

Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: September 1, 2010
REVISION DATE: August 27, 2013
ISSUED TO

**EQ - The Environmental Quality Company (Michigan Disposal Waste Treatment Plant),
Wayne Energy Recovery, Inc. Partnership (Wayne Energy Recovery, Inc.), and
Wayne Disposal, Inc. (Site 1, Site 2, Old Wayne, and Fons Landfills)**

State Registration Number (SRN): M4782

LOCATED AT

49350 I-94 Service Drive, Belleville, Michigan 48111

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-M4782-2010a

Expiration Date: September 1, 2015

Administratively Complete ROP Renewal Application Due Between March 1, 2014 and
March 1, 2015

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Michigan Air Pollution Control Rule 210(1), this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to PA 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-M4782-2010a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to PA 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Wilhemina McLemore, Detroit District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The department is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a source-wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements will be identified for each ROP term or condition. All terms and conditions that are included in a Permit to Install (PTI), are streamlined or subsumed, or are state-only enforceable will be noted as such.

In accordance with Section 5507 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

Section 1 – EQ - The Environmental Quality Company

Michigan Department Of Environmental Quality
Air Quality Division

ISSUED TO

EQ - The Environmental Quality Company (Michigan Disposal Waste Treatment Plant)

State Registration Number (SRN): M4782

LOCATED AT

49350 I-94 Service Drive, Belleville, Michigan 48111

A-1. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-wide Permit to Install (PTI) pursuant to Rule 201(2)(d) are designated by Footnote 1. **(R 336.1213(5)(a), R336.1214a(5))**
- Those conditions that are hereby incorporated in federal enforceable Source-wide PTI No. MI-PTI-M4782-2010a pursuant to Rule 201(2)(c) are designated by Footnote 2. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (EPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the EPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rules 215 and 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the United States Environmental Protection Agency together with a claim of confidentiality. **(R 336.1213(1)(e))**
6. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**

7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Except as provided in subrules 2, 3, and 4 of Rule 301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP. The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. **(R 336.1901(a))¹**
 - b. Unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901(b))¹**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b)):**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A responsible official shall certify to the appropriate District Office of the AQD and the EPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP **(R 336.1213(3)(c))**:
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:
 - a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate District

Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**:
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - Administrative amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - Administrative amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - Minor permit modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - State-only modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

- For changes to any process or process equipment covered by this ROP that does not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
- A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(3))**
- For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**
- Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(3), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the EPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. **(R 336.1201(1))**²
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**²
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. **(R 336.1219)**²
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, MI 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. **(R 336.1201(4))**²

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B-1. SOURCE-WIDE CONDITIONS

Part B outlines the source-wide terms and conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no source-wide conditions, this section will be left blank.

C-1. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE C-1

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUPUGMILL1	Pugmill 1, used to convey material to the east side waste treatment process, controlled by a baghouse dust collector, thermal oxidizer, and wet scrubber, in series.	7/1/91	FG_EAST FGTMTFACILITY
EUSILO4-6	Three identical treatment reagent and waste storage silos, each equipped with a baghouse, serving the east side waste treatment process.	7/1/91	FG_SILOS FGTMTFACILITY
EUSLUDGETANK12	40,000 gallon sludge tank (Tank 12), located in the east side waste treatment building. Controlled by a baghouse dust collector, thermal oxidizer, and wet scrubber, in series.	7/1/91	FG_EAST FGTMTFACILITY
EUSTORAGETANK1	Waste storage and treatment tanks E, F, G, and H located in the east side waste treatment building. Controlled by a baghouse dust collector, thermal oxidizer, and wet scrubber, in series.	7/1/91-6/1/97	FG_EAST FGTMTFACILITY
EUPUGMILL2	Pugmill 2, used to convey material to the west side waste treatment process, controlled by a baghouse dust collector. This process does not treat waste subject to 40 CFR §63 Subpart DD.	7/1/91	FG_WEST FGTMTFACILITY
EUSILO1-3	Three identical treatment reagent and waste storage silos, each equipped with a baghouse, serving the west side waste treatment process.	7/1/91	FG_SILOS FGTMTFACILITY
EUSLUDGETANK11	40,000 gallon sludge tank (Tank 11), located in the west side waste treatment building. Controlled by a baghouse dust collector.	7/1/91	FG_WEST FGTMTFACILITY
EUSTORAGETANK2	Waste storage and treatment tanks A, B, C, and D located in the west side waste treatment building. Controlled by a baghouse dust collector.	7/1/91-6/1/97	FG_WEST FGTMTFACILITY
EULIQWASTETK16	20,000 gallon liquid waste holding tank (Tank 16) controlled by two shared carbon adsorption canisters, in series.	7/1/91	FGLIQWASTETKS FGTMTFACILITY

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EULIQWASTETK17	20,000 gallon liquid waste holding tank (Tank 17) controlled by two shared carbon adsorption canisters, in series.	7/1/91	FGLIQWASTETKS FGTMTFACILITY
EULIQWASTETK18	20,000 gallon liquid waste holding tank (Tank 18) controlled by two shared carbon adsorption canisters, in series.	7/1/91	FGLIQWASTETKS FGTMTFACILITY
EULIQWASTETK19	20,000 gallon liquid waste holding tank (Tank 19) controlled by two shared carbon adsorption canisters, in series.	7/1/91	FGLIQWASTETKS FGTMTFACILITY
EUDRUMSTORAGE	North, East, and Southeast Container Storage Areas.	6/1/90-7/19/02	FGRULE290 FGTMTFACILITY
EUFEEDBLDG	Enclosed area where oily waste is received and fed to EUTDU. Building is maintained under negative pressure and vented to the regenerative thermal oxidizer (RTO).	2/14/2010	FGTDU
EUTDU	Thermal desorption unit. Volatile organic compounds and water are vaporized off of oily wastes using heat. Heat is supplied by a natural gas fired burner with a maximum heat input of 11 million Btu per hour. Vapors are condensed into oil and water. Uncondensed VOCs are controlled by the RTO.	2/14/2010	FGTDU
EUWATERTANK	Tank for storing condensed water. Tank is controlled by the RTO	2/14/2010	FGTDU
EUPHASETANK	Tank for storing water and for phase separation. Tank is controlled by the RTO.	2/14/2010	FGTDU
EUOILTANK	Tank for storing condensed oil. Tank is controlled by the RTO	2/14/2010	FGTDU
EUAIRSTRIPPER	Air stripper for removing VOC from the condensed water. Air stripper is controlled by the RTO.	2/14/2010	FGTDU

D-1. FLEXIBLE GROUP CONDITIONS

Part D outlines terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE D-1

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG_EAST	East side waste treatment process consisting of pugmill1, sludge tank 12, and waste treatment tanks E, F, G, and H. Controlled by a baghouse dust collector, thermal oxidizer, and wet scrubber, in series.	EUPUGMILL1 EUSLUDGETANK12 EUSTORAGETANK1
FG_WEST	West side waste treatment process consisting of pugmill2, sludge tank 11, and waste treatment tanks A, B, C, and D. Controlled by a baghouse dust collector. This process does not treat waste subject to 40 CFR Part 63 Subpart DD.	EUPUGMILL2 EUSLUDGETANK11 EUSTORAGETANK2
FGLIQWASTETKS	20,000 gallon liquid waste holding tanks, each controlled by two shared carbon adsorption canisters, in series.	EULIQWASTETK16 EULIQWASTETK17 EULIQWASTETK18 EULIQWASTETK19
FG_SILOS	Treatment reagent and waste storage silos 1, 2, 3, 4, 5 and 6	EUSILO1-3 EUSILO4-6
FGTMTFACILITY	Waste treatment facility including all equipment in the east and west side processes, the liquid waste storage tanks, consolidation room, and the North, East, and Southeast container storage areas.	EUPUGMILL1 EUSLUDGETANK1 EUSLUDGETANK12 EUSTORAGETANK1 EUPUGMILL2 EUSLUDGETANK2 EUSLUDGETANK11 EUSTORAGETANK2 EULIQWASTETK16 EULIQWASTETK17 EULIQWASTETK18 EULIQWASTETK19 EUDRUMSTORAGE EUSILO1-3 EUSILO4-6
FGTDU	All equipment related to the Thermal Desorption Unit and vented to the RTO.	EUFEEDHOPPERBLDG EUTDU EUWATERTANK EUPHASETANK EUOILTANK EUAIRSTRIPPER

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANER
FGRULE290	Equipment exempted by Rule 290, including the North, East, and Southeast Container Storage Areas.	EUDRUMSTORAGE

FG_EAST
FLEXIBLE GROUP CONDITIONS

DESCRIPTION – East side waste treatment process consisting of pugmill1, sludge tank 12, and waste treatment tanks E, F, G and H.

Emission Units: EUPUGMILL1, EU SLUDGETANK12, EUSTORAGETANK1

POLLUTION CONTROL EQUIPMENT – Baghouse dust collector, thermal oxidizer and caustic wet scrubber, in series.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	22.85 lb/hr ²	Per SC V.1	FG_EAST	SC V.1, V.2, VI.1, VI.3, VI.6, VI.8	R 336.1225 R 336.1702(a)
2. VOC	47.52 tpy ²	12-month rolling time period*	FG_EAST	SC V.1, V.2, VI.1, VI.3, VI.6, VI.8	R 336.1702(a)
3. Methylene chloride	14.92 lb/hr ¹	Per SC V.1	FG_EAST	SC V.1, V.2, VI.3, VI.5	R 336.1225
4. Benzene	0.71 lb/hr ¹				
5. 1,1,2,2-Tetrachloroethane	0.16 lb/hr ¹				
6. Carbon tetrachloride	0.28 lb/hr ¹				
7. Chloroform	3.02 lb/hr ¹				
8. Trichloroethene	4.52 lb/hr ¹				
9. Tetrachloroethene	12.7 lb/hr ¹				
10. Hydrogen chloride	28.4 lb/hr ¹	Per SC V.1	FG_EAST	SC V.1, VI.1, VI.4	R 336.1225
11. PM	0.028 lb per 1,000 lbs of exhaust air ²	Per SC VI.7.a and Appendix 7-S1	FG_EAST	SC VI.2, VI.9.a	R 336.1331(c)
12. PM-10	1.9 lb/hr ¹	Per SC VI.7.b	FG_EAST	SC VI.2, VI.9.b	R 336.1225
13. PM-10	4.0 tpy ²	12-month rolling time period*	FG_EAST	SC VI.2, VI.9.c	R 336.1205(3)

* Tons per year (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.VOC in waste	Maximum of 2% by weight for hazardous waste ²	Daily average for waste accepted for treatment	FG_EAST	SC VI.6	R 336.1225 R 336.1702(a)
2.VOC in waste	Maximum of 20% by weight for nonhazardous waste ²				

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall maintain the air flow through FG_EAST within the range specified in the following table during normal operation.

Parameter	Limit (cfm)
minimum air flow rate	19,500
maximum air flow rate	26,400

For purposes of this condition, normal operation is defined as:

- material in any waste treatment/storage tank is uncovered or has been covered less than two hours;
- the pug mill is operating or has been operating in the last two hours;
- any period when material is being placed in or removed from EUSLUDGETANK12;
- any period when waste is being placed in or removed from a waste treatment/storage tank, or has been within the last two hours.

(R 336.1201(1)(a), R 336.1213(2), R 336.1225, R 336.1331, R 336.1702(a), 40 CFR Part 63 Subparts A and DD)

- The permittee shall operate the baghouse, thermal oxidizer and caustic scrubber and maintain negative static pressure in the waste treatment building (pugmill and waste treatment/holding tanks) during normal operation, as defined above in special condition III.1.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD)**
- The permittee shall not operate FG_EAST, unless the baghouse, thermal oxidizer and caustic scrubber are installed and operated properly.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD)**
- The permittee shall not operate FG_EAST unless the treatment building baghouse pressure drop is maintained between 1.5 and 8 inches of water column.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)**
- The permittee shall not operate FG_EAST unless the thermal oxidizer maintains a minimum temperature of 1,500°F.² **(R 336.1213, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD)**
- The permittee shall maintain a VOC capture efficiency of 100 percent, as determined in accordance with S.C. V.2, in the FG_EAST exhaust system.² **(R 336.1225, R 336.1702(a), 40 CFR Part 63 Subparts A and DD)**
- The permittee shall not process waste with a VOC concentration greater than 500 ppm in FG_EAST unless the destruction efficiency of the thermal oxidizer is a minimum of 95%.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD)**
- The permittee shall not operate FG_EAST unless the caustic scrubber maintains a minimum pH of 7.3.² **(R 336.1225, R 336.1910)**
- The permittee shall not operate FG_EAST unless the liquid flow rate of the caustic scrubber is maintained between 225 and 350 gallons per minute.² **(R 336.1225, R 336.1910)**
- The permittee shall not have more than one waste treatment process building overhead door open at a time.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the air flow from FG_EAST on a continuous basis and record five minute block averages of the monitored air flow. **(R 336.1213(3))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop of the treatment building baghouse on a continuous basis and record five minute block averages of the monitored pressure drop.² **(R 336.1225, R 336.1331, R 336.1910, R 336.1205(3), 40CFR §64.6(b)(1), 40 CFR §64.7(b))**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the combustion chamber temperature of the thermal oxidizer on a continuous basis and record five minute block averages of the monitored temperature. **(R 336.1213(3), 40CFR §64.6(b)(1), 40 CFR §64.7(b))**
4. The thermal oxidizer shall be designed to maintain a minimum retention time of 0.4 seconds.² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD)**
5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pH of the caustic scrubber on a continuous basis and record five minute block averages of the monitored pH.² **(R 336.1225, R 336.1702(a), R 336.1910)**
6. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the liquid flow rate of the caustic scrubber on a continuous basis and record five minute block averages of the monitored liquid flow rate.² **(R 336.1225, R 336.1702(a), R 336.1910)**
7. The permittee shall install, maintain and operate limit switches in all overhead doors, so as to restrict the maximum opening heights to 20 feet except as needed for vehicle or equipment ingress and egress.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)**
8. Sludge feed and storage tank No. 12 (EUSLUDGETANK12) shall be vented into the FG_EAST waste treatment process building.² **(R 336.1225, R 336.1702(a), 40 CFR Part 63 Subparts A and DD)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Verification of pollutant emission rates from FG_EAST specified in SC I.1 through I.10 and the destruction efficiency of the thermal oxidizer by testing, at owner's expense, in accordance with Department requirements, will be required for operating approval. Verification of emission rates and efficiencies includes the submittal of a complete report of the test results. Stack testing procedures, operational parameters, and the location of stack testing ports must have prior approval by the AQD District Supervisor. Permittee shall conduct the verification tests at least once every five years, beginning in 2007, for the pollutant emission rates specified in SC I.1 through I.10.² **(R 336.1225, R 336.1702(a), R336.2001, R336.2003, 40 CFR Part 63 Subparts A and DD)**
2. Verification of the VOC capture efficiency of the exhaust system by testing, at owner's expense, in accordance with Department requirements, will be required for operating approval. The VOC capture efficiency of the exhaust system shall be determined in accordance with Procedure T, found in 40 CFR §52.741 Appendix B, or an alternative method as approved by the AQD, and by visual observation of the air movement and direction. Alternative testing procedures for VOC capture efficiency and associated operational parameters must have prior approval by the AQD District Supervisor. Permittee shall conduct the verification tests at least once every year and shall notify the department prior to conducting the tests.² **(R 336.1225, R 336.1702(a), R336.2001, R336.2003, 40 CFR Part 63 Subparts A and DD)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor the air flow from FG_EAST on a continuous basis and record five minute block averages of the monitored air flow. **(R 336.1213(3))**
2. The permittee shall monitor the pressure drop of the FG_EAST baghouse on a continuous basis and shall record five minute block averages of the monitored pressure drop. The permittee shall record any pressure drop excursions from the range specified in special condition III.4. **(R 336.1213(3), 40 CFR §64.6(c)(1))**
3. The permittee shall monitor the temperature of the thermal oxidizer in a representative area of the combustion chamber on a continuous basis and shall record five minute block averages of the monitored temperature in a

manner and with instrumentation acceptable to the AQD District Supervisor. The permittee shall record any temperature excursions below the minimum temperature specified in special condition III.5.² **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD, 40 CFR §64.6(c)(1))**

