## MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

EFFECTIVE DATE: January 18, 2024

**ISSUED TO** 

Republic Services of Michigan IV, LLC
Whitefeather Landfill

and

**Energy Developments Pinconning, LLC** 

State Registration Number (SRN): N5985

**LOCATED AT** 

2401 East Whitefeather Road, Pinconning, Bay County, Michigan 48650

and

2403 East Whitefeather Road, Pinconning, Bay County, Michigan 48650

## RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N5985-2024

Expiration Date: January 19, 2029

Administratively Complete ROP Renewal Application Due Between July 19, 2027 and July 19, 2028

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, 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 Act 451 and the federal Clean Air Act.

## SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N5985-2024

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, 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 Act 451 and the federal Clean Air Act.

Chris Hare, Bay City District Supervisor	-

Michigan Department of Environment, Great Lakes, and Energy

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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 Environment, Great Lakes, and Energy (EGLE) 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 are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, 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 - REPUBLIC SERVICES OF MICHIGAN IV, LLC WHITEFEATHER LANDFILL

## A. 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 PTI pursuant to Rule 201(2)(d) are designated by footnote one. (R 336.1213(5)(a), R 336.1214a(5))
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. (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 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 (USEPA) 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 USEPA 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 Rule 215 and Rule 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 the 1976 PA 442, MCL §15.231 et seq., and known as the

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Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. (R 336.1213(1)(e))

- 6. A challenge by any person, the Administrator of the USEPA, 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).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. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, 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 the following:"2 (R 336.1301(1))
  - 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.

The grading of visible emissions shall be determined in accordance with Rule 303.

- 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.1 (R 336.1901(a))
  - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901(b))

## 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).2 (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(5))

## 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 state 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 AQD District Office and to the USEPA 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 AQD District Office 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 USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. (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.

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- 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.
  - 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 AQD District Office. 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 AQD District Office. 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 AQD 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.2 (R 336.1912)

#### **Permit Shield**

- 26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as (R 336.1213(6)(a)(i), of the date of ROP issuance if either of the following provisions is satisfied. R 336.1213(6)(a)(ii))
  - a. The applicable requirements are included and are specifically identified in the ROP.
  - b. 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:
  - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. (R 336.1213(6)(b)(i))
  - b. 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))
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))

Section 1

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- d. The ability of the USEPA 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:
  - a. Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5))
  - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii))
  - c. 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))
  - d. Minor Permit Modifications made pursuant to Rule 216(2). (R 336.1216(2)(f))
  - e. 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 do 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(2))
- 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(10))
- 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)(iii), 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(9))

## **Stratospheric Ozone Protection**

- 36. If the permittee is subject to Title 40 of the Code of Federal Regulations (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 USEPA 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 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR 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 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
  - a. June 21, 1999,
  - b. Three years after the date on which a regulated substance is first listed under 40 CFR 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 USEPA 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.<sup>2</sup> (R 336.1201(1))

- 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.<sup>2</sup> (R 336.1201(8), Section 5510 of Act 451)
- 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, EGLE.<sup>2</sup> (R 336.1219)
- 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 of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, 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, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 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.<sup>2</sup> (R 336.1201(4))
- 47. Each Responsible Official shall certify annually the compliance status of the stationary source with all stationary Source-Wide conditions. This certification shall be included as part of the annual certification of compliance as required in the General Conditions in Part A and Rule 213(4)(c). (R 336.1213(4)(c))

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## **B. 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. EMISSION UNIT SPECIAL 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<34	A Municipal Solid Waste (MSW) landfill that commenced construction, reconstruction, or modification on or before July 17, 2014, and has accepted waste at any time since November 8, 1987. The MSW landfill has a design capacity greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters, and actual NMOC emissions less than 34 Mg per year. This MSW landfill is subject to the requirements of 40 CFR Part 62, Subpart OOO and 40 CFR Part 63, Subpart AAAA.	11-14-1989 10-07-2008	FGLANDFILL-OOO<34 FGLANDFILL-AAAA<34
EUOPENFLARE	Open flare is an open combustor without enclosure or shroud. This emission unit is operated as exempt per Rule 285(2)(aa).	11-14-2006	NA
EUENCLOSEDFLARE	An enclosed flare is considered an enclosed combustor which is an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. This emission unit is operated as exempt per Rule 285(2)(aa).	01-01-1997	NA
EULANDFILL- ASBESTOS	This landfill is actively accepting or has accepted asbestos waste in the past.	11-14-1989	FGLANDFILL-OOO<34 FGLANDFILL-AAAA<34
EUCOLDCLEANER	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a, and Rule 281(2)(h) or Rule 285(2)(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. The cold cleaner is used for degreasing various parts and small equipment and is located in the maintenance garage.	> 1979	FGCOLDCLEANERS

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUGASOLINETANK	One (1) 300-galllon gasoline storage tank subject to the National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subpart CCCCC with a monthly throughput less than 10,000 gallons of gasoline.	01-27-2020	FGMACTCCCCC

## **EULANDFILL-ASBESTOS EMISSION UNIT CONDITIONS**

## **DESCRIPTION**

This landfill is actively accepting or has accepted asbestos waste in the past.

Flexible Group ID: FGLANDFILL-OOO<34, FGLANDFILL-AAAA<50

## 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. The warning signs must: (40 CFR 61.154(b)(1))
      - (1) Be posted in such a manner and location that a person can easily read the legend; (40 CFR 61.154(b)(1)(i))
      - (2) Conform to the requirements of 51 cm by 36 cm (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))
      - (3) 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

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> 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))

## IV. DESIGN/EQUIPMENT PARAMETERS

1. Any segregated area of asbestos or non-degradable material may be excluded from collection if documented as provided under 40 CFR 62.16726(d) and 40 CFR 63.1983(d). The documentation must provide the nature, date of deposition, location, and amount of asbestos or non-degradable material deposited in the area and shall be provided to the AQD upon request. (40 CFR 62.16728(a)(3)(i), 40 CFR 63.1962(a)(3)(i))

## 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. 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))
    - 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 USEPA 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 USEPA 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 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 USEPA 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. Describe the discrepancy and attempts to reconcile it and submit a copy of the waste shipment record along with the report. (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 must keep readily accessible 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 62.16728(a)(3)(i) and 40 CFR 63.1962(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 62.16728(a)(3)(ii) and 40 CFR 63.1962(a)(3)(ii). (40 CFR 62.16726(d)(2), 40 CFR 63.1983(d)(2))

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4. The permittee shall keep records of one the following regarding any active disposal site where asbestos containing materials have been deposited:

- a. USEPA Testing Method 22 readings demonstrating no visible emissions from any active disposal site where asbestos containing materials have been deposited. These readings are to be taken for 15 minutes each operating day: (R 336.1213(3))
- b. Records of the date asbestos waste is received, the amount and type of material that has been used to cover the asbestos waste, and documentation that the cover material was applied in the frequency required in SC III.1.c of this table; (40 CFR 61.154(c))
- Records pursuant to an alternative emissions control method that has prior written approval of the AQD District Supervisor as noted in SC III.1.d of this table. (40 CFR 61.154(d))

