. The licensee shall monitor the monthly volume of leachate pumped from the facility and record the volume and place this documentation in the operating record. {R 299.9609(1)(b) and R 299.9619(4)(c)(iii)}

3. Any organic parameter that is added to the monitored parameters due to its elevated presence in the routine leachate monitoring conducted as specified in the Leachate Monitoring Program SAP of the Environmental Monitoring Program, Attachment 12, of this license shall be added to the groundwater and surface water monitoring parameters by the licensee. If an added parameter is not detected over two consecutive samplings in the groundwater and surface water monitoring programs, it may be removed from those programs, if approved in writing by the Division Chief.
4. The licensee shall submit an annual leachate monitoring report to the Division Chief no later than March 1st of each year for the previous calendar year's activities. In addition to the information specified to be provided in the Groundwater Monitoring Program SAP, the report shall include the following information:
 - a. A graphical presentation of the monthly and yearly quantities of leachate being generated and pumped from the landfill.
 - b. A graphical comparison between leachate quantities pumped/generated during the reported year and the leachate quantities pumped/generated from previous years.
 - c. Reasons for increases/decreases in leachate quantities. If there is an increase in leachate quantities, the source shall be indicated in the leachate monitoring report.
5. The licensee shall report the leachate monitoring results as defined in the Leachate Monitoring Program SAP of Attachment 12, of this license and as required by Condition II.I.4. of this license.

{R 299.9521(3)(a) and (b) and R 299.9611(5)}

**PART VII
CORRECTIVE ACTION CONDITIONS**

A. CORRECTIVE ACTION AT THE FACILITY

1. The licensee shall implement corrective action for all releases of a contaminant from any waste management unit (WMU) at the facility, regardless of when the contaminant may have been placed in or released from the WMU. For the purposes of this license, the term "corrective action" means an action determined by the Division Chief to be necessary to protect the public health, safety, welfare, or the environment, and includes, but is not limited to, investigation, evaluation, cleanup, removal, remediation, monitoring, containment, isolation, treatment, storage, management, the temporary relocation of people, and the provision of alternative water supplies, or any corrective action allowed under Title II of the federal Solid Waste Disposal Act, PL 89-272, as amended, or regulations promulgated pursuant to that act. For the purposes of this license, the process outlined in Part 111 of Act 451 and the environmental protection standards adopted in R 299.9629 shall be used to satisfy the corrective action obligations under this license. {§§11102 and 11115a of Act 451 and R 299.9629}
2. To the extent that a release of a hazardous substance, as defined in §20101(t) of Act 451, that is not also a contaminant, as defined in §11102(2) of Act 451, is discovered while performing corrective action under this license, the licensee shall take concurrent actions as necessary to address the Part 201, Environmental Remediation, of Act 451 remedial obligations for that release. {R 299.9521(3)(b)}

B. CORRECTIVE ACTION BEYOND THE FACILITY BOUNDARY

The licensee shall implement corrective action beyond the facility in accordance with §11115a of Act 451 and R 299.9629(2).

C. IDENTIFICATION OF WASTE MANAGEMENT UNITS

The WMUs at the facility are identified below, shown on the Drawings Y1-74997 and Y1-75002, and further described in Corrective Action, Attachment 13, of this license.

1. The following WMUs do not require additional investigations at this time:

The following WMUs, identified in the September 30, 1994, U.S. EPA, Region 5, Hazardous Waste Management Permit and by subsequent notification by the licensee, are undergoing corrective measures at this time. Site-wide corrective measures are being implemented as a result of the installation of the SIS. The SIS is designed to capture all shallow groundwater flowing off-site. Corrective measures are also being implemented for some WMUs as a result of the installation of localized groundwater collection systems around those WMUs.

WMU	Surface Sand Unit Surrounding the Hazardous Waste Landfill
WMU 10	513 Spill Area (<i>Chlorobenzene, Toluene; MERA #560005</i>)
WMU 16	Benzene Spill Area (<i>Tank 8; Benzene, Toluene, Xylene, Methanol; MERA #560005, MERA #560032</i>)
WMU 20	207 Spill Area
WMU 22	505 Spill Area
WMU 23	513 (Pinto) Spill Area (<i>same as WMU 10</i>)
WMU 27	604 Vaults
WMU	2407 Tank Farm (<i>UST</i>)

WMU 2504 Building Tank 8338 (UST)

2. The following WMUs do not require corrective action at this time:

a. The following WMUs, identified in the September 30, 1994, U.S. EPA, Region 5, Hazardous Waste Management Permit and by subsequent notification by the licensee, that are currently operating pursuant to the act and its rules with no evidence of a release of any contaminants. Corrective action may be required when any of the units undergo final closure.