4. The permittee shall monitor the pH and flow rate of the FG_EAST caustic scrubber on a continuous basis and shall record five minute block averages of the monitored parameters. **(R 336.1213(3))**
5. The permittee shall maintain a written log for activities related to the RTO and baghouse conducted pursuant to the "Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems." The written log shall indicate the following:
 - a. Date, time and duration of RTO & baghouse downtime.²
 - b. Date and description of maintenance performed on the RTO & baghouse.²
 - c. Date and description of repairs performed on the RTO & baghouse.²**(R 336.1213(3), R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subparts A and DD, 40 CFR §64.7(b) and (d))**
6. The permittee shall maintain a written log for activities related to the scrubber and air handling equipment conducted pursuant to the "Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems." The written log shall indicate the following:
 - a. Date, time and duration of equipment downtime.²
 - b. Date and description of maintenance performed.²
 - c. Date and description of repairs performed.²**(R 336.1213(3), R 336.1910)**
7. The permittee shall maintain the following records for FG_EAST:
 - a. The volume of each waste stream treated; monthly record.²
 - b. VOC content in percent by weight present in each waste stream prior to treatment, based on generator information; daily record.²
 - c. Average daily VOC content (% by weight) of waste streams; daily record.
 - d. Monthly and 12-month rolling total VOC emissions according to the method outlined in Appendix 7A-S1; monthly record.²**(R 336.1213(3), R 336.1225, R 336.1702(a), 40 CFR 63 Subparts A and DD)**
8. The permittee shall prepare a monthly report summarizing the amount and the VOC content (in percent by weight) of waste treated and the total VOC input in order to monitor the cumulative VOC emissions for the preceding 12 months.² **(R 336.1225, R 336.1702(a), 40 CFR 63 Subparts A and DD)**
9. On a monthly basis, the permittee shall maintain the following records for FG_EAST:
 - a. PM concentration in pounds per thousand pounds of exhaust gas according to the method outlined in Appendix 7B-S1.²
 - b. Hourly PM-10 emission rate according to the method outlined in Appendix 7B-S1.¹
 - c. Monthly and 12-month rolling total PM-10 emissions according to the method outlined in Appendix 7B-S1.²**(R 336.1225, R 336.1331, R 336.1205(3))**
10. The permittee shall calculate and limit the VOC and PM and PM-10 emissions from FG_EAST according to the methods outlined in Appendix 7-S1 unless a replacement method acceptable to the AQD has been submitted and approved.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a))**
11. The permittee shall develop a written operating procedure to assure that the requirements of S.C. III.1 are met before the air flow through FG_EAST is reduced below the minimum air flow specified in S.C. III.1, or before the permittee no longer maintains negative static pressure as specified in S.C. III.2. The permittee shall maintain records, including the time, date and duration of air flow reduction and/or non-negative static pressure, to assure the operating procedures are being met as specified in the startup, shutdown and malfunction plan. **(R 336.1213(2), R 336.1225, R 336.1331, R 336.1702(a), 40 CFR Part 63 Subparts A and DD)**

- Upon detecting an excursion or exceedance through the parametric monitoring of pressure drop or RTO combustion temperature, the permittee shall restore operation of FG_EAST to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. **(R 336.1213(3), 40 CFR 64.7(d))**

See Appendix 7-S1

VII. REPORTING

Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- The permittee shall submit, on a semi-annual basis, the monthly reports specified above in S.C. VI.6 in order to monitor the cumulative VOC emissions for the preceding 12 months.² **(R 336.1225, R 336.1702(a))**
- Results of performance tests shall be submitted to the department in the format prescribed by the applicable reference test method within 60 days after the last date of the test. **(R336.2001(4))**
- Each semiannual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR §64.9(a)(2)(i))**
- Each semiannual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR §64.9(a)(2)(ii))**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVTHERMAL	54 ¹	75 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with all applicable provisions of the National Emission Standards for Benzene Waste Operations as specified in 40 CFR Part 61 Subparts A and FF. **(40 CFR Part 61 Subparts A & FF)**
- The emissions of asbestos, the filter fabric, the operation of the fabric filter baghouse dust collectors and the process and disposal of all asbestos containing waste shall comply with the specifications found in the NESHAP (National Emission Standards for Hazardous Air Pollutants) for Asbestos in 40 CFR Part 61 Subpart M.² **(40 CFR Part 61 Subpart M)**
- The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations as specified in 40 CFR Part 63 Subparts A and DD. **(40 CFR Part 63 Subparts A & DD)**
- The permittee shall implement the "Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems." This plan shall be made available to the Department upon request.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)**
- The permittee shall notify the appropriate District Office of the AQD for the need to modify the CAM plan if the approved monitoring is found to be inadequate and shall submit a proposed modification to the plan if appropriate. **(R 336.1213(3), 40 CFR §64.7(e))**

Section 1
Michigan Disposal
Waste Treatment Plant

ROP No.: MI-ROP-M4782-2010a
Expires: September 1, 2015
PTI No.: MI-PTI-M4782-2010a

6. The permittee shall comply with all requirements of 40 CFR Part 64, Compliance Assurance Monitoring.
(R 336.1213(3), 40 CFR Part 64)

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG_WEST
FLEXIBLE GROUP CONDITIONS

DESCRIPTION – West side waste treatment process consisting of pugmill 2, sludge tank 11, and waste treatment tanks A, B, C, and D. This process treats low VOC waste (average VOC content less than 500 ppm).

Emission Units: EUPUGMILL2, EU SLUDGETANK11, EUSTORAGETANK2

POLLUTION CONTROL EQUIPMENT – Baghouse dust collector.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	22.85 lb/hr ²	Per SC VI.6	FG_WEST	SC VI.5, VI.6, VI.8/ V.1 Appendix 7A-S1	R 336.1225
2. VOC	40.2 tpy ²	12-month rolling time period*			R 336.1702(a)
3. Methylene Chloride	14.92 lb/hr ¹	Per SC VI.6	FG_WEST	SC VI.5, VI.6/ V.1	R 336.1225
4. Benzene	0.71 lb/hr ¹				
5. 1,1,2,2-Tetrachloroethane	0.16 lb/hr ¹				
6. Carbon Tetrachloride	0.28 lb/hr ¹				
7. Chloroform	3.02 lb/hr ¹				
8. Trichloroethene	4.52 lb/hr ¹				
9. Tetrachloroethylene	12.7 lb/hr ¹				
10. PM	0.028 lb per 1,000 lbs of exhaust air ²	Per SC VI.6	FG_WEST	SC VI.1, VI.2, VI.4, VI.6/ V.3, V.4 Appendix 7B-S1	R 336.1331(c)
11. PM-10	9.6 lb/hr ¹	Per SC VI.6	FG_WEST		R 336.1225
12. PM-10	20 tpy ²	12-month rolling time period*	FG_WEST		R 336.1205(3)

* Tons per year (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC in waste	Maximum of 500 ppm ²	Monthly average	FG_WEST	SC VI.5b	R 336.1225 R 336.1702(a)
2. VOC in waste	Maximum of 0.5% by weight ²	Daily average for waste accepted for treatment	FG_WEST	SC VI.5c	
3. VOC	VOC evaporation rate from the waste treatment process shall not exceed 60% by weight. ²	Per SC V.2	FG_WEST	SC V.2	
4. Volatile Organic HAP in waste	Less than 500 ppmw based on the HAP content of the off-site material stream at the point-of-delivery ²	Annual average per off-site material stream	FG_WEST	SC VI.9, VI.10	40 CFR Part 63 Subparts A and DD

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain the air flow through FG_WEST within the range specified in the following table during normal operation:

Parameter	Limit (cfm)
minimum air flow rate	80,000
maximum air flow rate	110,000

For purposes of this condition, normal operation is defined as:

- a. material in any waste treatment/storage tank is uncovered or has been covered less than two hours;
- b. the pug mill is operating or has been operating in the last two hours;
- c. any period when material is being placed in or removed from EUSLUDGETANK11;
- d. any period when waste is being charged into or discharged from a waste treatment/storage tank, or has been within the last two hours.

(R 336.1201(1)(a), R 336.1213(2), R 336.1225, R 336.1331, R 336.1702(a))

- 2. The permittee shall operate the baghouse dust collector 24 hours a day and maintain negative static pressure in the waste treatment building (pugmill and waste treatment/holding tanks) at all times during normal operation, as defined above in special condition III.1.² **(R 336.1225, R 336.1331, R 336.1910)**
- 3. The permittee shall maintain the pressure drop of the FG_WEST baghouse dust collector between 1.5 and 8 inches of water column.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1910)**
- 4. The permittee shall not have more than one waste treatment process building overhead door open at a time.² **(R 336.1225, R 336.1331, R 336.1910)**
- 5. The permittee shall not process waste streams subject to the control requirements in 40 CFR 61.342(c)(1) of the National Emission Standard for Benzene Waste Operations (40 CFR Part 61 Subpart FF) in FG_WEST.² **(40 CFR Part 61 Subpart FF)**
- 6. The permittee shall not process waste streams containing the following compounds. The permittee may add new compounds to the following list with a notification to the AQD. The AQD may also amend the list.¹ **(R 336.1901)**

Benzylamine	Dimethylamine	Methylamine	Trimethylamine
2-Butanethiol	Butyric acid	Diethyl sulfide	Dimethyl sulfide
Diisobutyl ketone	Ethanethiol	Methanethiol	Tetramethylammonium chloride
Thioglycolic acid	Thionyl chloride	Thiram	Mercaptans

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the air flow from FG_WEST on a continuous basis and record five minute block averages of the monitored air flow. **(R 336.1213(3))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop of the treatment building baghouse dust collector on a continuous basis and record five minute block averages of the monitored pressure drop.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1910, 40 CFR §64.7(b))**
3. The permittee shall install, maintain and operate limit switches in all overhead doors, so as to restrict the maximum operation opening heights to 20 feet except as needed for vehicle or equipment ingress and egress.² **(R 336.1225, R 336.1331, R 336.1910)**
4. Sludge feed and storage tank No. 11 (EUSLUDGETANK11) shall be vented into the FG_WEST waste treatment process building.¹ **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The VOC evaporation rate from the waste treatment process may be established at 60% by weight pursuant to "Air/Superfund National Technical Guidance, Study Series, Emission Factors for Superfund Remediation Technologies," EPA-450/1-901-001, March 1991, for calculation and compliance demonstration. The permittee may use site specific data, based on testing, with the approval of the AQD District Supervisor, to establish an alternate evaporation rate. **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall screen each waste stream for the compounds listed in SC III.7, using a method acceptable to the AQD District Supervisor.¹ **(R 336.1901)**
3. Verification of the negative static pressure in the waste treatment building by testing, at owner's expense, in accordance with Department requirements, will be required for operating approval. The negative static pressure in the waste treatment building shall be determined by using smoke tubes, or an alternative method as approved by the AQD, and by visual observation of the air movement and direction. Alternative testing procedures and associated operational parameters must have prior approval by the AQD District Supervisor. The permittee shall conduct the verification tests at least once every year and shall notify the department prior to conducting the tests. Any request for a change in the testing frequency must be submitted to the AQD District Supervisor for review and approval. **(R 336.1225, R 336.1331, R336.2001, R336.2003)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor the air flow from FG_WEST on a continuous basis and record five minute block averages of the monitored air flow. **(R 336.1213(3))**
2. The permittee shall monitor the pressure drop of the FG_WEST baghouse dust collector on a continuous basis and record five minute block averages of the monitored pressure drop. The permittee shall record any pressure drop excursions from the range specified in special condition III.4.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1910, 40 CFR §64.6(c)(1))**
3. The permittee shall maintain a written log for activities conducted pursuant to the "Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems." The written log shall indicate the following:
 - a. Date, time and duration of baghouse downtime.²
 - b. Date and description of maintenance performed on the baghouse.²
 - c. Date and description of repairs performed on the baghouse.²**(R 336.1225, R 336.1910, 40 CFR §64.7(b) and (d))**

4. On a monthly basis, the permittee shall maintain the following records for FG_WEST:
 - a. PM concentration in pounds per thousand pounds of exhaust gas according to the method outlined in Appendix 7B-S1.²
 - b. Hourly PM-10 emission rate according to the method outlined in Appendix 7B-S1.¹
 - c. Monthly and 12-month rolling total PM-10 emissions according to the method outlined in Appendix 7B-S1;²
(R 336.1205(3), R 336.1225, R 336.1331)
5. The permittee shall maintain the following records for FG_WEST:
 - a. The volume of each waste stream treated; monthly record.²
 - b. VOC content in parts per million (ppm) and/or percent by weight present in each waste stream prior to treatment, based on generator information; daily record.²
 - c. Average daily VOC content (% by weight) of waste streams; daily record.
 - d. Monthly and 12-month rolling total VOC emissions according to the method outlined in Appendix 7A-S1; monthly record.²
(R 336.1213(3), R 336.1225, R 336.1702(a))
6. The permittee shall calculate and record the VOC, PM and PM-10 emissions from FG_WEST according to the method outlined in Appendix 7-S1 unless a replacement method acceptable to the AQD has been submitted and approved.² **(R 336.1205(3), R 336.1225, R 336.1331, R 336.1702(a))**
7. The permittee shall prepare a monthly report summarizing the amount and VOC concentration (in ppm) of each waste stream treated, and the total VOC input (in pounds) to FG_WEST in order to monitor the cumulative VOC emissions for the preceding 12 months; monthly record.² **(R 336.1213(3), R 336.1225, R 336.1702(a))**
8. The permittee shall perform an initial determination of the average Volatile Organic HAP (VOHAP) concentration for each off-site material stream using the procedures specified in §63.694(b) prior to the first time any portion of the off-site material stream is treated in FG_WEST. Thereafter, the permittee shall review and update, as necessary, this determination at least once every 12 months following the date of the initial VOHAP determination.² **(40 CFR Part 63 Subpart DD)**
9. The permittee shall keep, in a satisfactory manner, records of the VOHAP concentration of each off-site material stream, as defined in 40 CFR Part 63 Subpart DD, processed in FG_WEST for each month and 12-month rolling time period.² **(40 CFR Part 63 Subpart DD)**
10. The permittee shall analyze each waste stream before treatment, on a daily basis, to determine if it is a benzene containing waste subject to the National Emission Standard for Benzene Waste Operations, 40 CFR Part 61 Subpart FF. **(40 CFR Part 61 Subpart FF)**
11. The permittee shall develop a written operating procedure to assure that the requirements of S.C. III.1 are met before the air flow through FG_WEST is reduced below the minimum air flow specified in S.C. III.1, or before the permittee no longer maintains negative static pressure as specified in S.C. III.2. The permittee shall maintain records, including the time, date and duration of air flow reduction and/or non-negative static pressure, to assure the operating procedures are being met as specified in the startup, shutdown and malfunction plan. **(R 336.1213(3), R 336.1225, R 336.1331, R 336.1702(a))**
12. Upon detecting an excursion or exceedance through the parametric monitoring of the pressure drop, the permittee shall restore operation of FG_WEST to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. **(40 CFR 64.7(d))**

See Appendix 7-S1

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. The permittee shall submit, on a semi-annual basis, the monthly report summarizing the amount of waste treated, the VOC concentration and the total VOC input in order to monitor the cumulative VOC emissions for the preceding 12 months.² **(R 336.1225, R 336.1702(a))**
5. Each semiannual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR §64.9(a)(2)(i))**
6. Each semiannual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR §64.9(a)(2)(ii))**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SWWEST	54 ¹	75 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Benzene Waste Operations as specified in 40 CFR Part 61 Subparts A and FF. **(40 CFR Part 61 Subparts A & FF)**
2. The emissions of asbestos, the filter fabric, the operation of the fabric filter baghouse dust collectors and the process and disposal of all asbestos containing waste shall comply with the specifications found in the NESHAP (National Emission Standards for Hazardous Air Pollutants) for Asbestos in 40 CFR §61, Subpart M.² **(40 CFR Part 61 Subpart M)**
3. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations as specified in 40 CFR Part 63 Subparts A and DD. **(R 336.1213(2), 40 CFR Part 63 Subparts A & DD)**
4. The permittee shall implement the “Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems.” This plan shall be made available to the Department upon request.² **(R 336.1213(2), R 336.1225, R 336.1331, R 336.1910, 40 CFR §64.6(c)(2))**
5. The permittee shall notify the appropriate District Office of the AQD for the need to modify the CAM plan if the approved monitoring is found to be inadequate and shall submit a proposed modification to the plan if appropriate. **(40 CFR §64.7(e))**
6. The permittee shall comply with all requirements of 40 CFR Part 64, Compliance Assurance Monitoring. **(40 CFR Part 64)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGLIQWASTETKS FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Four 20,000 gallon liquid waste holding tanks.