## 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 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 AQD Technical Programs Unit and 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. Include the following information in the notice: (40 CFR 61.154(j))
  - 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 or 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 8-1

#### VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

1. The permittee must comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants for Asbestos as specified in 40 CFR Part 61, Subparts A and M. (40 CFR Part 61, Subparts A and M)

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2. The permittee must comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills as specified in 40 CFR Part 63, Subparts A and AAAA) (40 CFR Part 63, Subparts A and AAAA)

## D. FLEXIBLE GROUP SPECIAL 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
FGLANDFILL-000<34	A Municipal Solid Waste (MSW) landfill that commenced construction, reconstruction, or modification on or before July 17, 2014, and has accepted waste at any time since November 8, 1987. The MSW landfill has a design capacity greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters, but actual NMOC emissions less than 34 Mg per year. This MSW landfill is subject to the requirements of 40 CFR Part 62, Subpart OOO.	EULANDFILL<34 EULANDFILL-ASBESTOS
FGLANDFILL-AAAA<50	A Municipal Solid Waste (MSW) landfill that has accepted waste at any time since November 8, 1987. The MSW landfill has a design capacity greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters, actual NMOC emissions less than 50 Mg per year as calculated according to 40 CFR 63.1959 and is collocated at a major source as defined in 40 CFR 63.2. This MSW landfill is subject to the requirements of 40 CFR Part 63, Subpart AAAA.	EULANDFILL<34 EULANDFILL-ASBESTOS
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a, and Rule 281(2)(h) or Rule 285(2)(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. The cold cleaner is used for degreasing various parts and small equipment and is located in the maintenance garage.	EUCOLDCLEANER
FGMACTCCCCC	Any tank subject to the National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subpart CCCCCC with a monthly throughput less than 10,000 gallons of gasoline.	EUGASOLINETANK

## FGLANDFILL-000<34 FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

A Municipal Solid Waste (MSW) landfill that commenced construction, reconstruction, or modification on or before July 17, 2014, and has accepted waste at any time since November 8, 1987. The MSW landfill has a design capacity greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters, but actual NMOC emissions less than 34 Mg per year. This MSW landfill is subject to the requirements of 40 CFR Part 62, Subpart OOO.

Emission Unit: EULANDFILL, EULANDFILL-ASBESTOS

#### POLLUTION CONTROL EQUIPMENT

No pollution control equipment is required by 40 CFR Part 62, Subpart OOO at this time; however, landfill gas from the landfill is controlled by one open flare and one landfill gas-to-energy facility (owned and operated by Energy Developments Pinconning, LLC - Section 2, formerly SRN P0437). An enclosed flare is on-site and can be reconnected to the gas collection lines if necessary.

## I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. <u>TESTING/SAMPLING</u>

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

- 1. The permittee shall determine the NMOC mass emission rate by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using procedures and calculations, as described in Appendices 5-1 and 7-1. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the appropriate AQD District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the appropriate AQD District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 62.16714(e)(1), 40 CFR 62.16718(a)(1))
  - a. Upon completion of each Tier test, the permittee must compare the results to the NMOC mass emission rate standard of 34 Mg per year. If the results are equal to or greater than 34 Mg per year, then the permittee may perform the next higher tier test or submit a gas collection and control system design plan within one year as specified in 40 CFR 62.16724(d) and install and operate a gas collection and control system within 30 months according to 40 CFR 62.16714(b) and (c). (40 CFR 62.16718(a)(2), (3), and (4))
  - b. Tier 1 or Tier 2 NMOC emission results must be recalculated annually if the NMOC mass emission rate is less than 34 Mg per year. (40 CFR 62.16718(a)(2) and (3))

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- c. Tier 2 testing must be performed at least once every five years when being used to demonstrate the facility NMOC emissions are less than 34 Mg per year. (40 CFR 62.16718(a)(3))
- d. Tier 3 testing must be performed to determine a site-specific methane generation rate constant. (40 CFR 62.16718(a)(4))
- e. Tier 4 testing to determine surface methane emissions, as described in Appendix 5-1, is allowed only if the permittee can demonstrate that NMOC emissions are greater than or equal to 34 Mg per year but less than 50 Mg per year using Tier 1 or Tier 2. If both Tier 1 and Tier 2 indicate NMOC emissions are 50 Mg per year or greater, then Tier 4 cannot be used. (40 CFR 62.16718(a)(6))
- Tier 4 testing is allowed to demonstrate that surface methane emissions are below the standard of 500 ppm. Surface emission monitoring must be conducted on a quarterly basis. (40 CFR 62.16718(a)(6))
- If there is any measured concentration of methane of 500 ppm or greater from the surface of the landfill, the permittee must submit a gas collection and control system design plan within 1 year of the first measured concentration of methane of 500 ppm or greater from the surface of the landfill according to 40 CFR 62.16724(d) and install and operate a gas collection and control system according to 40 CFR 62.16714(b) and (c) within 30 months of the most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 Mg per year based on Tier 2. (40 CFR 62.16718(a)(6)(v))
- 2. The permittee may use other methods to determine the NMOC concentration or a site-specific methane generation rate constant as an alternative to the methods required in Tier 2 (40 CFR 62.16718(a)(3)) and Tier 3 (40 CFR 62.16718(a)(4)) if the method has been approved by USEPA prior to submitting a test protocol to AQD. (40 CFR 62.16718(a)(5))

See Appendices 5-1 and 7-1

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must calculate the annual NMOC emission rates using methods outlined in Appendix 7-1. (40 CFR 62.16718(a)(1))
- 2. Except as provided in 40 CFR 62.16724(d)(2), each MSW landfill subject to the provisions of 40 CFR 62.16714(e) must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered 40 CFR 62.16714(e), 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 4 hours. Either paper copy or electronic formats are acceptable. (40 CFR 62.16726(a))
- 3. If the landfill is permanently closed, a closure notification shall be submitted to the appropriate AQD District Supervisor within 30 days, except for exemption allowed under 40 CFR 62.16711(g)(4). 62.16714(e)(1)(ii)(B))
- 4. If reporting leachate or other liquids addition under 40 CFR 62.16724(I), the permittee must keep records of any engineering calculations or company records used to estimate the quantities of leachate or liquids added, the surface areas for which the leachate or liquids were applied, and the estimates of annual waste acceptance or total waste in place in the areas where leachate or liquids were applied. (40 CFR 62.16726(i))