WMU Number 2	Neutralization Tank
WMU Number 11	801 Container Storage Building
WMU Number 11	809 Container Storage Building
WMU Number 12	Landfill
WMU Number 13	Truck Wash Facility
WMU Number 14	806 Tank Farm
WMU Number 18	Aboveground Quencher Tank
WMU	Chemical Sewer
WMU Number 28	802 Dewatering Area
WMUs	Hazardous Waste Drum & Dempster Storage Areas listed in Table B9-2, Corrective Action, Attachment 12, of this license and 311 Building Dempster B-103, 207 Building Indoor Container Storage Area, 501 Building West Drum Storage Area #17, 501 Building South Drum Storage Area #18, and 2509 Building Container Storage Area #15
WMUs	Hazardous Waste Railcar and Tank Truck Loading Areas listed in Table B9-3, Corrective Action, Attachment 12, of this license
WMUs	Hazardous Waste Tank Storage Areas listed in Table B9-4, Corrective Action, Attachment 12, of this license and 324 Building Tank 5636 and 2703 Building Tank 22796

b. The following WMUs, identified in the September 30, 1994 U.S. EPA, Region 5, Hazardous Waste Management Permit because the unit is currently undergoing postclosure pursuant to the act and its rules. Corrective action may be required upon completion of postclosure period of the unit.

WMU Number 17 Quench Pond

c. The following WMUs, identified in the September 30, 1994, U.S. EPA, Region 5, Hazardous Waste Management Permit, based on the design of the units and available information that indicates that no known or suspected releases of contaminants from the units have occurred.

WMU Number 1	Neutralization Bed
WMU Number 3	304 Vinyl Chloride Vent Incinerator
WMU Number 4	337 Scrubber Gel Accumulation Tank and Pond
WMU Number 5	Wood Ash Storage Building
WMU Number 6	501 Building North Skimmer
WMU Number 7	501 Building South Skimmer
WMU Number 8	505 Building East Skimmer
WMU Number 9	700 Block Waste Pile

WMU Number 11	800 Block Container Storage facilities, original
WMU Number 14	800 Block Tank Farm, original
WMU Number 15	Site Paint Area
WMU Number 19	Transfer Stations (207 Building and 800 Block)
WMU Number 21	Dow Injection Well
WMU Number 26	New Site Paint Facility

- d. The following WMUs, identified in the September 30, 1994 U.S. EPA, Region 5 Hazardous Waste Management Permit, require no further corrective action at this time. The determination that no further corrective action is required at this time is based on available information and data that indicates that any releases have been adequately addressed.

WMU Number 24	Demolition Pile
WMU Number 25	4705 Stormwater Retention Pond

The licensee notified the MDEQ in May 2001 of low levels of PCBs detected in the effluent from the 4705 Stormwater Retention Pond. This detection prompted a system-wide water line clean out program along with the sampling of manholes and the pond sediment layer. Based on this sampling, the licensee removed PCB contaminated soils and sediment. The MDEQ is not requiring further corrective action of this WMU under this license at this time. However, should additional remedial actions be warranted by MDEQ, Surface Water Program, or the U.S. EPA, TSCA program based on prior submittals to those agencies, the licensee may not use this license as a shield to comply with that agency's requirements.

{§§11102 and 11115a of Act 451 and R 299.9521(3)(b) and R 299.9629}

3. Within 30 days of discovery of a new WMU or a release of a contaminant from a new WMU, the licensee shall provide written notification to the Division Chief. The written notification shall include all of the following information:
- a. The location of the unit on the facility topographic map.
 - b. The designation of the type of unit.
 - c. The general dimensions and structural description, including any available drawings of the unit.
 - d. The date the unit was operated.
 - e. Specification of all waste(s) that have been managed in the unit.
 - f. All available information pertaining to any release of a contaminant from the unit.
4. Based on a review of all of the information provided in Condition VII.C.3. of this license, the Division Chief may require corrective action for the newly-identified WMU. The licensee shall submit a written Investigation Work Plan to the Division Chief within 60 days of written notification by the Division Chief that corrective action for the unit is required.