Emission Units: EULIQWASTETK16, EULIQWASTETK17, EULIQWASTETK18, EULIQWASTETK19

POLLUTION CONTROL EQUIPMENT

The conservation vents of the tanks are controlled by two common carbon adsorption canisters, in series.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	0.25 lb/hr ²	Per SC VI.1	FGLIQWASTETKS	SC VI.1	R 336.1225 R 336.1702(a)
2. VOC	1.1 tpy ²	See Note		SC VI.1, VI.2	R 336.1702(a)
3. Halogenated VOC	323.55 mg per m ³ of exhaust air ¹	Per SC VI.1		SC VI.1	R 336.1225
4. Halogenated VOC	0.0162 lb/hr ¹	Per SC VI.1		SC VI.1	R 336.1225
5. Halogenated VOC	3.6 lb/yr ¹	See Note		SC VI.1, VI.2	R 336.1225

* Tons per year (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Volatile Organic HAP in waste	Less than 500 ppmw based on the HAP content of the off-site material stream at the point-of- delivery	Annual average per off-site material stream	FGLIQWASTETKS	SC VI.3, VI.4	40 CFR Part 63 Subparts A and DD

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not store waste streams subject to the control requirements in 40 CFR 61.342(c)(1) of the National Emission Standard for Benzene Waste Operations (40 CFR Part 61 Subpart FF) in FGLIQWASTETKS.² **(40 CFR Part 61 Subpart FF)**
- The permittee shall not process waste streams containing the following compounds:

Benzylamine	Dimethylamine	Methylamine	Trimethylamine
2-Butanethiol	Butyric acid	Diethyl sulfide	Dimethyl sulfide
Diisobutyl ketone	Ethanethiol	Methanethiol	Tetramethylammonium chloride
Thioglycolic acid	Thionyl chloride	Thiram	Mercaptans

The permittee may add new compounds to the list with a notification to the AQD. The AQD may also amend the list.¹ **(R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall operate each FGLIQWASTETKS liquid waste storage tank with the carbon adsorption system that consists of two NIXTOX N100 (or equivalent) carbon adsorption canisters in series, installed and operating properly.² **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall equip and maintain each carbon adsorption canister with a saturation indicator.² **(R 336.1225, R 336.1702(a))**
3. The permittee shall change the carbon adsorption canister within 48 hours of indication that the carbon bed is 70 percent expended.² **(R 336.1225, R 336.1702(a), R 336.1910)**
4. Each FGLIQWASTETKS liquid waste storage tank shall be sealed to prevent VOC emissions to the ambient air except through the carbon adsorption system.² **(R 336.1225, R 336.1702(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall screen each waste stream for the compounds listed in SC III.2, using a method acceptable to the AQD District Supervisor.¹ **(R 336.1901)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a written log for maintenance and replacement of the activated carbon from the carbon canisters. The written log shall indicate the following:²
 - a) Date the carbon canisters are monitored for saturation and the observed indicator tube saturation level.
 - b) Date when expended carbon in the canister is replaced with fresh activated carbon.**(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall calculate the VOC and halogenated VOC emission rates from FGLIQWASTETKS for each calendar month and 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1225, R 336.1702(a))**
3. The permittee shall perform an initial determination of the average Volatile Organic HAP (VOHAP) concentration of each off-site material stream using the procedures specified in §63.694(b) before the first time any portion of the off-site material stream is placed in the unit. Thereafter, the permittee shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the off-site material stream. **(40 CFR Part 63 Subparts A and DD)**
4. The permittee shall keep, in a satisfactory manner, records of the VOHAP concentration of each off-site material stream, as defined in 40 CFR Part 63 Subpart DD, stored in FGLIQWASTETKS for each month and 12-month rolling time period. **(40 CFR Part 63 Subparts A and DD)**
5. The permittee shall analyze each waste stream before loading into any FGLIQWASTETKS tank to determine if it is a benzene containing waste subject to the National Emission Standard for Benzene Waste Operations, 40 CFR Part 61 Subpart FF. **(40 CFR Part 61 Subparts A and FF)**
6. For all storage vessels subject to 40 CFR Part 60 Subpart Kb; records shall be kept of the operating plan and of the measured values of the parameters monitored in accordance with the plan.² **(40 CFR §60.115(c))**
7. For all storage vessels subject to 40 CFR Part 60 Subpart Kb; records shall be kept for the life of the source showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.² **(40 CFR §60.116(b))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCARBONCAN	2 ¹	3 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with all applicable requirements of the NSPS general provisions and storage tank regulations in 40 CFR, Part 60, Subparts A, K, Ka, and Kb.² **(40 CFR Part 60, Subparts A, K, Ka, and Kb)**
- The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations as specified in 40 CFR Part 63 Subparts A and DD. **(R 336.1213(2), 40 CFR Part 63 Subparts A & DD)**
- The permittee shall implement the “Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems.” This plan shall be made available to the Department upon request.² **(R 336.1213(2), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG_SILOS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION – Silos used to store reagent, including (but not limited to) fly ash, lime, and cement kiln dust. Silos 1 through 3 serve the west side treatment plant, and silos 4 through 6 serve the east.

Emission Units: EUSILO1-3, EUSILO4-6

POLLUTION CONTROL EQUIPMENT – Each silo is equipped with a baghouse dust collector.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.028 lb per 1,000 lbs of exhaust air ²	Per SC V.1	Each storage silo	SC VI.1, V.1	R 336.1331
2. PM10	0.12 pph ¹	Per SC V.1	Each storage silo	SC VI.1, V.1	R 336.1225

II. MATERIAL LIMIT(S)

Not applicable.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall operate FG_SILOS with the baghouse dust collectors installed and operating with no visible emissions except as allowed in Appendix 3-S1. (R 336.1213(2), R 336.1225, R 336.1301(c), R 336.1331, R 336.1910)

See Appendix 3-S1

IV. DESIGN/EQUIPMENT PARAMETER(S)

Not applicable

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee shall conduct visible emission observations (as described in Appendix 3-S1) of each reagent silo baghouse exhaust once per calendar month during a period when that silo is being filled. The frequency of observations may be changed with the written approval of the AQD District Supervisor. ² (R 336.1213(2), R 336.1301(c), R 336.1331)

See Appendix 3-S1

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee shall record the results of the visible emission observations required in S.C. V.1.² (R 336.1213(3), R 336.1331)
- The permittee shall record the date and nature of all activities conducted pursuant to the "Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems." (R 336.1213(3))

See Appendix 3-S1

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

Not applicable

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement the "Preventive Maintenance and Malfunction Abatement Program, Air Pollution Control Systems." This plan shall be made available to the Department upon request. **(R 336.1213(2), R 336.1225, R 336.1331, R 336.1910)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGTMTFACILITY
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION - Waste treatment facility including all equipment in the east and west side processes, reagent silos, liquid waste storage tanks and the north container storage area.

Emission Units: EUPUGMILL1, EU SLUDGETANK1, EU SLUDGETANK12, EUSTORAGETANK1, EUPUGMILL2, EUSILO1-3, EU SLUDGETANK2 EU SLUDGETANK11, EUSTORAGETANK2, EULIQWASTETK16, EULIQWASTETK17, EUSILO4-6, EULIQWASTETK18, EULIQWASTETK19, EUDRUMSTORAGE

POLLUTION CONTROL EQUIPMENT

East side treatment process: Baghouse dust collector, thermal oxidizer, and wet scrubber in series.

West side treatment process: Baghouse dust collector.

Reagent silos: Each treatment reagent and waste silo has its own baghouse.

Liquid waste storage tanks: The tanks are controlled by two shared carbon adsorption canisters in series.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Waste	576,000 gallons per day ²	Calendar day	FGTMTFACILITY	SC VI.1	R 336.1225 R 336.1702(a)
2. Waste	210.24 MM gallons per year ²	12 month rolling total*		SC VI.1	R 336.1702(a)
3. VOC in waste	1,584 tpy ²	12 month rolling total*		SC VI.2	R 336.1702(a)

* Tons/gallons per year (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall control fugitive dust emissions from all paved roads and parking lots. Dust controls include sweeping or watering of all paved roads and parking lots, or an alternative method approved by the District Supervisor, at least once per day, weather permitting. **(R 336.1301(c))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall maintain compliance with the applicable general, off-site material treatment, tank, oil-water and organic-water separator, surface impoundment, container, transfer system, process vent, equipment leak, and closed vent system and control device standards detailed in §63.683, §63.684, §63.685, §63.686, §63.687, §63.688, §63.689, §63.690, §63.691, and §63.693. **(40 CFR Part 63 Subparts A and DD)**

2. The permittee shall maintain compliance with the applicable general, tank, surface impoundment, container, individual drain system, oil-water separator, treatment process, closed vent system and control device standards detailed in §61.342, §61.343, §61.344, §61.345, §61.346, §61.347, §61.348, and §61.349. **(40 CFR Part 61 Subparts A and FF)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct applicable testing as required in §63.694. **(40 CFR Part 63 Subparts A and DD)**
2. The permittee shall conduct applicable testing as required in §61.355. **(40 CFR Part 61 Subparts A and FF)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a daily, monthly, and 12-month rolling time period, as determined at the end of each calendar month, record of the type (hazardous & nonhazardous) and amount of waste processed and the VOC concentrations of the wastes.² **(R 336.1225, R 336.1702(a))**
2. The permittee shall calculate the total VOC in all waste treated each month and 12-month rolling time period, as determined at the end of each calendar month, according to the formula in Appendix 7-S1:² **(R 336.1702(a))**
3. A written daily log of the wetting or sweeping of all paved roads and parking lots shall be kept on file.² **(R 336.1301(c))**
4. The permittee shall comply with the applicable inspection and monitoring procedures detailed in §63.695. **(40 CFR Part 63 Subparts A and DD)**
5. The permittee shall comply with the applicable recordkeeping requirements of 40 CFR §63 Subpart A that are referenced in Table 2 of Subpart DD as well as those detailed in §63.696. **(40 CFR Part 63 Subparts A and DD)**
6. The permittee shall comply with the applicable monitoring procedures detailed in §61.354. **(40 CFR Part 61 Subparts A and FF)**
7. The permittee shall comply with the applicable recordkeeping requirements of 40 CFR §61 Subparts A as well as those detailed in §61.356. **(40 CFR Part 61 Subparts A and FF)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit reports as required in §61.357 and §63.697. **(40 CFR Part 61 Subparts A and FF, 40 CFR Part 63 Subparts A and DD)**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

Not applicable

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the NESHAP (National Emission Standards for Hazardous Air Pollutants) for Off-Site Waste Recovery Operations in Subpart DD.
(40 CFR Part 63 Subpart DD)
2. The permittee shall develop and implement a written startup, shutdown, and malfunction plan. **(40 CFR Part 63 Subparts A and DD)**
3. The permittee shall comply with all applicable requirements of the National Emission Standard for Benzene Waste Operations. **(40 CFR Part 61 Subparts A and FF)**
4. The permittee shall comply with all applicable requirements of the National Emission Standards for Gasoline Dispensing Facilities. **(40 CFR Part 63 Subpart CCCCCC)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGTDU
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION – All equipment related to the thermal desorption unit (TDU) and vented to the regenerative thermal oxidizer (RTO).

Emission Unit: EUFEEDHOPPERBLDG, EUTDU, EUWATERTANK, EUPHASETANK, EUOILTANK, EUAIRSTRIPPER

POLLUTION CONTROL EQUIPMENT – Regenerative thermal oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.VOC	0.2 pph ²	Test Protocol	FGTDU	V.1	R 336.1225 R 336.1702
2.VOC	0.9 tpy ²	12-month rolling time period*			

* Tons per year (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

II. MATERIAL LIMIT(S)

Not applicable.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGTDU unless all of the following operational procedures are followed:
 - a) Wastes will only be received and stored in closed containers.¹
 - b) Waste containers will only be opened and wastes handled in accordance with the applicable provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 61 Subpart FF.²

(R 336.1901, 40 CFR Part 61 Subpart FF)
2. The permittee shall maintain negative pressure in EUFEEDHOPPERBLDG during normal operation. This includes, but is not limited to, maintaining proper structural integrity of EUFEEDHOPPERBLDG. Negative pressure shall be verified using the procedure outlined in SC V.3. Normal operation is defined as any period that waste material in EUFEEDHOPPERBLDG:
 - a) Is uncovered.¹
 - b) Has been covered for less than two hours.¹

(R 336.1901)
3. The permittee shall not operate FGTDU unless the RTO is installed, maintained, and operated in a satisfactory manner, which includes maintaining a minimum temperature of 1,400°F (760°C) and a minimum retention time of 0.5 second in the combustion chamber. The following activities do not need to be controlled by an operating RTO because minimal emissions of air contaminants are anticipated from these activities:
 - a) Pumping treated water from the EUPHASETANK.²
 - b) Removing solid from the EUTDU by covered roll-off or covered trailer.²
 - c) Other activity not generating emissions, subject to the approval of the AQD District Supervisor.²

(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, 40 CFR 61.349(b), (40 CFR 63.693(f)(1)(iii))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip the RTO with a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ± 1 percent of the temperature being monitored in $^{\circ}\text{C}$ or $\pm 0.5^{\circ}\text{C}$, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, 40 CFR §61.354(c)(1))**
2. FGTDU shall be designed and installed so that all emissions are ducted to the RTO.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, 40 CFR §61.349(a))**
3. The permittee shall operate the flare only in the event of RTO malfunction.¹ **(R 336.1901)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Within 180 days after initial startup of FGTDU, the permittee shall verify the VOC emission rate by testing, at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(R 336.1225, R 336.2001, R 336.2003, R 336.2004)**
2. Upon AQD request, the permittee shall verify and quantify odor emissions from FGTDU, by testing at owner's expense, in accordance with Department requirements. Within 60 days after AQD request, the permittee shall submit to the AQD, a complete stack sampling and odor threshold analysis plan using the Dynamic Dilution Method. The stack sampling plan shall include provisions for various plant operating conditions, and odor neutralizer system operation (if any). The AQD must approve the final plan prior to testing. Verification of emissions includes the submittal of a complete report of the test results to the AQD within 60 days of the test.¹ **(R 336.1901, R 336.2001, R 336.2003, R 336.2004)**
3. Verification of the VOC capture efficiency of the exhaust system by testing, at owner's expense, in accordance with Department requirements, will be required for operating approval. The VOC capture efficiency of the exhaust system shall be determined in accordance with Procedure T, found in 40 CFR 52.741 Appendix B, or an alternative method as approved by the AQD, and by visual observation of the air movement and direction. Alternative testing procedures for VOC capture efficiency and associated operational parameters must have prior approval by the AQD District Supervisor. Permittee shall conduct the verification tests at least once every calendar year.² **(R 336.1225, R 336.1702(a), R 336.2001, R 336.2003)**
4. Verification that the closed vent system is operated with no detectable emissions by testing, at owner's expense, in accordance with Department requirements, may be required on an annual basis. The testing shall be conducted utilizing the procedure specified in 40 CFR §63.694(k).² **(40 CFR §63.693(c)(1)(i))**

See Appendix 5-S1

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor and record the following information:
 - a) the amount of VOC present in each waste stream in percent by weight²
 - b) the temperature of the thermal oxidizer at a representative location in the combustion chamber on a continuous basis and shall record five minute block averages of the monitored temperature in a manner and with instrumentation acceptable to the AQD District Supervisor.² **(R 336.1225, R 336.1299, R 336.1702, R 336.1901, 40 CFR 61.356(j)(4))**
2. The permittee shall calculate the VOC emission rate from FGTDU monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Within 90 days of commencement of operation, the permittee shall submit to the department the portion of the Startup, Shutdown and Malfunction (SSM) Plan, as required by 40 CFR §63.6(e)(3) which pertains to FGTDU.² **(R 336.1910, 40 CFR §63.6(e)(3)(v))**
5. If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within two working days after commencing actions inconsistent with the plan, followed by a letter within seven working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).² **(R 336.1910, 40 CFR §63.6(e)(3)(iv))**
6. The permittee shall satisfy all applicable reporting requirements contained in and referenced by 40 CFR §61.357.² **(40 CFR Part 61 Subparts A and FF)**
7. The permittee shall satisfy all applicable reporting requirements contained in and referenced by 40 CFR §63.697(b).² **(40 CFR Part 63 Subparts A and DD)**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRTO	18 ¹	40 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Benzene Waste Operations as specified in 40 CFR Part 61 Subparts A and FF.² **(40 CFR Part 61 Subparts A & FF)**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations as specified in 40 CFR Part 63 Subparts A and DD.² **(40 CFR Part 63 Subparts A & DD)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: See above.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than 5 percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than 10 square feet. **(R 336.1281(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20%, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to Special Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of compliance pursuant to Special Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Special Conditions 19 and 20 of Part A. Due annually by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGRULE290
FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Units: EUDRUMSTORAGE

POLLUTION CONTROL EQUIPMENT - Not Applicable

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**
2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(a)(ii))**
 - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the total uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
 - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(B))**
 - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(C))**
 - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(a)(ii)(D))**
3. Each emission unit that emits noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), above, and all of the following provisions are met: **(R 336.1290(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(a)(iii)(A))**
 - b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(a)(iii)(B))**
 - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ Rule 290 Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRS�, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). **(R 336.1213(3))**
 - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. **(R 336.1213(3), R 336.1290(c))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(b), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4-S1

VII. REPORTING

1. Prompt reporting of deviations pursuant to Special Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of compliance pursuant to Special Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Special Conditions 19 and 20 of Part A. Due annually by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-S1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E-1. NON-APPLICABLE REQUIREMENTS

At the time of ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1-S1. Abbreviations & Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	lb/hr	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

Appendix 2-S1. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3-S1. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG_SILOS. Alternative monitoring procedures, methods, or specifications must be approved by the AQD District Supervisor.