## See Appendix 7-1

#### 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. 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))

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- 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 must submit the NMOC emission rate report to the Administrator annually following the procedure specified in 40 CFR 62.16724(j)(2), except as provided for in 40 CFR 62.16724(c)(3). The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate. (40 CFR 62.16724(c))
  - a. The NMOC emission rate report must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 62.16718(a) or (b), as applicable. (40 CFR 62.16724(c)(1))
  - b. The NMOC emission rate report must include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. (40 CFR 62.16724(c)(2))
  - c. If the estimated NMOC emission rate as reported in the annual report is less than 34 Mg per year in each of the next 5 consecutive years, the permittee may elect to submit, following the procedure specified in 40 CFR 62.16724(j)(2), an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate must include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based must be provided. This estimate must be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate must be submitted. The revised estimate must cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. (40 CFR 62.16724(c)(3))
- 5. The permittee must submit reports electronically according to 40 CFR 62.16724(j)(1) and (2) as follows:
  - a. Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee must submit the results of each performance test. For data collected using test methods supported by the (ERT) Electronic Reporting Tool as listed on the EPA's ERT (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test, submit the results of the performance test to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternative file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website, once the XML schema is available. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, submit the results of the performance test to the USEPA at the appropriate address listed in 40 CFR 60.4. (40 CFR 62.16724(j)(1)(i) and (ii))
  - b. Each permittee must submit reports to the USEPA via the CEDRI (CEDRI can be accessed through the EPA's CDX). The permittee must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (https://www.epa.gov/chief). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the USEPA at the appropriate address listed in 40 CFR 60.4. Once the form has been available in CEDRI for 90 calendar days, the permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. (40 CFR 62.16724(j)(2))
- 6. The permittee shall submit any NMOC test reports to the appropriate AQD District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))
- 7. Annually, the permittee must submit a liquids addition report, to the appropriate AQD District Office, within 365 days after the date the previous report was submitted with the following information:
  - a. Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates); (40 CFR 62.16724(I)(1))
  - b. Total volume of all other liquids added (gallons per year) and the reported basis of those estimates (records or engineering estimates); (40 CFR 62.16724(I)(2))
  - c. Surface area (acres) over which the leachate is recirculated (or otherwise applied); (40 CFR 62.16724(I)(3))

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- d. Surface area (acres) over which any other liquids are applied: (40 CFR 62.16724(I)(4))
- e. The total waste disposed (megagrams) in the areas with recirculated leachate and/or added liquids based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates: (40 CFR 62.16724(I)(5))
- The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate and/or added liquids, based on on-site records to the extent data are available, or engineering estimates; (40 CFR 62.16724(I)(6)
- The initial report must contain items (a) through (f) for the initial annual reporting period as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than June 21, 2022. Subsequent annual reports must contain items (a) through (f) and be submitted no later than 365 days after the date the previous report was submitted and contain data for the most recent 365 days. (40 CFR 62.16724(I)(7))

See Appendix 8-1

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

- 1. If the NMOC emission rate is calculated to be equal to or greater than 34 Mg per year, the permittee must install a collection and control system in compliance with 40 CFR 62.16714(b) and (c) or conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in Appendix 5-1 if Tier 1 or 2 testing demonstrates NMOC emissions less than 50 Mg per year. If the permittee chooses or is required to install a gas collection and control system, they must submit a gas collection and control system design plan within one year as specified in 40 CFR 62.16724(d) and install and operate a gas collection and control system within 30 months according to 40 CFR 62.16714(b) and (c). Additionally, within 90 days of determining NMOC emissions are above 34 Mg per year, the permittee shall apply for a revision of this permit to reflect applicable requirements of 40 CFR Part 62, Subpart OOO. (R 336.1216(2), 40 CFR 62.16718(a)(4)(i)(A) and (B))
- 2. The permittee is exempted from the requirements to submit an NMOC emission rate report, after installing a collection and control system that complies with 40 CFR 62.16714(b) and (c), during such time as the collection and control system is in operation and in compliance with 40 CFR 62.16716 and 40 CFR 62.16720. (40 CFR 62.16724(c)(4))
- 3. The permittee shall comply with all applicable provisions of the Federal Plan Requirements for Municipal Solid Waste Landfills as specified in 40 CFR Part 62, Subparts A and OOO. (40 CFR Part 62, Subparts A and OOO)
- 4. The permittee must comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills as specified in 40 CFR Part 63, Subparts A and AAAA. (40 CFR Part 63, Subparts A and AAAA)

## FGLANDFILL-AAAA<50 FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

A Municipal Solid Waste (MSW) landfill that has accepted waste at any time since November 8, 1987. The MSW landfill has a design capacity greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters, actual NMOC emissions less than 50 Mg per year as calculated according to 40 CFR 63.1959 and is collocated at a major source as defined in 40 CFR 63.2. This MSW landfill is subject to the requirements of 40 CFR Part 63, Subpart AAAA.

Emission Units: EULANDFILL, EULANDFILL-ASBESTOS

## **POLLUTION CONTROL EQUIPMENT**

No pollution control equipment is required by 40 CFR Part 63, Subpart AAAA at this time; however, landfill gas from the landfill is controlled by one open flare and one landfill gas-to-energy facility (owned and operated by Energy Developments Pinconning, LLC - Section 2, formerly SRN P0437). An enclosed flare is on-site and can be reconnected to the gas collection lines if necessary.

## I. <u>EMISSION LIMIT(S)</u>

NA

## II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (40 CFR 63.1955(c))

#### IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

#### V. TESTING/SAMPLING

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

- The permittee shall determine the NMOC mass emission rate utilizing procedures and calculations as described in Appendices 5-1 and 7-1 and in accordance with the Department requirements. (R 336.1213(3), 40 CFR 63.1959(a)(1))
- 2. For Tier 2 NMOC emissions determination, no less than 30 days prior to testing, the permittee shall submit a complete test plan to the appropriate AQD District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the appropriate AQD District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1959(a)(3)(i))
- 3. Upon completion of any Tier 1, 2, or 3 NMOC determination, the permittee must compare the results to the NMOC mass emission rate standard of 50 Mg per year. If the results are equal to or greater than 50 Mg per year, then the permittee may perform the next higher tier determination or submit a gas collection and control system design

plan within one year as specified in 40 CFR 63.1981(d) and install and operate a gas collection and control system within 30 months according to 40 CFR 63.1959(b)(2)(ii) and (iii). (40 CFR 63.1959(a)(2)(i and ii), 40 CFR 63.1959(a)(3)(iv), 40 CFR 63.1959(a)(4)(i), 40 CFR 63.1959(b)(1)(ii)(A))

- 4. NMOC emission results must be recalculated annually if the NMOC mass emission rate is less than 50 Mg per year. (40 CFR 63.1959(a))
- 5. Tier 2 testing to determine site specific NMOC concentration must be performed at least once every five years when being used to demonstrate the facility NMOC emissions are less than 50 Mg per year. (40 CFR 63.1959(a)(3)(iii))
- 6. Tier 3 testing must be performed to determine a site-specific methane generation rate constant if the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is greater than or equal to 50 Mg/yr. (40 CFR 63.1959(a)(4))

See Appendices 5-1 and 7-1

## VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must calculate the annual NMOC emission rates using methods outlined in Appendices 5-1 and 7-1. This shall be performed annually until such time as the calculated NMOC emission rate is equal to or greater than 50 Mg/yr or the landfill is closed. (40 CFR 63.1959(b)(1)(ii))
- 2. Except as provided in 40 CFR 63.1981(d)(2), each MSW landfill subject to the provisions of 40 CFR 63.1959(b)(ii) and (iii) must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered 40 CFR 63.1959(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 4 hours. Either paper copy or electronic formats are acceptable. (40 CFR 63.1983(a))
- 3. If the landfill is permanently closed, a closure notification shall be submitted to the AQD District Supervisor within 30 days, except for exemption allowed under 40 CFR 63.1981(f). (40 CFR 63.1959(b)(1)(ii)(B))