{§§11102 and 11115a of Act 451 and R 299.9504(1), R 299.9508(1)(b), and R 299.9629 and 40 CFR §270.14(d)}

D. CORRECTIVE ACTION INVESTIGATION

The licensee shall conduct a Corrective Action Investigation to determine if a release of a contaminant(s) from any of the WMU identified in Condition VII.C. of this license has occurred and, if a release(s) has occurred, evaluate the nature and extent of the release(s). The licensee shall submit a written Corrective Action Investigation Work Plan, Corrective Action Investigation Final Report documenting compliance with the approved Work Plan and supporting further corrective action at the facility, and Corrective Action Investigation progress reports to the Division Chief for review and approval in accordance with Condition VII.K. of this license. The Division Chief will approve, modify and approve, or provide a Notice of Deficiency (NOD) for the Work Plan and Final Report. Upon approval, the Work Plan and Final Report become enforceable conditions of this license. {§§11102 and 11115a of Act 451 and R 299.9629}

E. INTERIM MEASURES

The licensee shall conduct interim measures (IM) at the facility, if determined necessary by the licensee or the Division Chief, to cleanup or remove a released contaminant or to take other actions, prior to the implementation of corrective measures, as may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, or to the environment. The licensee shall submit a written IM Work Plan, an IM Final Report documenting compliance with the approved Work Plan and supporting further corrective action at the facility, and IM progress reports to the Division Chief for review and approval in accordance with Condition VII.K. of this license. The Division Chief will approve, modify and approve, or provide an NOD for the Work Plan and Final Report. Upon approval, the Work Plan and Final Report become enforceable conditions of this license. {§§11102 and 11115a of Act 451 and R 299.9629}

F. DETERMINATION OF NO FURTHER ACTION

1. The licensee shall continue corrective action measures to the extent necessary to ensure that the applicable environmental protection standards adopted in Part 111 of Act 451, are met, if the limits are not less stringent than allowed pursuant to the provisions of RCRA.
2. Based on the results of the Corrective Action Investigation and other relevant information, the licensee shall submit a written request for a license minor modification to the Division Chief if the licensee wishes to terminate corrective action for a specific WMU identified in Condition VII.C. of this license. The licensee must demonstrate that there have been no releases of a contaminant(s) from the WMU and that the WMU does not pose a threat to public health, safety, welfare, or the environment.
3. Based on the results of the Corrective Action Investigation and other relevant information, the licensee shall submit a written request for a license major modification to the Division Chief if the licensee wishes to terminate facility-wide corrective action. The licensee must conclusively demonstrate that there have been no releases of a contaminant(s) from any of the WMU at the facility and that none of the WMUs pose a threat to public health, safety, welfare, or the environment.
4. If, based upon a review of the licensee's request for a license modification pursuant to Condition VII.F.2. or VII.F.3. of this license, the results of the completed Corrective Action Investigation, and other relevant information, the Division Chief determines that the releases or suspected releases of a contaminant(s) do not exist and that the WMU(s) do not pose a threat

to public health, safety, welfare, or the environment, the Division Chief will approve the requested modification

5. A determination of no further action shall not preclude the Division Chief from requiring continued or periodic monitoring of air, soil, groundwater, or surface water, if necessary to protect public health, safety, welfare, or the environment, when facility-specific circumstances indicate that potential or actual releases of a contaminant(s) may occur.
6. A determination of no further action shall not preclude the Division Chief from requiring further corrective action at a later date, if new information or subsequent analysis indicates that a release or potential release of a contaminant(s) from a WMU at the facility may pose a threat to public health, safety, welfare, or the environment. The Division Chief will initiate the necessary license modifications if further corrective action is required at a later date.

{§§11102 and 11115a of Act 451 and R 299.9629(2)}

G. CORRECTIVE MEASURES STUDY

If the Division Chief determines, based on the results of the Corrective Action Investigation and other relevant information, that remedial activities are necessary, the Division Chief will notify the licensee in writing that a Corrective Measures Study (CMS) is required. If required by the Division Chief, the licensee shall conduct a CMS to develop and evaluate the corrective measures alternative(s) necessary to address the release(s) of a contaminant(s) or hazardous substances and the WMU(s) that are identified in the approved Corrective Action Investigation Final Report as requiring final remedial activities. The licensee shall submit a written CMS Work Plan, a CMS Final Report documenting compliance with the approved Work Plan and supporting further corrective action at the facility, and CMS progress reports to the Division Chief for review and approval in accordance with Condition VII.K. of this license. The Division Chief will approve, modify and approve, or provide an NOD for the Work Plan and Final Report. Upon approval, the Work Plan and Final Report become enforceable conditions of this license. {§§11102 and 11115a of Act 451 and R 299.9629}