A “visible emissions observation” refers to a survey to be performed for the purpose of determining the presence or absence of visible emissions, other than uncombined water vapor. Visible emission observations shall be taken at least once per month, or on an alternate frequency as approved in writing by the AQD District Supervisor, for a duration of one (1) minute, during daylight hours while each silo is being filled (for a possible total of six (6) readings). This can be performed by either a certified or non-certified reader. A record of the required observations shall contain the following information: date, time, name and location of the observer, identity of the silo being observed and documentation of the presence or absence of visible emissions (Yes/No) for each reading.

Upon determination that visible emissions are occurring, the following procedure shall be followed:

1. Cease the filling of the affected silo immediately
2. Conduct necessary repair/maintenance on the baghouse
3. Resume filling and conduct a follow-up non-certified reading

If available, a Method 9 certified reader may conduct an opacity observation and determine the six-minute average opacity. If the opacity is below 20% (or 27% for one six-minute average per hour), then the operation may continue without corrective actions. However, corrective actions shall be completed prior to the next delivery.

Appendix 4-S1. Recordkeeping

The permittee shall use the DEQ Rule 290 Permit to Install Exemption Record form (EQP 3558) or an alternative format as approved by the AQD District Supervisor to document monthly records as required by R 336.1290 and Table D-1.6.

Appendix 5-S1. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 6-S1. Permits to Install

The following table lists any Permits to Install (PTI) issued since the effective date of previously issued ROP No. MI-ROP-M4782-2003a. **This includes any PTI that were incorporated into Source-Wide PTI No. MI-PTI-M4782-2010 through amendments or modifications and any PTI that remained off-permit until this ROP renewal.**

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
31-09	Thermal Desorption Unit	EUFEEDHOPPERBLDG, EUTDU, EUWATERTANK, EUPHASETANK, EUOILTANK, EUAIRSTRIPPER; FGTDU
26-10	Waste treatment and storage equipment	FG_WEST and FGLIQWASTETKS
80-10	Waste treatment bays	FG_EAST and FG_WEST
31-09A	Thermal Desorption Unit	EUFEEDBLDG, EUTDU, EUWATERTANK, EUPHASETANK, EUOILTANK, EUAIRSTRIPPER; FGTDU

Appendix 7-S1. Emission Calculations

A. PROCEDURE TO DETERMINE VOC EMISSIONS FROM TREATMENT PROCESSES

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG_EAST and FG_WEST.

The following formula shall be used to calculate and monitor the VOC emissions from each waste treatment process, based on a 12-month rolling time period, as determined at the end of each calendar month:

$$VOC_e = \Sigma[V_i \times W_i \times D_i] \times Er \times [1-A_e]$$

Where:

- VOC_e = Cumulative VOC emissions from the control unit during the period
- i = Each iteration of waste stream treated during the time period
- V_i = Volume of waste stream i processed
- W_i = Weight fraction of VOC present in waste stream i processed
- D_i = Density of waste stream i processed in appropriate unit; assumed to average 8.5 lbs/gal
- Er = Emission factor for VOC released from waste during treatment process and delivered to the control device (100% VOC capture efficiency). Pursuant to "Air/Superfund National Technical Guidance, Study Series, Emission Factors for Superfund Remediation Technologies," EPA-450/1-901-001, March 1991, the permittee may use a factor of 60% evaporation by weight for calculation and compliance demonstration. However, the permittee may use site specific data, based on testing, with the approval of the AQD District Supervisor, to establish an alternate evaporation rate.
- A_e = Control efficiency
 - = 0 for FG_WEST (no VOC control)
 - = 0.95 for FG_EAST (control efficiency of thermal oxidizer unit is 95%)

The permittee shall use the VOC emission factor, VOC capture efficiency and the control device control efficiency cited above until these parameters are determined by testing. Upon approval by the AQD, permittee shall use the test results for these parameters for VOC emission calculations unless a new determination by the permittee is approved by the AQD.

B. PROCEDURE TO DETERMINE PM AND PM-10 EMISSIONS FROM TREATMENT PROCESSES AND STORAGE SILOS

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG_EAST, FG_WEST, and FG_SILOS.

The following formula shall be used to calculate and monitor the PM-10 emissions from each waste treatment process and Storage Silo:

$$PM \text{ (lbs/1000 lbs exhaust air)} = C_{inlet} \times [1\text{lb}/7000 \text{ gr}] \times [1-A_e] \times [1/D_{air}] \times [1000]$$

$$PM-10_e \text{ (lb/hr)} = C_{inlet} \times [1 \text{ lb}/7000 \text{ gr}] \times [1-A_e] \times V \times [60 \text{ min}/1 \text{ hr}]$$

$$PM-10_e \text{ (tpy)} = C_{inlet} \times [1 \text{ lb}/7000 \text{ gr}] \times [1-A_e] \times V \times [525,600 \text{ min}/1 \text{ yr}] \times [1 \text{ ton}/2000 \text{ lbs}]$$

Where:

PM = Instantaneous PM emissions;

PM-10_e = Cumulative PM-10 emissions;

C_{inlet} = Design inlet loading from baghouse manufacturer = 0.5 gr/cf for FG EAST, FG WEST and Silos

D_{air} = Density of air at actual conditions = 0.075 lb/ft³

A_e = Minimum Baghouse Control Efficiency = 99.5% (to be conservative)

V = Exhaust air flow = 22,000 cfm for FG EAST; 110,000 for FG WEST; Pneumatic pump flow rate for the Silos is 900 cfm;

Appendix 8-S1 Reporting

A. Annual, Semi-annual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semi-annual and deviation certification reporting referenced in the Reporting section of the source-wide, emission unit and/or flexible group special conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) when submitting any other reports related to facility compliance including, but not limited to, annual Michigan Air Emissions Reporting System (MAERS) submittals, reports submitted pursuant to Rule 912, and stack testing. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor. **(R 336.1213(3))**

Section 2 – Wayne Energy Recovery, Inc. Partnership

Michigan Department of Environmental Quality
Air Quality Division

ISSUED TO

Wayne Energy Recovery Inc., Partnership (Wayne Energy Recovery, Inc.)

State Registration Number (SRN): M4782

LOCATED AT

49350 I-94 Service Drive, Belleville, Michigan 48111

A-2. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-wide Permit to Install (PTI) pursuant to Rule 201(2)(d) are designated by Footnote 1. **(R 336.1213(5)(a), R336.1214a(5))**
- Those conditions that are hereby incorporated in federal enforceable Source-wide PTI No. MI-PTI-M4782-2010a pursuant to Rule 201(2)(c) are designated by Footnote 2. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (EPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the EPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rules 215 and 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the United States Environmental Protection Agency together with a claim of confidentiality. **(R 336.1213(1)(e))**
6. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**

7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Except as provided in subrules 2, 3, and 4 of Rule 301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP. The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. **(R 336.1901(a))¹**
 - b. Unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901(b))¹**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b)):**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data

records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A responsible official shall certify to the appropriate District Office of the AQD and the EPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP **(R 336.1213(3)(c))**:
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:
 - a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**

25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**:
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - Administrative amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - Administrative amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - Minor permit modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - State-only modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that does not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(3))**

32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(3), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):

- a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 68.130, or
 - c. The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the EPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. **(R 336.1201(1))**²
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**²
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. **(R 336.1219)**²
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, MI 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. **(R 336.1201(4))**²

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B-2. SOURCE-WIDE CONDITIONS

Part B outlines the source-wide terms and conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no source-wide conditions, this section will be left blank.

C-2. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE C-2

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE2	500 hp Caterpillar G-398 naturally aspirated engine fired with landfill gas and supplemented with natural gas as needed to maintain combustion.	7/1/86	FGENGINES
EUENGINE3	500 hp Caterpillar G-398 naturally aspirated engine fired with landfill gas and supplemented with natural gas as needed to maintain combustion.	7/1/86	FGENGINES
EUENGINE4	710 hp Caterpillar G-398 turbo aspirated engine fired with landfill gas and supplemented with natural gas as needed to maintain combustion.	7/1/92	FGENGINES
EUENGINE5	500 hp Caterpillar G-398 naturally aspirated engine fired with landfill gas and supplemented with natural gas as needed to maintain combustion.	7/1/86	FGENGINES
EUOPENFLARE	Open Flare - an open combustor without enclosure or shroud.	No operational flare yet installed	NA
EU-TREATMENTSYS	Processing equipment that treats collected landfill gas for subsequent sale or use.		NA

EUOPENFLARE EMISSION UNIT CONDITIONS

DESCRIPTION – An open flare is an open combustor without enclosure or shroud. The facility does not currently have an operational open flare.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Not applicable

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the flare in accordance with 40 CFR Part 60 Subpart A §60.18.³ **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.4353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The permittee shall operate the flare at all times when the collected gas is routed to it.³ **(40 CFR Part 60 Subpart WWW §60.753(f), 40 CFR Part 62 Subpart GGG §62.4354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. The flare shall be operated with no visible emissions, as determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.³ **(40 CFR Part 60 Subpart A §60.18(c)(1))**
4. The flare shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f).³ **(40 CFR Part 60 Subpart A §60.18(c)(2))**
5. The flare shall be used only with the net heating value of the gas being combusted of 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted of 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f).³ **(40 CFR Part 60 Subpart A §60.18(c)(3))**
6. Steam-assisted and non-assisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR Part 60 Subpart A §60.18(c)(4)(ii) and (iii).³ **(40 CFR Part 60 Subpart A §60.18(c)(4)(i))**
 - a. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).³ **(40 CFR Part 60 Subpart A §60.18(c)(4)(ii))**
 - b. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f)(4) less than the velocity, V_{max} , as determined by the method specified in 40 CFR Part 60 Subpart A §60.18(f)(5), and less than 122 m/sec (400 ft/sec) are allowed.³ **(40 CFR Part 60 Subpart A §60.18(c)(4)(iii))**

7. Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in 40 CFR Part 60 Subpart A §60.18(f)(6).³ **(40 CFR Part 60 Subpart A §60.18(c)(5))**
8. Flares used to comply with provisions of 40 CFR Part 60 Subpart A shall be operated at all times when emissions may be vented to them.³ **(40 CFR Part 60 Subpart A §60.18(e))**
9. The permittee shall operate control system such that all collected gases are vented to a control system designed and operated in accordance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii). In event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system shall contributing to venting of the gas to the atmosphere shall be closed within one hour.³ **(40 CFR Part 60 Subpart WWW §60.753(e), 40 CFR Part 62 Subpart GGG §62.4354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Within 60 days after achieving maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall evaluate visible emissions from EUOPENFLARE, as required by federal Standards of Performance for New Stationary Sources, at owner's expense, in accordance 40 CFR Part 60 Subparts A and WWW. Visible emission observation procedures must have prior approval by the AQD. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation.³ **(40 CFR Part 60 Subparts A & WWW)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
 - a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.³ **(40 CFR Part 60 Subpart WWW §60.756(c)(1), 40 CFR Part 62 Subpart GGG §62.4354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. A device that records flow to or bypass of the flare. The owner or operator shall either:
 - i. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes³ or **(40 CFR Part 60 Subpart WWW §60.756(c)(2)(i), 40 CFR Part 62 Subpart GGG §62.4354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - ii. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.³ **(40 CFR Part 60 Subpart WWW §60.756(c)(2)(ii), 40 CFR Part 62 Subpart GGG §62.4354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. Except as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall keep up-to-date, readily accessible records for the life of the open flare of the data listed in 40 CFR Part 60 Subpart WWW §60.758(b)(4) (below in condition VI.3.) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the open flare vendor specifications shall be maintained until removal.³ **(40 CFR Part 60 Subpart WWW §60.758(b), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. The permittee shall maintain records regarding the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60 Subpart A §60.18; continuous records of the open flare pilot flame or open flare flame monitoring and records of

- all periods of operations during which the pilot flame of the flare flame is absent.³ **(40 CFR Part 60 Subpart WWW §60.758(b)(4), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. Except as provided in 40 CFR 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall keep readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60 Subpart WWW §60.756 (above in condition VI.1.), as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.³
 - a. The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60 Subpart WWW §60.756.³ **(40 CFR Part 60 Subpart WWW §60.758(c)(2), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. The permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR Part 60 Subpart WWW §60.756(c) (condition VI.1.a.), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.³ **(40 CFR Part 60 Subpart WWW §60.758(c)(4), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 5. The following records for the flare shall be maintained onsite:
 - a. Records indicating presence of flare pilot flame.³ **(40 CFR Part 60 Subpart A §60.18(f)(2))**
 - b. The net heating value of the gas being combusted in the flare shall be calculated and recorded using the equation provided in Appendix 7-S2.³ **(40 CFR Part 60 Subpart A §60.18(f)(3))**
 - c. The actual exit velocity of the flare shall be calculated and recorded by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Federal Reference Test Methods 2, 2A, 2C, or 2D as appropriate, by the unobstructed (free) cross sectional area of the flare tip.³ **(40 CFR Part 60 Subpart A §60.18(f)(4))**
 - d. The maximum permitted velocity, V_{max} , for flares complying with 40 CFR Part 60 Subpart A §60.18(c)(4)(iii) shall be calculated and recorded using the equation provided in Appendix 7-S2.³ **(40 CFR Part 60 Subpart A §60.18(f)(5))**
 - e. The maximum permitted velocity, V_{max} , for air-assisted flares shall be calculated and recorded using the equation provided in Appendix 7-S2.³ **(40 CFR Part 60 Subpart A §60.18(f)(6))**

See Appendix 7-S2

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.³ **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be postmarked or received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.³ **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be postmarked or received by appropriate AQD district office by March 15 for the previous calendar year.³ **(R 336.1213(4)(c))**
4. The permittee shall submit to the appropriate AQD District Office semi-annual reports for the gas collection system. Reports shall be received by appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR Part 6 Subpart WWW §60.758(c). The semi-annual report shall contain:
 - a. Value and length of time for exceedance of applicable parameters monitored under 40 CFR Subpart WWW §60.756(b).³ **(40 CFR Part 60 Subpart WWW §60.757(f)(1), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1980(a) and §63.1955(a))**

- b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR Part 60 Subpart WWW §60.756.³ **(40 CFR Part 60 Subpart WWW §60.757(f)(2), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1980(a) and §63.1955(a))**
 - c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.³ **(40 CFR Part 60 Subpart WWW §60.757(f)(3), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1980(a) and §63.1955(a))**
5. The permittee shall submit an equipment removal report to the AQD 30 days prior to removal or cessation of operation of the open flare.
- a. The equipment removal report shall contain all of the following items:
 - i. A copy of the closure report submitted in accordance with 40 CFR Part 60 Subpart WWW §60.757.³ **(40 CFR Part 60 Subpart WWW §60.757(e)(1)(i), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - ii. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired.³ **(40 CFR Part 60 Subpart WWW §60.757(e)(1)(ii), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - iii. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.³ **(40 CFR Part 60 Subpart WWW §60.757(e)(1)(iii), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - iv. Additional information may be requested as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(v) have been met.³ **(40 CFR Part 60 Subpart WWW §60.757(e)(2), 40 CFR Part 62 Subpart GGG §62.4355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
6. The permittee shall submit the startup, shutdown, and malfunction (SSM) report to the appropriate AQD district office and it shall be delivered or postmarked by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.³ **(40 CFR Part 63 Subpart A §63.10(a)(5) & §63.10(d)(5))**

See Appendix 8-S2

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

1. The duration of start-up, shutdown, or malfunction for the open flare shall not exceed 1 hour.³ **(40 CFR Part 60 Subpart WWW §60.755(e), 40 CFR Part 62 Subpart GGG §62.4354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. Compliance of 40 CFR Part 63, Part AAAA is determined in the same way it is determined for 40 CFR Part 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data collected in 40 CFR Part 60 Subpart WWW §60.756(c)(1) (above in condition VI.1.) are used to demonstrate compliance with the operating conditions for the open flare. The permittee shall have developed and implemented a written SSM for EUOPENFLARE. A copy of the SSM plan shall be maintained on site.³ **(40 CFR Part 63 Subpart AAAA §63.1960)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

Section 2
Wayne Energy Recovery, Inc.