#### See Appendices 5-1 and 7-1

#### 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. 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 must submit an NMOC emission rate report to the Administrator annually following the procedure specified in 40 CFR 63.1981(c)(1)(ii). (40 CFR 63.1981(c))
  - a. The NMOC emission rate report must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 63.1959(a) or (b), as applicable. (40 CFR 63.1981(c)(1))
  - b. The NMOC emission rate report must include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. (40 CFR 63.1981(c)(2))
  - If the estimated NMOC emission rate as reported in the annual report is less than 50 Mg per year in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for

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the next 5-year period in lieu of the annual report. This estimate must include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based must be provided. This estimate must be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate must be submitted. The revised estimate must cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. (40 CFR 63.1981(c)(1)(ii)(A))

- 5. The permittee must submit reports electronically according to 40 CFR 63.1981(I)(1) and (2) as follows:
  - a. Within 60 days after the date of completing each performance test, the permittee must submit the results of each performance test. For data collected using test methods supported by the USEPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<a href="https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert">https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert</a>) at the time of the test, submit the results of the performance test to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI can be accessed through the EPA's CDX (<a href="https://cdx.epa.gov/">https://cdx.epa.gov/</a>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternative file format consistent with the extensible markup using the language (XML) schema listed on the EPA's ERT website, once the XML schema is available. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, include the results of the performance test as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website and submit the ERT generated package or alternative file to the EPA via CEDRI. (40 CFR 63.1981(I)(1)(i) and (ii))
  - b. Each permittee must submit reports to the USEPA via the CEDRI (CEDRI can be accessed through the EPA's CDX). The permittee must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<a href="https://www.epa.gov/chief">https://www.epa.gov/chief</a>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the USEPA at the appropriate address listed in 40 CFR 63.13. Once the form has been available in CEDRI for 90 calendar days, the permittee must begin submitting all subsequent reports via CEDRI. The NMOC emission rate reports, semi-annual reports, and bioreactor 40-percent moisture reports should be electronically reported as a spreadsheet template upload/form to CEDRI. (40 CFR 63.1981(I)(2))
- 6. The permittee shall submit any NMOC test reports to the appropriate AQD District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendix 8-1

## VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

- 1. If the NMOC emission rate is calculated to be equal to or greater than 50 Mg per year using Tier 1, 2, or 3 procedures, the permittee must either calculate NMOC emissions using the next higher tier procedure or submit a collection and control system design plan within one year as specified in 40 CFR 63.1981(d) and install and operate a gas collection and control system within 30 months according to 40 CFR 63.1959(b)(2)(ii)(B) or (C) and 40 CFR 63.1959(b)(2)(iii). Additionally, within 90 days of determining NMOC emissions are above 50 Mg per year, the permittee shall apply for a revision of this permit to reflect applicable requirements of 40 CFR Part 63, Subpart AAAA. (R 336.1216(2), 40 CFR 63.1959(a)(2)(i) and (ii))
- 2. The permittee is exempted from the requirements to submit an NMOC emission rate report, after installing a collection and control system that complies with 40 CFR 63.1959(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 63.1958 and 40 CFR 63.1960. (40 CFR 63.1981(c)(3))

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3. The permittee must comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills as specified in 40 CFR Part 63, Subparts A and AAAA) (40 CFR Part 63, Subparts A and AAAA)

## FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a, and Rule 281(2)(h) or Rule 285(2)(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. The cold cleaner is used for degreasing various parts and small equipment and is located in the maintenance garage.

**Emission Unit:** EUCOLDCLEANER

## **POLLUTION CONTROL EQUIPMENT**

NA

## I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five 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. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 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 ten square feet; (R 336.1281(2)(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(2)(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:

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- 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

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))

- 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(2)(h);
  - d. The applicable Rule 201 exemption;
  - e. The Reid vapor pressure of each solvent used;
  - If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, used in each cold cleaner. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1213(3))
- 4. 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))
- 5. 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 percent, 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 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 8-1

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## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

NA

## FGMACTCCCCC FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Any tank subject to the National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subpart CCCCCC with a monthly throughput less than 10,000 gallons of gasoline.

**Emission Unit:** EUGASOLINETANK

## POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

NA

II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.11115(a))
- 2. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to the following:
  - a. Minimize gasoline spills; (40 CFR 63.11116(a)(1))
  - b. Clean up spills as expeditiously as practicable; (40 CFR 63.11116(a)(2)
  - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; (40 CFR 63.11116(a)(3))
  - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators; (40 CFR 63.11116(a)(4))
  - e. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F are considered acceptable for compliance with 40 CFR 63.11116(a)(3). **(40 CFR 63.11116(d))**

#### 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 is not required to submit notifications or reports as specified in 40 CFR 63.11125, 40 CFR 63.11126, or 40 CFR Part 63, Subpart A, but must have records available within 24 hours of a request by the Administrator to document gasoline throughput. (40 CFR 63.11116(b))

- 2. The permittee shall keep records as specified:
  - a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment; (40 CFR 63.11125(d)(1))
  - b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.11125(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. 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 8-1

#### VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and CCCCC for Gasoline Dispensing Facilities. (40 CFR Part 63, Subparts A and CCCCCC)

## E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision is no longer valid for that emission unit or flexible group.

## **APPENDICES**

Appendix 1-1. Acronyms and Abbreviations

Appendix 1-1	Appendix 1-1. Acronyms and Abbreviations			
	Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute	
BACT	Best Available Control Technology	BTU	British Thermal Unit	
CAA	Clean Air Act	°C	Degrees Celsius	
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide	
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent	
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot	
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter	
СОМ	Continuous Opacity Monitoring	°F	Degrees Fahrenheit	
Department/	Michigan Department of Environment,	Gr	Grains	
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant	
EGLE	Michigan Department of Environment,	Hg	Mercury	
	Great Lakes, and Energy	Hr	Hour	
EU	Emission Unit	HP	Horsepower	
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide	
GACS	Gallons of Applied Coating Solids	kW	Kilowatt	
GC	General Condition	Lb	Pound	
GHGs	Greenhouse Gases	М	Meter	
HVLP	High Volume Low Pressure*	Mg	Milligram	
ID	Identification	mm	Millimeter	
IRSL	Initial Risk Screening Level	MM	Million	
ITSL	Initial Threshold Screening Level	MW	Megawatts	
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds	
MACT	Maximum Achievable Control Technology	NOx	Oxides of Nitrogen	
MAERS	Michigan Air Emissions Reporting System	Ng	Nanogram	
MAP	Malfunction Abatement Plan	PM	Particulate Matter	
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10	
NA	Not Applicable		microns in diameter	
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5	
	·		microns in diameter	
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour	
	Air Pollutants	ppm	Parts per million	
NSPS	New Source Performance Standards	ppmv	Parts per million by volume	
NSR	New Source Review	ppmw	Parts per million by weight	
PS	Performance Specification	%	Percent	
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute	
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge	
PTI	Permit to Install	Scf	Standard cubic feet	
RACT	Reasonable Available Control Technology	sec	Seconds	
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide	
SC	Special Condition	TAC	Toxic Air Contaminant	
SCR	Selective Catalytic Reduction	Temp	Temperature	
SDS	Safety Data Sheet	THC	Total Hydrocarbons	
SNCR	Selective Non-Catalytic Reduction	Тру	Tons per year	
SRN	State Registration Number	μg	Microgram	
TEQ	Toxicity Equivalence Quotient	μm	Micrometer or Micron	
USEPA/EPA	United States Environmental Protection	VOC	Volatile Organic Compounds	
	Agency	Yr	Year	
VE	Visible Emissions			