H. CORRECTIVE MEASURES IMPLEMENTATION PLAN

1. The licensee shall conduct final corrective measures based on the CMS Final Report approved by the Division Chief. The licensee shall submit a written Corrective Measures Implementation (CMI) Work Plan to the Division Chief for review and approval. The licensee shall also submit a written CMI Final Report documenting the compliance with the approved CMI Work Plan and providing justification that the corrective actions may cease, and CMI progress reports to the Division Chief for review and approval in accordance with Condition VII.K. of this license. The Division Chief will approve, modify and approve, or provide an NOD for the Work Plan and Final Report. Upon approval, the Work Plan and Final Report become enforceable conditions of this license.
2. The Division will provide notice of its draft decision on the CMI Work Plan to persons on the facility mailing list and provide an opportunity for a public hearing.
3. The licensee shall implement the approved CMI Work Plan within 60 days of receipt of the Division Chief's written approval of the Work Plan.

{§§11102 and 11115a of Act 451 and R 299.9629}

I. CORRECTIVE ACTION MANAGEMENT UNITS

If applicable, the licensee shall comply with the requirements of R 299.9635 in order to designate an area at the facility as a corrective action management unit for implementation of corrective measures. {R 299.9521(3)(a)}

J. TEMPORARY UNITS

If applicable, the licensee shall comply with the requirements of R 299.9636 in order to designate tank or container storage units used for the treatment or storage of remediation wastes as temporary units for implementation of corrective measures. {R 299.9521(3)(a)}

K. SUMMARY OF CORRECTIVE ACTION SUBMITTALS

The licensee shall submit the required documents in accordance with Conditions VII.D., VII.E, VII.G, and VII.H. of this license and the schedule below.

Document	Submittal Deadline
Written notification of a new release of a contaminant from an existing WMU, a new WMU, or a release of a contaminant from a new WMU	Within 30 days of discovery
Corrective Action Investigation Work Plan for a newly-identified release of a contaminant from an existing WMU, a new WMU, or a release of a contaminant from a new WMU	Within 60 days of receipt of notification that an investigation is required
Revised Corrective Action Investigation Work Plan for WMUs and contaminant releases	Within 30 days of receipt of Corrective Action Investigation Work Plan NOD
Corrective Action Investigation progress reports	Within 30 days of initiation of the investigation and every 90 days thereafter, unless otherwise approved
Corrective Action Investigation Final Report for WMUs and contaminant releases	Within 60 days of completion of investigation
Revised Corrective Action Investigation Final Report for WMUs and contaminant releases	Within 30 days of receipt of Corrective Action Investigation Final Report NOD
IM Work Plan for WMUs and contaminant releases	Within 30 days of receipt of notification that IM Work Plan is required
Revised IM Work Plan for WMUs and contaminant releases	Within 30 days of receipt of IM Work Plan NOD
IM progress reports	Within 30 days of initiation of the IM and every 30 days thereafter, unless otherwise approved
IM Final Report for WMUs and contaminant releases	Within 60 days of completion of the IM
Revised IM Final Report for WMUs and contaminant releases	Within 30 days of receipt of IM Final Report NOD
CMS Work Plan for WMUs and contaminant releases	Within 60 days of receipt of notification that CMS is required

Document	Submittal Deadline
Revised CMS Work Plan for WMUs and contaminant releases	Within 30 days of receipt of CMS Work Plan NOD
CMS progress reports	Within 30 days of initiation of the CMS and every 90 days thereafter, unless otherwise approved
CMS Final Report for WMUs and contaminant releases	Within 60 days of completion of the CMS
Revised CMS Final Report for WMUs and contaminant releases	Within 30 days of receipt of CMS Final Report NOD
CMI Work Plan for WMUs and contaminant releases	Within 60 days of approval of the CMS Final Report
Revised CMI Work Plan for WMUs and contaminant releases	Within 30 days of receipt of CMI Work Plan NOD
CMI progress reports	Within 30 days of implementation of the CMI Work Plan and every 90 days thereafter, unless otherwise approved
CMI Final Report for remediated WMUs and contaminant releases	Within 60 days of the remedial actions have been completed and cleanup criteria have been met
Revised CMI Final Report for WMUs and contaminant releases	Within 30 days of receipt of CMI Final Report NOD

L. CORRECTIVE ACTION DOCUMENTS RETENTION

The licensee shall maintain all corrective action documents required by this license at the facility. The documents shall be maintained for the operating life of the facility or until the facility is released from financial assurance requirements for corrective action by the Director, whichever is longer. The licensee shall offer such documents to the Division Chief prior to discarding those documents. {§§11102 and 11115a of Act 451 and R 299.9521(3)(b) and R 299.9629}