ROP No.: MI-ROP-M4782-2010a
Expires: September 1, 2015
PTI No.: MI-PTI-M4782-2010a

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

³This condition is future applicable. The date of future applicability is based upon the date of installation of an open flare.

EU-TREATMENTSYS EMISSION UNIT CONDITIONS

DESCRIPTION

This emission unit treats landfill gas before it is used for subsequent use or sale. The treatment system removes particulate to at least the 10 micron level, compresses the landfill gas and removes enough moisture to ensure good combustion of gas for subsequent use.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Any emissions from any atmospheric vents or stacks associated with the treatment system shall be subject to 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A) or (B).

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the treatment system at all times when the collected gas is routed to the treatment system. **(40 CFR 60.753(f))**
2. The permittee shall operate the treatment system so that any emissions from any atmospheric vents or stacks associated with the treatment system shall be subject to 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A) or (B). **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(C), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. The permittee shall operate the treatment system to comply with the provisions of 40 CFR Part 60 Subpart WWW §60.753(e) and (f) and §60.756(d). **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iv), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep up to date, readily accessible records of all control or treatment system exceedances of the operational standards in 40 CFR Part 60 Subpart WWW §60.753(e) and (f). **(40 CFR Part 60 Subpart WWW §60.758(e), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit to the appropriate AQD District Office semiannual reports for the landfill gas treatment system. The report shall be received by the appropriate AQD District Office by March 15 for the reporting period from July 1 to December 31 and September 15 for the reporting period from January 1 to June 30. **(40 CFR Part 60 Subpart WWW §60.757(f), 40 CFR Part 63 Subpart AAAA §63.1980(a) & §63.1955(a))**

The report shall include:

- a. Value and length of time for exceedances of applicable parameters monitored under 40 CFR Part 60 Subpart WWW §60.756(d). **(R 336.1213(3), 40 CFR Part 60 Subpart WWW §60.757(f)(1), 40 CFR Part 63 Subpart AAAA §63.1980(a) & §63.1955(a))**
 - b. Description and duration of all periods when the gas stream is diverted from the treatment system through a bypass line or the indication of bypass flow. **(R 336.1213(3))**
 - c. Description and duration of all periods when the treatment system was not operating for a period exceeding one hour and length of time the control device was not operating. **(40 CFR Part 60 Subpart WWW §60.757(f)(3), 40 CFR Part 63 Subpart AAAA §63.1980(a) & §63.1955(a))**
 - d. Description and duration of all periods when the treatment system was not operated in accordance with the operating parameters and monitoring procedures that were part of the plan in Condition No. VII.4. **(R 336.1213(3))**
5. The permittee shall submit the startup, shutdown and malfunction (SSM) report to the appropriate AQD District Office and it shall be delivered or postmarked by March 15 for the reporting period from July 1 to December 31 and September 15 for the reporting period from January 1 to June 30. **(40 CFR Part 63 Subpart A §63.10(a)(5) and 63.10(d)(5))**

See Appendix 8-S2

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

1. The provisions of 40 CFR Part 60 Subpart WWW apply at all times, except during periods of startup, shutdown, or malfunction, provided that the duration of startup, shutdown, or malfunction shall not exceed one hour for the treatment system. **(40 CFR Part 60 Subpart WWW §60.755(e), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The permittee shall have developed and implemented a written SSM plan according to the provisions in 40 CFR Part 63 Subpart A §63.6(e)(3) for EU-TREATMENTSYS. A copy of the SSM plan shall be maintained on-site. **(40 CFR Part 63 Subpart AAAA §63.1960 & §63.1965(c))**

Section 2
Wayne Energy Recovery, Inc.

ROP No.: MI-ROP-M4782-2010a
Expires: September 1, 2015
PTI No.: MI-PTI-M4782-2010a

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D-2. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGENGINES	Four Caterpillar G-398 engines; three 500 Hp naturally aspirated and one 710 Hp turbo aspirated, all fired with landfill gas and supplemented with natural gas as needed to maintain combustion.	EUENGINE2, EUENGINE3, EUENGINE4, EUENGINE5

FGENGINES

FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Three 500 Hp Caterpillar G-398 naturally aspirated engines and one 710 Hp Caterpillar G-398 turbo aspirated engine, all fired with landfill gas and supplemented with natural gas as needed to maintain combustion.

Emission Units: EUENGINE2, EUENGINE3, EUENGINE4 and EUENGINE5

POLLUTION CONTROL EQUIPMENT – Not applicable

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen oxides (NO _x)	14.28 pounds per hour ²	Three hour average, based on stack test	Each engine	VI.4/V.1, V.4	40 CFR §52.21(c) & (d)
2. Nitrogen oxides (NO _x)	190 tons per year ²	12 month rolling time period*	FGENGINES		R 336.1205(3) 40 CFR §52.21(c) & (d)
3. Carbon monoxide (CO)	3.43 pounds per hour ²	Three hour average, based on stack test	Each engine		40 CFR §52.21(d)
4. Carbon monoxide (CO)	39.9 tons per year*	12 month rolling time period*	FGENGINES		40 CFR §52.21(d)

* Tons per year (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

** Parts per million by volume, dry basis as hexane at 3 percent oxygen.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Landfill Gas	70% methane by volume	Daily average	FGENGINES	SC VI.6,	R 336.1213(2) 40 CFR §52.21(c) & (d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall limit the power output of each engine as follows:²

Engine	Maximum Output
EUENGINE2	370 kW
EUENGINE3	370 kW
EUENGINE4	520 kW
EUENGINE5	370 kW

- (R 336.1205(3), 40 CFR §52.21 (c) & (d))**
2. The permittee shall operate and properly maintain a fuel gas flow metering system for determining the instantaneous flow rate of landfill gas and natural gas to the engines.² **(R 336.1205(3), R 336.1225, 40 CFR §52.21(c) & (d))**
3. The permittee shall operate and properly maintain a kilowatt meter on each engine.² **(R 336.1910, 40 CFR §52.21(c) & (d))**
4. The permittee shall operate and maintain a device to measure the landfill gas methane concentration. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install a fuel gas flow metering system for determining the instantaneous flow rate of landfill gas (and natural gas, if applicable) to the engines.² **(R 336.1205(3), R 336.1225, 40 CFR §52.21(c) & (d))**
2. The permittee shall install a kilowatt meter on each engine.² **(R 336.1205(3), 40 CFR §52.21(c) & (d))**
3. The permittee shall maintain all engines, to the extent practicable, in a condition to enable the start-up of an idle engine should one of the active units experience a failure. Alternatively, the permittee may provide a supplemental control device which complies with 40 CFR Part 60 Subpart WWW §60.752(b)(iii) to ensure a consistent flow of landfill gas from the active collection system. **(R 336.1213(2))**
4. The permittee shall verify that the proper air/fuel regulator spring is installed for each engine based on the observed landfill gas methane content on a daily basis, excluding weekends and holidays when an operator is not scheduled to be on-site. **(R 336.1213(2))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Verification of NO_x and CO emission rates from each engine during normal operation, by testing at owner's expense, is required at least once during the term of the ROP. **(R 336.1205(3), R 336.1213(3), 40 CFR §52.21(c) & (d))**
2. Within 180 days after pipeline natural gas exceeds 10 percent of the fuel supply to an engine, verification of NO_x and CO emission rates from that engine during normal operation, by testing at owner's expense, is required.² **(R 336.1205(3), 40 CFR §52.21(c) & (d))**
3. All testing, sampling, analytical and calibration procedures used for testing shall be performed in accordance with Appendix A of 40 CFR Part 60, or other acceptable reference methods approved by AQD.² **(R 336.1205(3), R 336.1213(3), 40 CFR §52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor and record the amount of landfill gas and natural gas used in FGENGINES for each month and 12-month rolling time period, as determined at the end of each calendar month.² **(R 336.1205(3), 40 CFR §52.21 (c) & (d))**
2. The permittee shall continuously monitor the electrical output, in kilowatts, of each engine and shall record the electrical output, in kilowatts, of each engine, every fifteen minutes.² **(R 336.1205(3), 40 CFR §52.21(c) and (d))**

3. The permittee shall monitor and record the NO_x and CO concentrations in the exhaust stream of each operating engine with a properly calibrated handheld monitor on a daily basis, excluding weekends and holidays when an operator is not scheduled to be on-site, unless an alternative method has been approved by the District Supervisor. **(R 336.1213(3))**
4. The permittee shall calculate and record the NO_x and CO emission rates from FGEngines for each month and 12-month rolling time period, as determined at the end of each calendar month.² **(R 336.1205(3), 40 CFR §52.21(c) & (d))**
5. The permittee shall record the landfill gas methane content (in percent methane) on a daily basis, excluding weekends and holidays when an operator is not scheduled to be on-site. **(R 336.1213(3))**
6. The permittee shall keep a record of the identity of the air/fuel regulator spring installed in each engine, and note if the spring is changed, on a daily basis excluding weekends and holidays when an operator is not scheduled to be on-site. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit a complete test plan to the AQD District Supervisor and to the AQD Technical Programs Unit, no less than 30 days prior to testing.² **(R 336.1213(3), R 336.2001(3))**
5. The permittee shall submit a report containing the verification test results of the performance testing within 60 days after the last date of the test.² **(R 336.1213(3), R 336.2001(4))**

See Appendix 8-S2

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE2	8 ²	29.5 ²	R 336.1225, 40 CFR §52.21 (c) & (d)
2. SVENGINE3	8 ²	29.5 ²	R 336.1225, 40 CFR §52.21 (c) & (d)
3. SVENGINE4	8 ²	29.5 ²	R 336.1225, 40 CFR §52.21 (c) & (d)
4. SVENGINE5	8 ²	29.5 ²	R 336.1225, 40 CFR §52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

Section 2
Wayne Energy Recovery, Inc.

ROP No.: MI-ROP-M4782-2010a
Expires: September 1, 2015
PTI No.: MI-PTI-M4782-2010a

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E-2. NON-APPLICABLE REQUIREMENTS

At the time of ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1-S2. Abbreviations & Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

Appendix 2-S2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3-S2. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 4-S2. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 5-S2. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 6-S2. Permits to Install

The following table lists any Permits to Install (PTI) issued since the effective date of previously issued ROP No. MI-ROP-M4782-2003. This includes any PTI that were incorporated into Source-Wide PTI No. MI-PTI-M4782-2010 through amendments or modifications and any PTI that remained off-permit until this ROP renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-M4782-2010.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201300083/ August 27, 2013	<ul style="list-style-type: none"> • Removal of FG-CONTROLS • Rule citation clarified to include subparts • Addition of EU-TREATMENTSYS • Updates to FGENGINES in regard to 07/26/2012 USEPA determination 	EU-TREATMENTSYS FGENGINES

Appendix 7-S2. Emission Calculations

Net Heating Value of the gas being combusted in the flare:

The net heating value of the gas being combusted in the flare shall be calculated and recorded using the equation provided in 40 CFR Part 60 Subpart A §60.18(f)(3). **(40 CFR Part 60 Subpart A §60.18(f)(3))**

$$H_T = K \sum_{i=1}^n C_i H_i$$

WHERE:

H_T =Net heating value of the sample,

MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant, } 1.740 \times 10^{-7} \left(\frac{1}{\text{ppm}} \right) \left(\frac{\text{g mole}}{\text{scm}} \right) \left(\frac{\text{MJ}}{\text{kcal}} \right)$$

where the standard temperature for $\left(\frac{\text{g mole}}{\text{scm}} \right)$ is 20°C;

C_i =Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 or 90 (Reapproved 1994) (Incorporated by reference as specified in 40 CFR Part 60 Subpart A §60.17); and

H_i =Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in 40 CFR Part 60 Subpart A §60.17) if published values are not available or cannot be calculated.

Calculation of V_{\max} for steam-assisted and non-assisted flares

The maximum permitted velocity, V_{\max} , for flares complying with 40 CFR Part 60 Subpart A §60.18(c)(4)(iii) shall be calculated and recorded using the equation provided in 40 CFR Part 60 Subpart A §60.18(f)(5). **(40 CFR Part 60 Subpart A §60.18(f)(5))**

$$\text{Log}_{10} (V_{\max}) = (H_T + 28.8) / 31.7$$

V_{\max} =Maximum permitted velocity, M/sec

28.8=Constant

31.7=Constant

H_T =The net heating value as determined above.

Calculation of V_{\max} for air-assisted flares

The maximum permitted velocity, V_{\max} , for air-assisted flares shall be calculated and recorded using the equation provided in 40 CFR Part 60 Subpart A §60.18(f)(6). **(40 CFR Part 60 Subpart A §60.18(f)(6))**

$$V_{\max} = 8.706 + 0.7084 (H_T)$$

V_{\max} =Maximum permitted velocity, m/sec

8.706=Constant

0.7084=Constant

H_T =The net heating value as determined above.

Appendix 8-S2. Reporting

A. Annual, Semi-annual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semi-annual and deviation certification reporting referenced in the Reporting section of the source-wide, emission unit and/or flexible group special conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) when submitting any other reports related to facility compliance including, but not limited to, annual Michigan Air Emissions Reporting System (MAERS) submittals, reports submitted pursuant to Rule 912, and stack testing. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.
(R 336.1213(3))

Section 3 – Wayne Disposal, Inc.

Michigan Department of Environmental Quality
Air Quality Division

ISSUED TO

Wayne Disposal, Inc.

State Registration Number (SRN): M4782

LOCATED AT

49350 I-94 Service Drive, Belleville, Michigan 48111

A-3. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-wide Permit to Install (PTI) pursuant to Rule 201(2)(d) are designated by Footnote 1. **(R 336.1213(5)(a), R336.1214a(5))**
- Those conditions that are hereby incorporated in federal enforceable Source-wide PTI No. MI-PTI-M4782-2010a pursuant to Rule 201(2)(c) are designated by Footnote 2. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (EPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the EPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rules 215 and 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the United States Environmental Protection Agency together with a claim of confidentiality. **(R 336.1213(1)(e))**
6. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**

7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Except as provided in subrules 2, 3, and 4 of Rule 301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP. The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. **(R 336.1901(a))**¹
 - b. Unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901(b))**¹

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b))**:
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data

records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A responsible official shall certify to the appropriate District Office of the AQD and the EPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP **(R 336.1213(3)(c))**:
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:
 - a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable

standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**:
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - Administrative amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - Administrative amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - Minor permit modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - State-only modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

- For changes to any process or process equipment covered by this ROP that does not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
- A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(3))**
- For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**

33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(3), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaiming, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.

40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the EPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. **(R 336.1201(1))**²
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**²
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. **(R 336.1219)**²
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, MI 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. **(R 336.1201(4))**²

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B-3. SOURCE-WIDE CONDITIONS

Part B outlines the source-wide terms and conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no source-wide conditions, this section will be left blank.