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

## Appendix 2-1. 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 3-1. 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 4-1. 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 5-1. Testing Procedures**

A. The permittee must use the following approved procedures, to measure the pollutant emissions for the applicable requirements referenced in FGLANDFILL-OOO<34. (40 CFR 62.16718(a))

#### Tier 2

The permittee must determine the site-specific NMOC concentration using the following sampling procedure. The permittee must install at least two sample probes per hectare, evenly distributed over the landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be evenly distributed across the sample area. The sample probes should be located to avoid known areas of nondegradable solid waste.

The permittee must collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using 40 CFR Part 60, Appendix A-7, Methods 25 or 25C. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If more than the required number of samples is taken, all samples must be used in the analysis. The permittee must divide the NMOC concentration from 40 CFR Part 60, Appendix A-7, Method 25 or 25C by six (6) to convert from C<sub>NMOC</sub> as carbon to C<sub>NMOC</sub> as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two-sampling probes per hectare requirement. For active collection systems, samples may be collected from the common header pipe. The sample location on the common header pipe must be before any gas moving, condensate removal, or treatment system equipment. For active collection systems, a minimum of three (3) samples must be collected from the header pipe. (40 CFR 62.16718(a)(3))

#### Tier 3

The site-specific methane generation rate constant must be determined using the procedures provided in 40 CFR Part 60, Appendix A-1, Method 2E. The permittee must estimate the NMOC mass emission rate using **Equation 1** (40 CFR 62.16718(a)(1)(i)) or **Equation 2** (40 CFR 62.16718(a)(1)(ii)) and using a site-specific methane generation rate constant (k), and the site-specific NMOC concentration as determined in 40 CFR 62.16718(a)(3) instead of the default values provided in 40 CFR 62.16718(a)(1). The permittee must compare the resulting NMOC mass emission rate to the standard of 34 Mg per year. **(40 CFR 62.16718(a)(4))** 

#### Tier 4

The permittee must demonstrate that surface methane emissions are below 500 ppm. Surface emission monitoring must be conducted on a quarterly basis using the following procedures. Tier 4 is allowed only if the permittee can demonstrate that NMOC emissions are greater than or equal to 34 Mg/yr but less than 50 Mg/yr using Tier 1 or Tier 2. If both Tier 1 and Tier 2 indicate NMOC emissions are 50 Mg/yr or greater, then Tier 4 cannot be used.

The permittee must measure surface concentrations of methane along the entire perimeter of the landfill and along a pattern that traverses the landfill at no more than 30-meter intervals using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 62.16720(d). The background concentration must be determined by moving the probe inlet upwind and downwind at least 30 meters from the waste mass boundary of the landfill.

Surface emission monitoring (SEM) must be performed in accordance with 40 CFR Part 60, Appendix A-7, Section 8.3.1 of Method 21 except that the probe inlet must be placed no more than 5 centimeters above the landfill surface; the constant measurement of distance above the surface should be based on a mechanical device such as with a wheel on a pole. The permittee must use a wind barrier, similar to a funnel, when onsite average wind speed exceeds 4 miles per hour or 2 meters per second or gust exceeding 10 miles per hour. Average on-site wind speed must also be determined in an open area at 5-minute intervals using an on-site anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier must surround the SEM monitor, and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour.

Landfill surface areas where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover, and all cover penetrations must also be monitored using a device meeting the specifications provided in 40 CFR 62.16720(d).

Each permittee seeking to comply with the Tier 4 provisions must maintain records of surface emission monitoring as provided in 40 CFR 62.16726(g) and submit a Tier 4 surface emissions report as provided in 40 CFR 62.16724(d)(4)(iii).

If a landfill has installed and operates a collection and control system that is not required by this subpart, then the collection and control system must meet the following criteria: (40 CFR 62.16718(a)(6)(viii))

- (A) The gas collection and control system must have operated for at least 6,570 out of 8,760 hours preceding the Tier 4 surface emissions monitoring demonstration.
- (B) During the Tier 4 surface emissions monitoring demonstration, the gas collection and control system must operate as it normally would to collect and control as much landfill gas as possible.
- B. The permittee must use the following approved procedures, to measure the pollutant emissions for the applicable requirements referenced in FGLANDFILL-AAAA<50. (40 CFR 63.1959(a))

#### Tier 2

The permittee must determine the site-specific NMOC concentration using the following sampling procedure. The permittee must install at least two sample probes per hectare, evenly distributed over the landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be evenly distributed across the sample area. The sample probes should be located to avoid known areas of nondegradable solid waste.

The permittee must collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using 40 CFR Part 60, Appendix A-7, Methods 25 or 25C. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If more than the required number of samples is taken, all samples must be used in the analysis. The permittee must divide

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the NMOC concentration from 40 CFR Part 60, Appendix A-7, Method 25 or 25C by six (6) to convert from C<sub>NMOC</sub> as carbon to C<sub>NMOC</sub> as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two-sampling probes per hectare requirement. For active collection systems, samples may be collected from the common header pipe. The sample location on the common header pipe must be before any gas moving, condensate removal, or treatment system equipment. For active collection systems, a minimum of three (3) samples must be collected from the header pipe. (40 CFR 63.1959(a)(3))

#### Tier 3

The site-specific methane generation rate constant must be determined using the procedures provided in 40 CFR Part 60, Appendix A-1, Method 2E. The permittee must estimate the NMOC mass emission rate using Equation 1 (40 CFR 63.1959(a)(1)(i)) or Equation 2 (40 CFR 63.1959(a)(1)(ii)) and using a site-specific methane generation rate constant (k), and the site-specific NMOC concentration as determined in 40 CFR 63.1959(a)(3) instead of the default values provided in 40 CFR 63.1959(a)(1). The permittee must compare the resulting NMOC mass emission rate to the standard of 50 Mg per year. (40 CFR 63.1959(a)(4))

## Appendix 6-1. Permits to Install

The following table lists any PTIs issued, or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N5985-2019. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-N5985-2019 is being reissued as Source-Wide PTI No. MI-PTI-N5985-2024.