C-3. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EULANDFILL	<u>Municipal Solid Waste Landfill</u> This emission unit represents the general Municipal Solids Waste (MSW) Landfill. Site 2 uses an active landfill gas collection system. For Site 1, Old Wayne, and Fons, a passive landfill gas collection and control plan has been approved by the U.S. EPA.	10/1/74 – 9/1/97	NA
EUALGCS	<u>Active Landfill Gas Collection System</u> This emission unit represents the active landfill gas collection system at the landfill that uses gas mover equipment to draw landfill gas from the wells and moves the gas to the treatment equipment.	1985/2002	FGLGCS
EUASBESTOS	Any active or inactive asbestos disposal site.	10/1/74	NA
EUPLGCS	<u>Passive Landfill Gas Collection System</u> - a landfill gas collection system that solely uses positive pressure within the landfill to move the landfill gas rather than using gas mover equipment.	4/01/04	FGLGCS
EUVENTFLARE	Self-igniting (solar powered) flares - open combustor without enclosure or shroud.	4/01/04	FGLGCS

**EULANDFILL
EMISSION UNIT CONDITIONS**

DESCRIPTION – Landfill consisting of four contiguous sites in which municipal waste was co-disposed with hazardous waste. The landfills are identified as Site 2, Site 1, Old Wayne and Fons.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Open flare, landfill gas treatment system. Passive vent flares provide control for Old Wayne, Fons and Site 1.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Methane concentration	500 ppm above background level	Calendar quarter	Surface of Landfill	V.1 and V.2	40 CFR §60.753(d), 40 CFR §60.755(c), 40 CFR §62.14354(b), 40 CFR §63.1955(a)(1)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. For all portions of the facility that received municipal solid waste, the permittee shall operate either:
 - a. An active control system that meets the requirements of 40 CFR Part 60 Subpart WWW §60.755 to control the emissions from the MSW landfill (**40 CFR Part 60 Subpart WWW §60.752(b)(2)(iv), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a) and (b) OR**
 - b. A passive collection and control system that meets the requirements established by the U.S. EPA approved Final Control Plan (**40 CFR Part 60 Subpart WWW §60.753(a), (d), (f) and (g), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan**)
2. The permittee shall operate the landfill gas collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. (**40 CFR Part 60 Subpart WWW §60.753(d), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)**)
3. The permittee shall comply with the requirements in 40 CFR Part 63 Subpart AAAA §63.1955(b) & §63.1960 through §63.1980. (**40 CFR Part 63 Subpart AAAA §63.1945(d)**)
4. The permittee shall not cause or permit open burning of refuse, garbage, or any other waste materials, except as provided by R 336.1310(1)(c) or R 299.4434(2) of Part 115 of Public Act 451. (**R 336.1310**)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall have installed a collection and control system that captures the landfill gas generated within the landfill as required by 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), §60.752(b)(2)(ii), and §60.752(b)(2)(iii). (**40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), §60.752(b)(2)(ii) & §60.752(b)(2)(iii), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1), U.S. EPA approved Final Control Plan**)
2. The permittee shall route all the collected landfill gas to at least one of the following:

- a. A flare designed in accordance with 40 CFR Part 60 Subpart A §60.18, except as noted in 40 CFR Part 60 §60.754(e) **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
- b. A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test, required under §60.8 using the test methods specified in 40 CFR Part 60 Subpart WWW §60.754(d). **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(B), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
- c. A treatment system that processes the collected gas for subsequent sale or use. The treatment system shall be designed so that all emissions from any atmospheric vent(s) shall be subject to 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(B) or (C). **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. To determine if the methane concentration is less than 500 ppm above background at the surface of the landfill is exceeded, the permittee shall conduct surface testing, on a quarterly basis, around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. **(40 CFR Part 60 Subpart WWW §60.753(d), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
2. The permittee shall use the following procedures for compliance with the surface methane operational standard as provided in 40 CFR Part 60 Subpart WWW §60.753(d).
 - a. The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing approved by the AQD) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR Part 60 Subpart WWW §60.755(d). **(40 CFR Part 60 Subpart WWW §60.755(c)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. **(40 CFR Part 60 Subpart WWW §60.755(c)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - c. Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. **(40 CFR Part 60 Subpart WWW §60.755(c)(3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR Part 60 Subpart WWW §60.753(d). **(40 CFR Part 60 Subpart WWW §60.755(c)(4), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - i. The location of each monitored exceedance shall be marked and the location recorded. **(40 CFR Part 60 Subpart WWW §60.755(c)(4)(i), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**

- ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance. **(40 CFR Part 60 Subpart WWW §60.755(c)(4)(ii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified below (in condition **V.2.d.v**) shall be taken, and no further monitoring of that location is required until the action specified below (in condition **V.2.d.v**) has been taken. **(40 CFR Part 60 Subpart WWW §60.755(c)(4)(iii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified above (in conditions **V.2.d.ii** or **iii**) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified above (in condition **V.2.d.iii**) or below (in condition **V.2.d.v**) shall be taken. **(40 CFR Part 60 Subpart WWW §60.755(c)(4)(iv), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - v. For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the AQD for approval. **(40 CFR Part 60 Subpart WWW §60.755(c)(4)(v), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - e. The permittee shall comply with the operational standard at 40 CFR Part 60 Subpart WWW §60.755(c)(4) or an approved alternative. **(40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a), US EPA approved Final Control Plan pages 51 through 55)**
3. The permittee shall comply with the provisions in 40 CFR Part 60 Subpart WWW §60.755(c) with the following instrumentation specifications and procedures for surface emission monitoring devices: **(40 CFR Part 60 Subpart WWW §60.755(d), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - a. The portable analyzer shall meet the instrument specifications provided in Section 3 of Method 21 of Appendix A of 40 CFR Part 60, except that "methane" shall replace all references to VOC. **(40 CFR Part 60 Subpart WWW §60.755(d)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. **(40 CFR Part 60 Subpart WWW §60.755(d)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - c. To meet the performance evaluation requirements in Section 3.1.3 of Method 21 of Appendix A of 40 CFR Part 60, the instrument evaluation procedures of Section 4.4 of Method 21 of Appendix A of 40 CFR Part 60 shall be used. **(40 CFR Part 60 Subpart WWW §60.755(d)(3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - d. The calibration procedures provided in Section 4.2 of Method 21 of Appendix A of 40 CFR Part 60 shall be followed immediately before commencing a surface monitoring survey. **(40 CFR Part 60 Subpart WWW §60.755(d)(4), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 4. The permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR Part 60 Subpart WWW §60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. **(40 CFR Part 60 Subpart WWW §60.755(d), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**

§60.752(b)(2)(i)(B) & §60.756(f), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a) & (c), U.S. EPA approved Final Control Plan page 69)

5. The flow rate of landfill gas, Q_{LFG} , (from the equation presented in 40 CFR Part 60 Subpart WWW §60.754(b)) shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device (i.e. Vortex Shedding Meter) approved by U.S. EPA. The permittee may use another method to determine landfill gas flow rate if the method has been approved by the U.S. EPA. **(40 CFR Part 60 Subpart WWW §60.754(b)(1) & (3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a) & (c), U.S. EPA approved Final Control Plan page 57)**
6. The average NMOC concentration, C_{NMOC} , (in the equation presented in 40 CFR Part 60 Subpart WWW §60.754(b)) shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25c or Method 18 of appendix A of 40 CFR Part 60. If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25c of appendix A by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. The permittee may use another method to determine NMOC concentration if the method has been approved by the AQD. **(40 CFR Part 60 Subpart WWW §60.754(b)(2) & (3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis for the first year, then reduction in frequency to quarterly the following year, then annually if data gathered for the site-specific conditions warrant and as approved by the Administrator. Upon identification of deficiencies in the cover integrity monitoring program, the frequency shall be returned to monthly. The permittee shall maintain a written record of inspection logs and corrective actions taken to maintain cover integrity. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B) & §60.755(c)(5), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan page 57).**
2. The location of each monitored exceedance shall be marked and the location recorded. **(40 CFR Part 60 Subpart WWW §60.755(c)(4)(i), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. The permittee shall monitor surface concentrations at a 30 to 60 meter spacing where the final cover consists of geomembrane or synthetic material and the data collected shows that such a widening is appropriate. If three consecutive monitoring events show no exceedances, 60 meter spacing may be adopted. Any future exceedances will require resumption of 30 meter spacing for the entire site until three consecutive monitoring events show that compliance has been assured. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, page 49, 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(B))**
4. The permittee shall keep the following written records pertaining to surface methane monitoring:
 - a. Sample dates **(R 336.1213(3))**
 - b. Sample locations, including a map with sample locations clearly marked **(R 336.1213(3))**
 - c. Sample results **(R 336.1213(3))**
5. Except as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall maintain up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR Part 60 Subpart WWW §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four (4) hours. Either paper copy or electronic formats are acceptable. **(40 CFR Part 60 Subpart WWW §60.758(a), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
6. Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", shall keep readily accessible, on-site records of the annual

- recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. **(40 CFR Part 60 Subpart WWW §60.758(f), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
7. The permittee shall calculate and record the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(v), using the equation presented in 40 CFR Part 60 Subpart WWW §60.754(b). **(40 CFR Part 60 Subpart WWW §60.754(b), 40 CFR Part 62 Subpart GGG §62.14354(b))**
 8. If the permittee adds any liquids other than leachate in a controlled fashion to the waste mass and does not comply with the bioreactor requirements in 40 CFR Part 63 Subpart AAAA §63.1947, §63.1955(c), and §63.1980(c) through (f), the permittee shall keep a record of calculations showing that the percent moisture by weight expected in waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of the water added to the waste including leachate recirculation and other liquids addition, and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. The permittee shall document the calculations and the basis of the assumptions. **(40 CFR Part 63 Subpart AAAA §63.1980(g))**
 9. Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. **(R 336.1213(3), 40 CFR Part 60 Subpart WWW §60.755(c)(1) & §60.756(f), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a) U.S. EPA approved Final Control Plan, page 69)**
 10. Surface monitoring and control may be discontinued in any area that is demonstrated, to the Administrator's satisfaction, to be contributing less than one percent of the total NMOC emissions, as provided in 40 CFR Part 60 Subpart WWW §60.759(a)(3)(ii). **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), 40 CFR & §60.756(d), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, page 64)**
 11. If monitoring demonstrates that the operational requirements above in condition III.2 are not met, corrective action shall be taken as specified above in condition V.2. If corrective actions are taken as specified above in condition V.2, the monitored exceedance is not a violation of the operational requirements in this section. **(40 CFR Part 60 Subpart WWW §60.753(g), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit the annual report every 6 months of the recorded information in 40 CFR Part 60 Subpart WWW §60.757(f) to the AQD by March 15 and September 15 of each calendar year. **(40 CFR Part 60 Subpart WWW §60.757(f), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1980(a))**
5. The permittee shall submit an equipment removal report to the appropriate AQD District Supervisor 30 days prior to removal or cessation of operation of the control equipment. **(40 CFR Part 60 Subpart WWW §60.757(e), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - a. The equipment removal report shall contain all of the following items:
 - i. A copy of the closure report submitted in accordance with 40 CFR Part 60 Subpart WWW §60.757(d) **(40 CFR Part 60 Subpart WWW §60.757(e)(1)(i), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - ii. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year **(40 CFR Part 60 Subpart WWW §60.757(e)(1)(iii), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**

- b. The AQD may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(v) have been met. **(40 CFR Part 60 Subpart WWW §60.757(e)(2), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
6. The permittee shall submit reports which shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. The report shall include the location of each exceedance of the 500 parts per million methane concentration as provided above (in condition V.1) and the concentration recorded at each location for which an exceedance was recorded in the previous month. The report shall also contain information on all deviations that occurred during the 6-month reporting period. **(40 CFR Part 60 Subpart WWW §60.757(f)(5), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1), §63.1955(c) & CFR §63.1980(a))**

See Appendix 3.8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

1. The collection and control system may be capped or removed provided that all the following conditions are met:
 - a. The landfill shall be a closed landfill as defined in 40 CFR Part 60 Subpart WWW §60.751. A closure report shall be submitted to the appropriate AQD District Office as provided in 40 CFR Part 60 Subpart WWW §60.757(d) **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(v)(A), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - b. The collection and control system shall have been in operation a minimum of 15 years; and **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(v)(B), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
 - c. Following the procedures specified in Part 60 Subpart WWW §60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(v)(C), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
2. The permittee shall submit a closure report to the appropriate AQD District Office within 30 days of waste acceptance cessation. The AQD may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the AQD, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4). **(40 CFR Part 60 Subpart WWW §60.757(d), 40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
3. For the approval of collection and control systems that includes any alternatives to the operational standards, test methods, procedures, compliance measures, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the permittee shall follow the procedures in 40 CFR Part 60 Subpart WWW §60.752(b)(2). **(40 CFR Part 63 Subpart AAAA §63.1955(c))**
4. The permittee shall comply with any applicable schedule for increments of compliance as specified in 40 CFR Part 60 Subpart Cc, 40 CFR Part 62, Subpart GGG and R 336.1931. **(R 336.1931(1), 40 CFR Part 62 Subpart GGG §62.14352)**
5. The permittee shall comply with the provisions of 40 CFR Part 60, Subpart GGG, "Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction Prior to May 30, 1991, and Have Not Been Modified or Reconstructed Since May 30, 1991". **(R 336.1931(1), 40 CFR Part 62 Subpart GGG §62.14352(a))**
6. The permittee shall comply with the requirements of 40 CFR Part 60, Subparts A and WWW. **(40 CFR Part 63 Subpart AAAA §63.1955(a)(1))**
7. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart AAAA, including the general provisions specified in Table 1. **(40 CFR Part 63 Subpart AAAA §63.1955)**
8. The permittee shall have developed and implemented a written startup, shutdown, and malfunction (SSM) plan by January 16, 2004, according to the provisions in 40 CFR §63.6(e)(3). A copy of the SSM plan must be

maintained on site. Failure to write, implement or maintain a copy of the SSM plan is a deviation. **(40 CFR Part 63 Subpart AAAA §63.1960, §63.1965(c) & §63.1945(b))**

9. If the landfill adds any liquids other than leachate in a controlled fashion to the waste mass and does not comply with the bioreactor requirements in section 63.1947, 63.1955(c), and 63.1980(c) through (f), the landfill shall keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balance calculations can be used. The landfill must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition. **(40 CFR Part 63 Subpart AAAA §63.1980(g))**
10. The permittee is no longer required to comply with the requirements of Subpart AAAA of Part 63 when it is no longer required to apply controls as specified in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(v) ~~of Subpart WWW~~. **(40 CFR Part 63 Subpart AAAA §63.1950)**
11. Physical or operational changes made to an existing MSW landfill solely to comply with 40 CFR Part 62, the “Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed Since May 30, 1991”, are not considered a modification or reconstruction and do not subject an existing MSW landfill to the requirements of 40 CFR Part 60 Subpart WWW. **(40 CFR Part 62 Subpart GGG §62.14352(d))**
12. When the landfill is closed, the permittee will no longer be required to maintain a renewable operating permit under 40 CFR Part 70 and 40 CFR Part 71 for the landfill if the landfill is not otherwise subject to the requirements of either 40 CFR Part 70 or 40 CFR Part 71 when the following condition is met: **(40 CFR Part 60 Subpart WWW §60.752(d)(2), 40 CFR Part 62 Subpart GGG §62.14352(f))**
 - a. The permittee meets the following conditions for control system capping or removal: **(40 CFR Part 62 Subpart GGG §62.14352(f)(2))**
 - i. The landfill is a closed landfill as defined in 40 CFR Part 60 Subpart WWW §60.751. A closure report shall be submitted to the AQD with the first annual Emissions Guidelines Report **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(v)(A) & §60.752(b)(2)(i)(D), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan)**
 - ii. The collection and control system has been in operation a minimum of 15 years; **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(v)(B), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - iii. Following the procedures specified in 40 CFR Part 60 Subpart WWW §60.754(b), the calculated NMOC gas produced by the landfill is less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(v)(C), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - iv. The permittee submits a written demonstration, for approval by the AQD and Waste and Hazardous Materials Division, Michigan Department of Environmental Quality, that removal of the collection and control system will not compromise the integrity and effectiveness of the final cover pursuant to R 299.4449(1) of Part 115 of Public Act 451. The final cover must be installed and maintained in a satisfactory manner in accordance R 336.1910 and R 299.4449(1) of Part 115 of Public Act 451. **(R 336.1910)**
13. If a modification of the landfill, as defined in 40 CFR Part 62 Subpart GGG §62.14351, results in an increase in the permitted design capacity caused by an increase in the permitted horizontal or vertical dimensions of the landfill, then the permittee shall immediately comply with the provisions of 40 CFR Part 60 Subpart WWW. In addition, the permittee shall modify the RO permit to incorporate the provisions of 40 CFR Part 60 Subpart WWW pursuant to the requirements of R 336.1216(3). **(R 336.1213(3), 40 CFR Part 62 Subpart GGG 62.14352(a)(1))**
14. The permittee may submit a request for an alternate compliance schedule to the AQD. An alternate compliance schedule shall meet one or more of the following criteria for approval, as stated in 40 CFR 60.24(f): **(R 336.1931(2))**
 - a. Unreasonable cost of control resulting from landfill age, location or basic design. **(R 336.1931(2)(a))**
 - b. Physical impossibility of installing necessary control equipment. **(R 336.1931(2)(b))**

- c. Other factors specific to the landfill that make application of a less stringent compliance time significantly more reasonable. **(R 336.1931(2)(c))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUALGCS EMISSION UNIT CONDITIONS

DESCRIPTION – This emission unit represents the active landfill gas collection system at the landfill. Gas mover equipment is used to draw landfill gas from the wells and deliver it to the control equipment.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