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

#### **Appendix 7-1. Emission Calculations**

A. The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EULANDFILL<34.

#### **Default Values**

The permittee must calculate the NMOC emission rate using either Equation 1 (the equation provided in 40 CFR 62.16718(a)(1)(i)) or **Equation 2** (the equation provided in 40 CFR 62.16718(a)(1)(ii)(A)). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in Equation 1 (40 CFR 62.16718(a)(1)(i)(A)), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in Equation 2 (the equation provided in 40 CFR 62.16718(a)(1)(ii)(A)), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L<sub>o</sub>, and 4,000 ppm by volume as hexane for the C<sub>NMOC</sub>. For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year. (40 CFR 62.16718(a)(1))

The following equation must be used if the actual year-to-year solid waste acceptance rate is known. (40 CFR 62.16718(a)(1)(i)(A))

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 $M_{NMOC} = \sum_{i=1}^{n} 2 k L_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$ 

Where:

M<sub>NMOC</sub> = Total NMOC emission rate from the landfill, megagrams per year

 $k = methane generation rate constant, year^{-1}$ 

L<sub>o</sub> = methane generation potential, cubic meters per megagram solid waste

M<sub>i</sub> = mass of solid waste in the i<sup>th</sup> section, megagrams

t<sub>i</sub> = age of the i<sup>th</sup> section, years

C<sub>NMOC</sub> = concentration of NMOC, parts per million by volume as hexane

 $3.6 \times 10^{-9} = conversion factor$ 

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

## **Equation 2**

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown. (40 CFR 62.16718(a)(1)(ii)(A))

$$M_{NMOC} = 2L_0 R (e^{-kc} - e^{-kt}) (C_{NMOC}) (3.6 \times 10^{-9})$$

Where:

M<sub>NMOC</sub> = mass emission rate of NMOC, megagrams per year

L<sub>o</sub> = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

 $k = methane generation rate constant, year^{-1}$ 

t = age of landfill, years

C<sub>NMOC</sub> = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years; for active landfill c = 0 and  $e^{-kc}$  = 1

 $3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R, if documentation of the nature and amount of such wastes is maintained.

#### Tier 1

The permittee must calculate NMOC mass emission rate utilizing Equation 1 or 2 in **Appendix 7-1**, as applicable, and compare it to the standard of 34 Mg per year. **(40 CFR 62.16718(a)(2))** 

#### Tier 2

The permittee must recalculate the NMOC mass emission rate using **Equation 1** or **Equation 2** in **Appendix 7-1** and using the average site-specific NMOC concentration from the collected samples (**Tier 2** testing in **Appendix 5-1**) instead of the default value in the equation provided in 40 CFR 62.16718(a)(1). **(40 CFR 62.16718(a)(3)(ii))** 

If the resulting **Tier 2** NMOC mass emission rate is less than 34 Mg per year, the permittee must submit a periodic estimate of NMOC emissions in an NMOC emission rate report as provided in 40 CFR 62.16724I and must recalculate the NMOC mass emission rate annually as required under 40 CFR 62.16714I. The site-specific NMOC concentration must be retested every 5 years. **(40 CFR 62.16718(a)(3)(iii))** 

If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 34 Mg per year, then the permittee must either:

- 1. Comply with 40 CFR 62.16724(d) (submit a gas collection and control system design plan prepared by a professional engineer within 1 year); or (40 CFR 62.16718(a)(3)(iv)(A)
- Determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in Tier 3 (40 CFR 62.16718(a)(4)); or (40 CFR 62.16718(a)(3)(iv)(B))
- 3. Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in 40 CFR 62.16718(a)(6). (40 CFR 62.16718(a)(3)(iv)(C))

#### Tier 3

If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration and Tier 3 site-specific methane generation rate is equal to or greater than 34 Mg per year, the permittee must either comply with 40 CFR 62.16724(d) (submit a collection and control system design plan prepared by a professional engineer within 1 year) or conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in Appendix 5-1 and 40 CFR 62.16718(a)(6). (40 CFR 62.16718(a)(4)(i)(A))

If the NMOC mass emission rate is less than 34 Mg per year, then the permittee must recalculate the NMOC mass emission rate annually, as provided in 40 CFR 62.16718(a)(1) using **Equation 1** or **Equation 2** and using the site-specific Tier 2 NMOC concentration and Tier 3 methane generation rate constant and submit a periodic NMOC emission rate report as provided in 40 CFR 62.16724(c). The calculation of the methane generation rate constant (**Tier 3**) is performed only once, and the value obtained from this test must be used in all subsequent annual NMOC emission rate calculations. **(40 CFR 62.16718(a)(4)(ii))** 

## Calculating expected gas generation flow rates from the landfill

For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 62.16714(b)(2)(i), either **Equation 5** or **Equation 6**, below, must be used. The methane generation rate constant (k) and methane generation potential (L<sub>o</sub>) kinetic factors should be those published in the most recent AP-42 or other site-specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in 40 CFR 62.16718(a)(4), the value of k determined from the test must be used. A value of no more than 15 years must 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 62.16720(a)(1))** 

If a 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, **Equation 5** or **Equation 6**, below. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using **Equation 5** or **Equation 6**, below, or other methods must be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. **(40 CFR 62.16720(a)(1)(iii))** 

#### **Equation 5**

$$Qm = 2L_0 R (e^{-kc} - e^{-kt})$$

Where:

Q<sub>m</sub> = Maximum expected gas generation flow rate, cubic meters per year.

 $L_0$  = Methane generation potential, cubic meters per megagram solid waste.

R = Average annual acceptance rate, megagrams per year.

k = Methane generation rate constant, year-1.

t = Age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years.

c = Time since closure, years (for an active landfill c = 0 and  $e^{-kc}$  = 1).

#### **Equation 6**

$$Q_m = \sum_{i=1}^n 2 k L_o M_i (e^{-kt_i})$$

Where:

 $Q_M = Maximum$  expected gas generation flow rate, cubic meters per year.

k = Methane generation rate constant, year-1.

 $L_0$  = Methane generation potential, cubic meters per megagram solid waste.

 $M_i$  = Mass of solid waste in the i<sup>th</sup> section, megagrams.

 $t_i$  = Age of the  $i^{th}$  section, years.

B. The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGLANDFILL-AAAA<50.

## **Default Values**

The permittee must calculate the NMOC emission rate using either **Equation 1** (the equation provided in 40 CFR 63.1959(a)(1)(i)(A)) or **Equation 2** (the equation provided in 40 CFR 63.1959(a)(1)(ii)(A)). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in **Equation 1** (40 CFR 63.1959 (a)(1)(i)(A)), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in **Equation 2** (the equation provided in 40 CFR 63.1959 (a)(1)(ii)(A)), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for  $L_0$ , and 4,000 ppm by volume as hexane for the  $C_{NMOC}$ . For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year. **(40 CFR 63.1959(a)(1))** 

#### **Equation 1**

The following equation must be used if the actual year-to-year solid waste acceptance rate is known. (40 CFR 63.1959(a)(1)(i)(A))

$$M_{NMOC} = \sum_{i=1}^{n} 2 k L_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

Where:

M<sub>NMOC</sub> = Total NMOC emission rate from the landfill, megagrams per year

 $k = methane generation rate constant, year^{-1}$ 

L<sub>o</sub> = methane generation potential, cubic meters per megagram solid waste

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M<sub>i</sub> = mass of solid waste in the i<sup>th</sup> section, megagrams

t<sub>i</sub> = age of the i<sup>th</sup> section, years

C<sub>NMOC</sub> = concentration of NMOC, parts per million by volume as hexane

 $3.6 \times 10^{-9} = conversion factor$ 

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

#### **Equation 2**

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown. (40 CFR 63.1959 (a)(1)(ii)(A)

$$M_{NMOC} = 2L_0 R (e^{-kc} - e^{-kt}) (C_{NMOC}) (3.6 \times 10^{-9})$$

Where:

M<sub>NMOC</sub> = mass emission rate of NMOC, megagrams per year

L<sub>0</sub> = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

 $k = methane generation rate constant, year^{-1}$ 

t = age of landfill, years

 $C_{NMOC}$  = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years; for active landfill c = 0 and  $e^{-kc}$  = 1

 $3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R, if documentation of the nature and amount of such wastes is maintained.