A treatment system provides primary control for landfill gas prior to sale for use as fuel.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. **(40 CFR Part 60 Subpart WWW §60.753(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The permittee shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
 - a. 5 years or more if active; or **(40 CFR Part 60 Subpart WWW §60.753(a)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. 2 years or more if closed or at final grade **(40 CFR Part 60 Subpart WWW §60.753(a)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. The permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions: **(40 CFR Part 60 Subpart WWW §60.753(b), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided below (in condition VII.4) **(40 CFR Part 60 Subpart WWW §60.753(b)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. Use of a geo-membrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan **(40 CFR Part 60 Subpart WWW §60.753(b)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - c. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the AQD **(40 CFR Part 60 Subpart WWW §60.753(b)(3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with a nitrogen level less than 20% or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. **(40 CFR Part 60 Subpart WWW §60.753(c), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. An active collection system shall:
 - a. Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(1), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. The permittee shall place each well or design component in the collection system as specified in the approved design plan as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of 5 years or more if active; or 2 years or more if closed at final grade. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(2) & §60.755(b), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - c. Collect gas at a sufficient extraction rate **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(3), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - d. Be designed to minimize off-site migration of subsurface gas. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(4), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The permittee shall design the collection system so that all collected gases are vented to a control system designed and operated in compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii). **(40 CFR Part 60 Subpart WWW §60.753(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. When adding gas collectors to the active gas collection system, a sufficient density of gas collectors shall be installed in compliance as specified above (in condition **IV.1**). The permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the appropriate AQD District Office, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards in NSPS WWW. **(40 CFR Part 60 Subpart WWW §60.755(a)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. If the permittee is seeking to demonstrate compliance through the use of a collection system not conforming to the specifications provided in 40 CFR Part 60 Subpart WWW §60.759, then the permittee shall provide information that satisfies the Administrator as specified in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), demonstrating that off site migration is being controlled. **(40 CFR Part 60 Subpart WWW §60.755(a)(6), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
5. The permittee may seek to comply with 40 CFR 60.752(b)(2)(i)(A) by conveying the landfill gas to a control system in compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures: **(40 CFR Part 60 Subpart WWW §60.759(c), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in 40 CFR Part 60 Subpart WWW §60.759(c)(2) shall be used. **(40 CFR Part 60 Subpart WWW §60.759(c)(1), 40 CFR Part 62 Subpart GGG §62.14353(b) , 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. For new collection systems, the maximum flow rate shall be in accordance with 40 CFR Part 60 Subpart WWW §60.755(a)(1). **(40 CFR Part 60 Subpart WWW §60.759(c)(2), 40 CFR Part 62 Subpart GGG §62.14354(b) , 40 CFR Part 63 Subpart AAAA §63.1955(a))**
6. The permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead. **(40 CFR Part 60 Subpart WWW §60.756(a), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
7. The permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C) and (D):

- a. The collection devices within the interior and along the perimeter areas shall be certified, by a professional engineer, to achieve comprehensive control of surface gas emissions. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat. **(40 CFR Part 60 Subpart WWW §60.759(a)(1), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. The sufficient density of gas collection devices determined above (condition IV.5.a) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior. **(40 CFR Part 60 Subpart WWW §60.759(a)(2), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - c. The placement of gas collection devices determined above (in condition IV.5.a) shall control all gas producing areas, except as provided below (in conditions IV.5.c.i and ii). **(40 CFR Part 60 Subpart WWW §60.759(a)(3), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - i. Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR Part 60 Subpart WWW §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the District Supervisor upon request. **(40 CFR Part 60 Subpart WWW §60.759(a)(3)(i), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - ii. Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the AQD District Supervisor upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the equation in Appendix 7-S3. **(40 CFR Part 60 Subpart WWW §60.759(a)(3)(ii), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
See Appendix 7-S3
8. The permittee shall construct the gas collection devices using the following equipment or procedures:
- a. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration. **(40 CFR Part 60 Subpart WWW §60.759(b)(1), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations. **(40 CFR Part 60 Subpart WWW §60.759(b)(2), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - c. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness. **(40 CFR Part 60 Subpart WWW §60.759(b)(3), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

9. The active gas collection system shall be designed to convey the landfill gas to a control system in compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures: **(40 CFR Part 60 Subpart WWW §60.759(c), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in 40 CFR Part 60 Subpart WWW §60.759(c)(2) shall be used. **(40 CFR Part 60 Subpart WWW §60.759(c)(1), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - For new collection systems, the maximum flow rate shall be in accordance with 40 CFR Part 60 Subpart WWW §60.755(a)(1). **(40 CFR Part 60 Subpart WWW §60.759(c)(2), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

- Unless an alternative test method is established as allowed by 40 CFR 60 Subpart WWW §60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
 - The span shall be set so that the regulatory limit is between 20 and 50 percent of the span **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(i), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - A data recorder is not required **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(ii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - Only two calibration gases are required, a zero and span, and ambient air may be used as the span **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(iii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - A calibration error check is not required **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(iv), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - The allowable sample bias, zero drift, and calibration drift are ± 10 percent. **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(v), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

- After the installation of an active collection and control system in compliance with 40 CFR Part 60 Subpart WWW §60.755, the permittee shall calculate and record the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(v), using the equation presented in 40 CFR Part 60 Subpart WWW §60.754(b). **(40 CFR Part 60 Subpart WWW §60.754(b), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(3), the permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed above in conditions **III.3.a-c**. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded or the permittee shall obtain approval for an alternative corrective measure from the appropriate AQD District Office to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the appropriate AQD District Office for approval. **(40 CFR Part 60 Subpart WWW §60.755(a)(3) & §60.756(a)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

3. If monitoring demonstrates that the negative pressure is not being met, then corrective action shall be taken as noted above in condition **VI.1**. If corrective actions are taken as specified in 40 CFR Part 60 Subpart WWW §60.755, the monitored exceedance is not a violation of the operational requirements. **(40 CFR Part 60 Subpart WWW §60.753(g), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. The permittee is not required to expand the gas collection system as required above in condition **VI.1** during the first 180 days after gas collection system startup. **(40 CFR Part 60 Subpart WWW §60.755(a)(4), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
5. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and oxygen as provided above in condition **III.4**. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded or the permittee shall obtain an alternative corrective measure from the appropriate AQD District Office to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the appropriate AQD District Office for approval. **(40 CFR Part 60 Subpart WWW §60.755(a)(5), §60.756(a)(2) & §60.756(a)(3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
6. If monitoring demonstrates that the pressure, temperature and oxygen parameters are not being met, then corrective action shall be taken as noted above in **VI.1** and **VI.4** and specified in 40 CFR Part 60 Subpart WWW §60.755(a)(5). If corrective actions are taken as specified in §60.755, the monitored exceedance is not a violation of the operational requirements. **(40 CFR Part 60 Subpart WWW §60.753(g), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
7. Except as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below in conditions **VI.4.a-b**, as measured during the compliance determination. Records of the control device vendor specifications shall be maintained until removal. **(40 CFR Part 60 Subpart WWW §60.758(b), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. The maximum expected gas generation flow rate as calculated in 40 CFR Part 60 Subpart WWW §60.755(a)(1). The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the appropriate AQD District Office. **(40 CFR Part 60 Subpart WWW §60.758(b)(1)(i), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR Part 60 Subpart WWW §60.758(a)(1). **(40 CFR Part 60 Subpart WWW §60.758(b)(1)(ii), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
8. Except as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector; and the installation date and location of all newly installed collectors as specified above in condition **IV.1.b**. **(40 CFR Part 60 Subpart WWW §60.758(d) & §60.758(d)(1), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
9. The permittee shall keep readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR Part 60 Subpart WWW §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. **(40 CFR Part 60 Subpart WWW §60.758(e), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
10. The permittee shall maintain the following information:
 - a. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion **(40 CFR Part 60 Subpart WWW §60.757(g)(1), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

- b. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based **(40 CFR Part 60 Subpart WWW §60.757(g)(2), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- c. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material **(40 CFR Part 60 Subpart WWW §60.757(g)(3), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- d. The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area **(40 CFR Part 60 Subpart WWW §60.757(g)(4), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- e. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill **(40 CFR Part 60 Subpart WWW §60.757(g)(5), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- f. The provisions for the control of off-site migration. **(40 CFR Part 60 Subpart WWW §60.757(g)(6), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit to the appropriate AQD district office semi-annual reports for the gas collection system. Reports shall be received by the appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR Part 60 Subpart WWW §60.758(c). **(40 CFR Part 60 Subpart WWW §60.757(f), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a), §63.1965 & §63.1980(a))**
5. The permittee shall submit the annual report every 6 months of the recorded information in 40 CFR Part 60 Subpart WWW §60.757(f)(1) through (f)(6) to the AQD by March 15 and September 15 of each calendar year. The semi-annual annual report shall include the following information: **(40 CFR Part 60 Subpart WWW §60.757(f), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & 40 CFR §63.1980(a))**
 - a. The value and length of time for exceedances of applicable parameters monitored under 40 CFR Part 60 Subpart WWW §60.756(a), (b), (c) and (d). **(40 CFR Part 60 Subpart WWW §60.757(f)(1), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & §63.1980(a))**
 - b. A description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR Part 60 Subpart WWW §60.756. **(40 CFR Part 60 Subpart WWW §60.757(f)(2), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & §63.1980(a))**
 - c. A description and duration of all periods when the control device was not operating for a period exceeding one (1) hour and length of time the control device was not operating. **(40 CFR Part 60 Subpart WWW §60.757(f)(3), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & §63.1980(a))**
 - d. A summary of all periods when the collection system was not operating in excess of 5 days. **(40 CFR Part 60 Subpart WWW §60.757(f)(4), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & §63.1980(a))**
 - e. A summary of the location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR Part 60 Subpart WWW §60.753(d) and the concentration recorded at each location for

- which an exceedance was recorded in the previous month. **(40 CFR Part 60 Subpart WWW §60.757(f)(5), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & §63.1980(a))**
- f. A summary of the date of installation and the location of each well or collection system expansion added pursuant to 40 CFR Part 60 Subpart WWW §60.755(a)(3), (b), and (c)(4). **(40 CFR Part 60 Subpart WWW §60.757(f)(6), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a) & §63.1980(a))**
6. The semi-annual reports for the gas collection system shall include the following information: **(40 CFR Part 60 Subpart WWW §60.753(b)(1), 40 CFR Part 62 Subpart GGG §62.14354(b),)**
- a. Any deviations as listed in 40 CFR Part 63 Subpart AAAA §63.1965.
- b. The permittee shall record instances when a positive pressure occurs in efforts to avoid fire.
7. The permittee shall submit the startup, shutdown, and malfunction (SSM) report to the appropriate AQD district office, delivered or postmarked by the 30th (January 30, 2005) day following the end of the calendar half that includes July through December 2004. The permittee shall thereafter submit the calendar half SSM reports to the appropriate AQD district office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(40 CFR Part 63 Subpart A §63.10(a)(5) & §63.10(d)(5))**

See Appendix 8-S3

VIII. STACK/VENT RESTRICTION(S)

Not applicable

IX. OTHER REQUIREMENT(S)

1. If monitoring demonstrates that the operational requirements above in conditions **III.3** and **III.5** are not met, corrective action shall be taken as specified above in conditions **VI.1** and **VI.3**. If corrective actions are taken as specified above in conditions **VI.1** and **VI.3**, the monitored exceedance is not a violation of the operational requirements in conditions **III.3** and **III.5**. **(40 CFR Part 60 Subpart WWW §60.753(g), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The above provisions in conditions **IV.1.b**, **VI.1** and **VI.3** apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems. **(40 CFR Part 60 Subpart WWW §60.755(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. If the permittee is seeking to install a collection system that does not meet the specifications above in conditions **IV.5**, **IV.6**, and **IV.7**, or is seeking to monitor alternative parameters to those required by 40 CFR Subpart WWW §60.753 through §60.756, they shall provide information satisfactory to the appropriate AQD District Office as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The AQD may specify additional appropriate monitoring procedures. **(40 CFR Part 60 Subpart WWW §60.756(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. The permittee shall have developed and implemented a written SSM plan according to the provision in 40 CFR §63.6(e)(3) for EUALGCS. A copy of the SSM plan shall be maintained on site. **(40 CFR Part 63 Subpart AAAA §63.1960)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUVENTFLARE EMISSION UNIT CONDITIONS

DESCRIPTION – A self-igniting, solar powered, non-assisted open flare which uses subsurface gas pressure to generate a flammable mixture. The closed Site 1, Fons, and Old Wayne landfills have passive landfill gas collection and control systems that consist of an array of these flares.

Flexible Group ID: FGLGCS

POLLUTION CONTROL EQUIPMENT – Not applicable

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible emissions	0% opacity	Except for 5 cumulative minutes in any given two-hour period	Each vent flare	EPA reference Method 22	40 CFR §60.18

II. MATERIAL LIMIT(S)

Not applicable

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. **(40 CFR Part 60 Subpart A §60.18(c)(1), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. Passive flares shall be operated with a battery to provide a spark to re-ignite the flare as long as landfill gas of sufficient quality and quantity is present to sustain combustion. **(40 CFR Part 60 Subpart A §60.18(c)(2), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA Approved Final Control Plan, page 21)**
3. Flares shall be used only with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f). **(40 CFR Part 60 Subpart A §60.18(c)(3), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA Approved Final Control Plan, page 22)**
4. Non-assisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR Part 60 Subpart A §60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR Part 60 Subpart A §60.18(c)(4)(ii) and (iii). **(40 CFR Part 60 Subpart A §60.18(c)(4)(i), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA Approved Final Control Plan, page 22)**
5. Flares used to comply with provisions of 40 CFR Part 60 Subpart A shall be operated at all times when emissions may be vented to them. **(40 CFR Part 60 Subpart A §60.18(e), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
6. The permittee shall operate and maintain the vent flares in accordance with the manufacturer's recommendations, including, but not limited to, conducting periodic relight testing and battery voltage monitoring. **(R 336.1213(3), 40 CFR Part 63 Subpart A §63.6(e))**

7. At the conclusion of the first year of operating a passive collection and control system, the permittee shall review all information collected from the data logger attached to each vent flare. In the case that a vent flare has operated less than 20% of one year (i.e. less than 1752 hours), then the vent flare may be removed and the location converted to a passive vent. No further monthly monitoring will be required of the location. Removal of vent flares will be reported in the semiannual NSPS report. Data logger records for all passive vent flares will be kept on file for a minimum of five years. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(D) & §60.756(d), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, pages 24 and 63)**
8. In the case that all of the vent flares within each landfill have been "shut down" or the permittee is no longer required to control emissions in accordance with 40 CFR §60.752(b)(2)(v), the permittee will cease to monitor surface emissions of methane within that landfill. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(D) & §60.756(d), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA Final Control Plan, page 63)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. A passive flare shall be designed and operated in accordance with 40 CFR Part 60 Subpart A §60.18, and according to the U.S. EPA approved Final Control Plan. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan)**
2. The passive flare shall be designed to ignite and stay lit with a minimum of 30% methane. **(40 CFR Part 60 Subpart WWW §60.753(f)), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan page 21)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Federal Reference Test Method 22 shall be used to determine the compliance of flares with the visible emission provisions of 40 CFR Part 60 Subpart A. The observation period is 2 hours and shall be used according to Federal Reference Test Method 22. Upon approval by U.S. EPA, the observation period may be reduced to 5 minutes. **(40 CFR Part 60 Subpart A §60.18(f)(1), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. Federal Reference Method 22 shall be used to test visual emissions for each operational passive flare. An operational passive flare is a flare that continuously burns landfill gas for two consecutive hours. The data logger will be used to determine the operation of each flare. Any flare that has not operated for one consecutive week will be considered to be non-operational with respect to this test. If at any time in the future the data indicates the flare operated for more than four consecutive hours, the flare will be tested according to Method 22. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan)**
3. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s). **(40 CFR Part 60 Subpart WWW §60.8(a), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b))**
4. Not less than 7 days before performance tests are conducted, the owner of a source of air contaminant, or his or her authorized agent, shall notify the department, in writing, of the time and place of the performance tests and who shall conduct them. A representative of the department shall have the opportunity to witness these tests. **(R 336.2001(3))**
5. The net heating value of gas being combusted in a flare will be determined using 40 CFR Part 60, Method 3C. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, page 22)**
6. The actual exit velocity of a flare shall be determined and recorded by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Federal Reference Test Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. **(R 336.1213(3), 40 CFR Part 60**

Subpart A §60.18(f)(4), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, page 22)

See Appendix 5-S3

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The presence of a flare flame shall be monitored and recorded continuously using a thermocouple or any other equivalent device to detect the presence of a flame. **(40 CFR Part 60 Subpart A §60.18(f)(2), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, page 22)**
2. The permittee shall keep continuous records of the flame or flare flame monitoring specified under 40 CFR Part 60 Subpart WWW §60.756(c) and records of all periods of operation in which the flame or flare flame is absent. **(40 CFR Part 60 Subpart WWW §60.758(c)(4), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. If the permittee uses an open flare, records shall be kept of the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR Part 60 Subpart A §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent. **(40 CFR Part 60 Subpart WWW §60.758(b)(4), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. The permittee shall monitor each flare to ensure that it is operated and maintained in conformance with its design and the provisions of 40 CFR Part 60 Subparts A and WWW and the EPA approved Final Control Plan. **(40 CFR Part 60 Subpart A §60.18(d), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C) & §60.752(b)(2)(iii)(A), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
5. The permittee shall perform the following monitoring on a monthly basis:
 - a. Identification of whether the vent flare is operating (i.e. flame present);
 - b. Measurement of pressure at each passive flare and visual confirmation that the data loggers are on;
 - c. Measurement of gas quality within the passive flare (methane, carbon dioxide, and oxygen);
 - d. Downloading of the data collected by the data logger;
 - e. Visual inspection of each flare to verify that components of the flare have not become damaged by weather conditions or vandalism.