#### Tier 1

The permittee must calculate NMOC mass emission rate utilizing Equation 1 or 2 in **Appendix 7-1**, as applicable, and compare it to the standard of 50 Mg per year. **(40 CFR 63.1959(a)(1)(ii)(A) (a)(2))** 

If the resulting **Tier 1** calculated NMOC mass emission rate is less than 50 Mg per year, the permittee must submit annually an estimate of NMOC emissions in an NMOC emission rate report as provided in 40 CFR 63.1981(c) and must recalculate the NMOC mass emission rate annually as required under 40 CFR 63.1959(b). **(40 CFR 63.1959(a)(2)(i))** 

If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 50 Mg per year, then the permittee must either:

- Submit a gas collection and control system design plan within 1 year as specified in 40 CFR 63.1981(d) and install and operate a gas collection and control system within 30 months of the first annual report in which the NMOC emission rate equals or exceeds 50 Mg/yr according to 40 CFR 63.1959(b)(2)(ii) and (iii); or (40 CFR 63.1959(a)(2)(ii)(A)
- 2. Determine a site-specific NMOC concentration and recalculate the NMOC emission rate using **Tier 2** procedures (40 CFR 63.1959(a)(3)). **(40 CFR 63.1959(a)(2)(ii)(B))**, or
- 3. Determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the procedure specified in **Tier 3** procedures (40 CFR 63.1959(a)(4)). **(40 CFR 63.1959(a)(2)(ii)(C))**

#### Tier 2

The permittee must recalculate the NMOC mass emission rate using **Equation 1** or **Equation 2** in **Appendix 7-1** and using the average site-specific NMOC concentration from the collected samples (**Tier 2** testing in **Appendix 5-1**) instead of the default value in the equation provided in 40 CFR 63.1959(a)(1). **(40 CFR 63.1959(a)(3)(ii))** If the resulting **Tier 2** NMOC mass emission rate is less than 50 Mg per year, the permittee must submit a periodic estimate of NMOC emissions in an NMOC emission rate report as provided in 40 CFR 63.1981(c) and must recalculate the NMOC mass emission rate annually as required under 40 CFR 63.1959(b). The site-specific NMOC concentration must be retested every 5 years. **(40 CFR 63.1959(a)(3)(iii))** 

If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 50 Mg per year, then the permittee must either:

- Submit a gas collection and control system design plan within 1 year as specified in 40 CFR 63.1981(d) and install and operate a gas collection and control system within 30 months of the first annual report in which the NMOC emission rate equals or exceeds 50 Mg/yr according to 40 CFR 63.1959(b)(2)(ii) and (iii); or (40 CFR 63.1959(a)(3)(iv)(A)
- 2. Determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in **Tier 3** (40 CFR 63.1959(a)(4)). **(40 CFR 63.1959(a)(3)(iv)(B))**

### Tier 3

The site-specific methane generation rate constant must be determined using the procedures provided in 40 CFR Part 60, Appendix A-1, Method 2E. The permittee must estimate the NMOC mass emission rate using **Equation 1** (40 CFR 63.1959(a)(1)(i)) or **Equation 2** (40 CFR 63.1959(a)(1)(ii)) and using a site-specific methane generation rate constant (k), and the site-specific NMOC concentration as determined in 40 CFR 63.1959(a)(3) instead of the default values provided in 40 CFR 63.1959(a)(1). The permittee must compare the resulting NMOC mass emission rate to the standard of 50 Mg per year. **(40 CFR 63.1959(a)(4))** 

If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration and Tier 3 site-specific methane generation rate is equal to or greater than 50 Mg per year, the permittee must submit a gas collection and control system design plan within 1 year as specified in 40 CFR 63.1981(d) and install and operate a gas collection and control system within 30 months of the first annual report in which the NMOC emission rate equals or exceeds 50 Mg/yr according to 40 CFR 63.1959(b)(2)(ii) and (iii).. (40 CFR 63.1959(a)(4)(i)(A))

If the NMOC mass emission rate is less than 50 Mg per year, then the permittee must recalculate the NMOC mass emission rate annually, using **Equation 1** or **Equation 2** in **Appendix 7-1**, and using the site-specific Tier 2 NMOC concentration and Tier 3 methane generation rate constant and submit a periodic NMOC emission rate report as provided in 40 CFR 63.1981(c). The calculation of the methane generation rate constant (**Tier 3**) is performed only once, and the value obtained from this test must be used in all subsequent annual NMOC emission rate calculations. **(40 CFR 63.1959(a)(4)(ii))** 

## **Appendix 8-1. Reporting**

#### A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual 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.

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## **B.** Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

## SECTION 2 - ENERGY DEVELOPMENTS PINCONNING, LLC

## A. 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 PTI pursuant to Rule 201(2)(d) are designated by footnote one. (R 336.1213(5)(a), R 336.1214a(5))
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. (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 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 (USEPA) 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 USEPA 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 Rule 215 and Rule 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 the 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 USEPA together with a claim of confidentiality. (R 336.1213(1)(e))

- 6. A challenge by any person, the Administrator of the USEPA, 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).<sup>2</sup> (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. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, 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 the following:"2 (R 336.1301(1))
  - 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.

The grading of visible emissions shall be determined in accordance with Rule 303.

- 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.<sup>1</sup> (R 336.1901(a))
  - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901(b))

## **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).<sup>2</sup> (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(5))

## 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 state 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 AQD District Office and to the USEPA 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 AQD District Office 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 USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. (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.