(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, page 47)

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit a complete test report of the performance test results to the District Supervisor within 60 days following the last date of the test. **(R 336.2001(4), R 336.1213(3))**
5. The permittee shall submit the annual report every 6 months of the recorded information in 40 CFR §60.757(f) to the AQD by March 15 and September 15 of each calendar year. **(40 CFR Part 60 Subpart WWW §60.757(f), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1980(a))**

See Appendix 8-S3

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

Not applicable

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUASBESTOS EMISSION UNIT CONDITIONS
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DESCRIPTION – This landfill may receive asbestos waste.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT – NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. If the landfill accepts asbestos-containing waste materials from a source covered under 40 CFR §61.149, 40 CFR §61.150, or 40 CFR §61.155, the permittee shall meet the following operational requirements: **(40 CFR §61.154)**
 - a. Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of 40 CFR §61.154(c) or (d) must be met. **(40 CFR §61.154(a))**
 - b. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of 40 CFR §61.154(c)(1) must be met. **(40 CFR §61.154(b))**
 - i. Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. **(40 CFR §61.154(b)(1))** The warning signs must:
 - (a) Be posted in such a manner and location that a person can easily read the legend **(40 CFR §61.154(b)(1)(i))**
 - (b) Conform to the requirements of 51 cm by 36cm (20 inches by 14 inches) upright format signs specified in 29 CFR 1910.145(d)(4) and 40 CFR §61.154(b)(1) **(40 CFR §61.154(b)(1)(ii))**
 - (c) The permittee shall display the legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in 40 CFR §61.154(b)(1). Spacing between any two lines must be at least equal to the height of the upper of the two lines. **(40 CFR §61.154(b)(1)(iii))**
 - ii. The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public. **(40 CFR §61.154(b)(2))**
 - iii. Upon request and supply of appropriate information, the appropriate AQD District Supervisor will determine whether a fence or a natural barrier adequately deters access by the general public. **(40 CFR §61.154(b)(3))**
 - c. Rather than meet the no visible emission requirement of 40 CFR §61.154(a), at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall: **(40 CFR §61.154(c))**
 - i. Be covered with at least 15 centimeters (6 inches) of compacted non-asbestos-containing material. **(40 CFR §61.154(c)(1))** or

- ii. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the appropriate AQD District Supervisor. For purposes of 40 CFR §61.154(c)(2), any used, spent, or other waste oil is not considered a dust suppression agent. **(40 CFR §61.154(c)(2))**
- d. Rather than meet the no visible emission requirement of 40 CFR §61.154(a), use an alternative emissions control method that has received prior written approval by the appropriate AQD District Supervisor according to the procedures described in 40 CFR §61.149(c)(2). **(40 CFR §61.154(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The placement of gas collection devices determined in paragraph 40 CFR Part 60 Subpart WWW §60.759(a)(1) shall control all gas producing areas, except as provided by §60.759 (a)(3)(i) and (a)(3)(ii). **(40 CFR Part 60 Subpart WWW §60.759(a)(3), 40 CFR Part 62 Subpart GGG §62.14355(a))**
- 2. Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR Part 60 Subpart WWW §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the AQD upon request. **(40 CFR Part 60 Subpart WWW §60.759(a)(3)(i), 40 CFR Part 62 Subpart GGG §62.14355(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

Not applicable

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

- 1. For all asbestos-containing waste material received, the permittee of the active waste disposal site shall:
 - a. Maintain waste shipment records that include the following information: **(40 CFR §61.154(e)(1))**
 - i. The name, address, and telephone number of the waste generator. **(40 CFR §61.154(e)(1)(i))**
 - ii. The name, address, and telephone number of the transporter(s). **(40 CFR §61.154(e)(1)(ii))**
 - iii. The quantity of the asbestos-containing waste material in cubic meters (cubic yards). **(40 CFR §61.154(e)(1)(iii))**
 - iv. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report. **(40 CFR §61.154(e)(1)(iv))**
 - v. The date of the receipt. **(40 CFR §61.154(e)(1)(v))**
 - b. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator. **(40 CFR §61.154(e)(2))**
 - c. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record) **(40 CFR §61.154(e)(3))**
- 2. The permittee shall maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area storage. **(40 CFR §61.154(f))**

3. The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR Part 60 Subpart WWW §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR Part 60 Subpart WWW §60.759(a)(3)(ii). **(40 CFR Part 60 Subpart WWW §60.758(d)(2))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be received by appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit to the appropriate AQD District Supervisor, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities. **(40 CFR §61.154(h))**
5. The permittee shall furnish upon request, and make available during normal business hours for inspection by the AQD, all records required by 40 CFR Part 61. **(40 CFR §61.154(i))**
6. Notify the appropriate AQD District Office in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the appropriate AQD District Office at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. **(40 CFR §61.154(j))**
Include the following information in the notice:
 - a. Scheduled starting and completion dates. **(40 CFR §61.154(j)(1))**
 - b. Reason for disturbing the waste. **(40 CFR §61.154(j)(2))**
 - c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the AQD may require changes in the emission control procedures to be used. **(40 CFR §61.154(j)(3))**
 - d. Location of any temporary storage site and the final disposal site. **(40 CFR §61.154(j)(4))**

See Appendix 8-S3

VIII. STACK/VENT RESTRICTION(S)

Not applicable

IX. OTHER REQUIREMENT(S)

Not applicable

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D-3. FLEXIBLE GROUP CONDITIONS

Part D outlines terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE D-3

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGLGCS	Landfill Gas Collection System(s)	EUALGCS, EUVENTFLARE
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANER

FGLGCS FLEXIBLE GROUP CONDITIONS

DESCRIPTION – The landfill gas collection systems, consisting of the active collection system and the passive vent flares.

Emission Unit: EUALGCS and EUVENTFLARE

POLLUTION CONTROL EQUIPMENT

Open flare and/or the landfill gas is treated by a treatment system before the landfill gas is used as fuel in four internal combustion engines or sold for subsequent use are used to control the landfill gas collected by the active system. Various vent flares control the landfill gas in areas equipped within a passive gas collections system.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the landfill gas collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: **(40 CFR Part 60 Subpart WWW §60.753(a), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. Five years or more if active. **(40 CFR Part 60 Subpart WWW §60.753(a)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. Two years or more if closed or at final grade. **(40 CFR Part 60 Subpart WWW §60.753(a)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The permittee shall operate the active landfill gas collection system with negative pressure at each wellhead except under the following conditions: **(40 CFR Part 60 Subpart WWW §60.753(b), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. A fire or increased well temperature. The permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR Part 60 Subpart WWW §60.757(f)(1). **(40 CFR Part 60 Subpart WWW §60.753(b)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. Use of a geo-membrane or synthetic cover. The permittee shall develop acceptable pressure limits in the design plan. **(40 CFR Part 60 Subpart WWW §60.753(b)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - c. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the AQD. **(40 CFR Part 60 Subpart WWW §60.753(b)(3), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. Except as described below, the permittee shall operate each interior wellhead in the landfill gas collection system with a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The permittee may establish a higher nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. Upon completion of the horizontal collection system the permittee shall monitor temperature. **(40 CFR Part 60 Subpart WWW §60.753(c), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

- a. For Site 1, Old Wayne, and Fons, as approved by U.S. EPA, at the conclusion of the first year of operating a passive collection and control system the permittee shall review all information collected from the data logger attached to each vent flare. In the case that a vent has operated less than 20% of one year (i.e. less than 1752 hours), then the vent may be removed and the location converted to a passive vent. No further monthly monitoring will be required of the location. Removal of flares will be reported in the semiannual NSPS report. Data logger records for all passive vent flares will be kept on site for a minimum of five years. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)&(c), U.S EPA approved Final Control Plan, pages 24 and 63)**
- b. In the case, all passive flares within each landfill have been removed or the permittee is no longer obligated to control emissions in accordance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(v), the permittee will cease to monitor surface emissions of methane within that landfill. **(40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 62 Subpart GGG §62.14353(b), 40 CFR Part 63 Subpart AAAA §63.1955(a)&(c), U.S EPA approved Final Control Plan, page 63)**
4. Except as described below, the permittee shall operate the landfill gas collection system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. **(40 CFR Part 60 Subpart WWW §60.753(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
For Site 1, Old Wayne, and Fons, as approved by U.S. EPA, the requirement to close valves within 1 hour in the event of control device malfunction is satisfied by following the vent flare manufacturer's specified maintenance and test procedures. **(40 CFR Part 60 Subpart WWW §60.753(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 63 Subpart AAAA §63.1955(a)&(c), U.S. EPA approved Final Control Plan)**
5. Except as described below, the permittee shall operate a control or treatment system at all times when the collected gas is routed to the system. **(40 CFR Part 60 Subpart WWW §60.753(f), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
For Site 1, Old Wayne, and Fons, as approved by U.S. EPA, the requirement to operate the vent flare at all times when the collected gas is routed to it is satisfied by the continuous ignition system and following the vent flare manufacturer's specified maintenance and test procedures. **(40 CFR Part 60 Subpart WWW §60.753(e) & §60.752(b)(2)(i)(C), 40 CFR Part 63 Subpart AAAA §63.1955(a)&(c), 40 CFR Part 62 Subpart GGG §62.14354(b), U.S. EPA approved Final Control Plan)**
6. If monitoring demonstrates that the operational requirements in 40 CFR Part 60 Subpart WWW §60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR Part 60 Subpart WWW §60.755(a)(3) through (5) or 40 CFR Part 60 Subpart WWW §60.755(c). If corrective actions are taken as specified in 40 CFR Part 60 Subpart WWW §60.755, the monitored exceedance is not a violation of the operational requirements in this section and is not considered to be a deviation as specified in General Requirement 23, 24, 28 or 29 of Part A. **(40 CFR Part 60 Subpart WWW §60.753(g), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(2), the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the AQD, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards. **(40 CFR Part 60 Subpart WWW §60.755(a)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
2. The permittee is not required to expand the landfill gas collection system as required in 40 CFR Part 60 Subpart WWW §60.755(a)(3) during the first 180 days after landfill gas collection system start-up. **(40 CFR Part 60 Subpart WWW §60.755(a)(4), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. The permittee may seek to demonstrate compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(4) through the use of a landfill gas collection system not conforming to the specifications provided in 40 CFR Part 60 Subpart WWW §60.759 by providing information satisfactory to the AQD as specified in 40 CFR Part 60

- Subpart WWW §60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled. **(40 CFR Part 60 Subpart WWW §60.755(a)(6), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
4. The permittee may seek to install a landfill gas collection system that does not meet the specifications in 40 CFR Part 60 Subpart WWW §60.759 or may seek to monitor alternative parameters to those required by 40 CFR Part 60 Subpart WWW §60.753 through §60.756 by providing information satisfactory to the AQD as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B) and (C) describing the design and operation of the alternate landfill gas collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. **(40 CFR Part 60 Subpart WWW §60.756(e), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 5. For purposes of compliance with 40 CFR Part 60 Subpart WWW §60.753(a), the permittee shall place each well or design component as specified in the approved design plan as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: **(40 CFR Part 60 Subpart WWW §60.755(b), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. Five years or more if active. **(40 CFR Part 60 Subpart WWW §60.755(b)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. Two years or more if closed or at final grade. **(40 CFR Part 60 Subpart WWW §60.755(b)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

Not applicable.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor the nitrogen level of the landfill gas using Method 3 A or 3C of appendix A of 40 CFR Part 60, unless an alternative test method is established as allowed by 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i). **(40 CFR Part 60 Subpart WWW §60.753(c)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

OR

The permittee shall monitor the oxygen level of the landfill gas using an oxygen meter as provided in Method 3A or 3C of appendix A of 40 CFR Part 60, except: **(40 CFR Part 60 Subpart WWW §60.753(c)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

- a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span. **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(i), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- b. A data recorder is not required. **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(ii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- c. Only two calibration gases are required, a zero and span, and ambient air may be used as the span. **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(iii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- d. A calibration error check is not required. **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(iv), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- e. The allowable sample bias, zero drift, and calibration drift are plus or minus 10 percent. **(40 CFR Part 60 Subpart WWW §60.753(c)(2)(v), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
- f. An alternative test method may be established as allowed by 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i). **(40 CFR Part 60 Subpart WWW §60.753(c)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

2. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR Part 60 Subpart WWW §60.752(b)(2)(ii)(A)(1), the permittee shall use the equations provided in 40 CFR Part 60 Subpart WWW §60.755(a)(1)(i) or (ii). The k and Lo kinetic factors should be those published the most recent Compilation Air Pollutant Emission Factors (AP-42) or other site-specific values demonstrated to be appropriate and approved by the AQD. If k has determined as specified in 40 CFR Part 60 Subpart WWW §60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure. **(40 CFR Part 60 Subpart WWW §60.755(a)(1), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - a. If a landfill gas collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR Part 60 Subpart WWW §60.755(a)(1)(i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR Part 60 Subpart WWW §60.755(a)(1)(i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. **(40 CFR Part 60 Subpart WWW §60.755(a)(1)(iii), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
3. Except as provided in the U.S. EPA approved Final Control Plan, for the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR Part 60 Subpart WWW §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the landfill gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternate timeline for correcting exceedances may be submitted to the AQD for approval. **(40 CFR Part 60 Subpart WWW §60.755(a)(5), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(C), 40 CFR Part 63 Subpart AAAA §63.1955(c), U.S. EPA approved Final Control Plan, pages 51 and 52)**
4. For Site 1, Old Wayne, and Fons, as approved by U.S. EPA, the permittee shall monitor and record, on a monthly basis, the vent flare inlet pressure and, for each vent flare and vent, the methane content of the gas. **(40 CFR Part 60 Subpart WWW §60.753(b)(2), 40 CFR Part 62 Subpart GGG §62.14354(b), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
5. Except as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall keep the following records:
 - a. A plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector shall be kept on file for the life of the collection system. **(40 CFR Part 60 Subpart WWW §60.758(d), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - b. The installation date and location of all newly installed collectors as specified under 40 CFR Part 60 Subpart WWW §60.755(b). **(40 CFR Part 60 Subpart WWW §60.758(d)(1), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - c. Documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 40 CFR Part 60 Subpart WWW 60.759(a)(3)(i) as well as any non-productive areas excluded from collection as provided in 40 CFR Part 60 Subpart WWW §60.759(a)(3)(ii). **(40 CFR Part 60 Subpart WWW §60.758(d)(2), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**
 - d. Except as provided in 40 CFR Part 60 Subpart WWW §60.752(b)(2)(i)(B), the permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR Part 60 Subpart WWW §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. **(40 CFR Part 60 Subpart WWW §60.758(e), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1955(a))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit the annual report every 6 months of the recorded information in 40 CFR Part 60 Subpart WWW §60.757(f) to the AQD by March 15 and September 15 of each calendar year. **(40 CFR Part 60 Subpart WWW §60.757(f), 40 CFR Part 62 Subpart GGG §62.14355(a), 40 CFR Part 63 Subpart AAAA §63.1980(a))**

See Appendix 8-S3

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: See above.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than 5 percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than 10 square feet. **(R 336.1281(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20%, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to Special Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of compliance pursuant to Special Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Special Conditions 19 and 20 of Part A. Due annually by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-S3

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E-3. NON-APPLICABLE REQUIREMENTS

At the time of ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1-S3. Abbreviations & Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
Acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
Dscf	Dry standard cubic foot	pph	Pound per hour
Dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
Hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
Lb	Pound	TAC	Toxic Air Contaminant
M	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
Mg	Milligram	VOC	Volatile Organic Compounds
Mm	Millimeter	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

Appendix 2-S3. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. **(R 336.1213(4)(a), R 336.1119(a)(ii))**

Appendix 3-S3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 4-S3. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 5-S3. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 6-S3. Permits to Install

There are no Permits to Install associated with Section 3 of this ROP.

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-M4782-2010.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201300083/ August 27, 2013	<ul style="list-style-type: none"> • Rule citation clarified to include subparts • EULANDFILL, EUALGCS and FGLGCS updates to pollution control equipment description 	EULANDFILL EUALGCS FGLGCS

Appendix 7-S3. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 8-S3. Reporting

A. Annual, Semi-annual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semi-annual and deviation certification reporting referenced in the Reporting section of the source-wide, emission unit and/or flexible group special conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) when submitting any other reports related to facility compliance including, but not limited to, annual Michigan Air Emissions Reporting System (MAERS) submittals, reports submitted pursuant to Rule 912, and stack testing. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor. **(R 336.1213(3))**