Section 2
Energy Developments Pinconning, LLC

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- 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 AQD District Office. 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 AQD District Office. 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 AQD 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.<sup>2</sup> (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))
  - a. The applicable requirements are included and are specifically identified in the ROP.
  - b. 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:
  - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. (R 336.1213(6)(b)(i))
  - b. 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))
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))

- d. The ability of the USEPA 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:
  - a. Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5))
  - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii))
  - c. 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))
  - d. Minor Permit Modifications made pursuant to Rule 216(2). (R 336.1216(2)(f))
  - e. 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 do 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(2))
- 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(10))
- 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)(iii), 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(9))

## **Stratospheric Ozone Protection**

- 36. If the permittee is subject to Title 40 of the Code of Federal Regulations (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 USEPA 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 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR 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 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
  - a. June 21, 1999,
  - b. Three years after the date on which a regulated substance is first listed under 40 CFR 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 USEPA 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.<sup>2</sup> (R 336.1201(1))

- 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.<sup>2</sup> (R 336.1201(8), Section 5510 of Act 451)
- 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, EGLE.<sup>2</sup> (R 336.1219)
- 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 of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, 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, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 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.<sup>2</sup> (R 336.1201(4))
- 47. Each Responsible Official shall certify annually the compliance status of the stationary source with all stationary Source-Wide conditions. This certification shall be included as part of the annual certification of compliance as required in the General Conditions in Part A and Rule 213(4)(c). (R 336.1213(4)(c))

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## **B. 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. 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
EUICEENGINE1	Internal combustion engine (Caterpillar G3520C) for combusting treated landfill gas to produce electricity.	05-08-2009	FGICEENGINES FGRICEMACT
EUICEENGINE2	Internal combustion engine (Caterpillar G3520C) for combusting treated landfill gas to produce electricity.	05-08-2009	FGICEENGINES FGRICEMACT

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

## D. 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
FGICEENGINES	Two internal combustion engines (Caterpillar G3520C) for combusting treated landfill gas to produce electricity. (PTI 130-08A)	
FGRICEMACT	New and Reconstructed Engines located at a Major Source > 500 HP, Non-emergency firing Landfill/Digester Gas. Commenced Construction or Reconstruction on or after December 19, 2002. Compliance date is upon start-up. (PTI 130-08a)	

# FGICEENGINES FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Two internal combustion engines (Caterpillar G3520C) for combusting treated landfill gas to produce electricity. (PTI 130-08A)

Emission Units: EUICEENGINE1, EUICEENGINE2

## **POLLUTION CONTROL EQUIPMENT**

NA

## I. <u>EMISSION LIMITS</u>

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO	3.3 g/hp-hr per engine <sup>2</sup>	Hourly	EUICEENGINE1, EUICEENGINE2	SC V.1 & 2	40 CFR 60.4233(e)
2. CO	16.23 pph per engine <sup>2</sup>	Hourly	EUICEENGINE1, EUICEENGINE2	SC V.1 & 2 SC VI.1 & 2	R 336.2804, 40 CFR 52.21(d)
3. NOx	1.0 g/hp-hr per engine <sup>2</sup>	Hourly	EUICEENGINE1, EUICEENGINE2	SC V.1 & 2	40 CFR 60.4233(e)
4. NOx	4.92 pph per engine <sup>2</sup>	Hourly	EUICEENGINE1, EUICEENGINE2	SC V.1 & 2 SC VI.1 & 2	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. VOC	1.0 g/hp-hr per engine <sup>2</sup>	Hourly	EUICEENGINE1, EUICEENGINE2	SC V.1 & 2	40 CFR 60.4233(e)
6. Formaldehyde	2.10 lb/hr <sup>1</sup> per engine	Hourly	EUICEENGINE1, EUICEENGINE2	SC V.1 & 2	R 336.1225(2)

#### II. MATERIAL LIMITS

Mat	terial	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Land	dfill	565.88 MMscf	12-month rolling	FGICEENGINES	SC VI.1	R 336.1205(1)(a)
Gas		per year <sup>2</sup>	time period as determined at the end of each calendar month			

## III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall only burn treated landfill gas in FGICEENGINES. (R 336.1201(3))2
- 2. The permittee submitted a malfunction abatement/preventative maintenance plan for FGICEENGINES in April 2018. The MAP was approved in April 2018. After approval of the malfunction abatement/preventative maintenance plan by the AQD District Supervisor, the permittee shall not operate FGICEENGINES unless the malfunction abatement/preventative maintenance plan, or an alternate plan approved by the AQD District

Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:

- a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair;
- b. Description of the items or conditions to be inspected and frequency of the inspections or repairs;
- Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be
  monitored to detect a malfunction or failure, the normal operating range of these parameters and a description
  of the method of monitoring or surveillance procedures;
- d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement;
- e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the malfunction abatement/preventative maintenance plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> (R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.4243(b)(2))

- 3. Based on each engine's kilowatt output, the permittee shall adjust the engine's air/fuel ratio, as needed, to ensure that each engine in FGICEENGINES operates at its maximum design output based on the fuel available to burn.<sup>2</sup> (R 336.1702(a), R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 4. The permittee shall operate and maintain each engine in FGICEENGINES such that it meets the emission limits in SC I.1, I.3, and I.5 over the entire life of the engine.<sup>2</sup> (40 CFR 60.4234, 40 CFR 60.4243(b))
- 5. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for FGICEENGINES and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> (40 CFR 60.4243(b))

#### IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate any engine in FGICEENGINES unless the engines air/fuel ratio controller is installed, maintained and operated in a satisfactory manner.<sup>2</sup> (R 336.1702, R 336.1910)
- 2. The permittee shall equip and maintain each engine in FGICEENGINES with non-resettable hours meters to track the operating hours.<sup>2</sup> (R 336.1225, 40 CFR 60.4243)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years.2 (R 336.1201(3))

- 1. The permittee shall conduct an initial performance test for each engine in FGENGINES, to verify NOx, CO, and VOC emission rates. The permittee shall conduct an initial performance test within 60 days after achieving the maximum production rate but not later than 180 days after initial startup of each engine in FGENGINES and subsequent performance testing every 8760 hours of operation or three years, whichever occurs first, to demonstrate compliance. The performance tests shall be conducted according to 40 CFR 60.4244. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> (40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ)
- 2. The permittee shall verify formaldehyde emission rates from one or more engine(s) in FGICEENGINES 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 Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> (R 336.1225, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))

3. Testing for CO, formaldehyde, NOx, and VOC shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A;

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)

- 4. The permittee shall verify the formaldehyde emission rates from FGICEENGINES, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall continuously monitor and record, in a satisfactory manner, the landfill gas usage for the engines in FGICEENGINES.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The permittee shall continuously monitor, in a satisfactory manner, the kilowatt output from each engine in FGICEENGINES.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 3. The permittee shall continuously monitor, in a satisfactory manner, the hours of operation from each engine in FGICEENGINES.<sup>2</sup> (40 CFR 60.4243)
- 4. The permittee shall keep, in a satisfactory manner, records of all maintenance activities conducted according to the malfunction abatement/preventative maintenance plan (pursuant to SC III.2). The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.<sup>2</sup> (R 336.1702(a), R 336.1911, R 336.1912, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 5. The permittee shall keep, in a satisfactory manner, records of the landfill gas usage for the engines in FGICEENGINES on a monthly and 12-month rolling time period basis as determined at the end of each calendar month, as required by SC VI.1. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1702, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 6. The permittee shall record the kilowatt output from each engine in FGICEENGINES, a minimum of once per day, excluding holidays and weekends when an engine operator is not scheduled, or called in, to be on site, as required by SC VI.2. A list of excluded holidays shall be maintained on site and made available to the Air Quality Division upon request. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.<sup>2</sup> (R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 7. The permittee shall keep, in a satisfactory manner, records of the hours of operation from each engine in FGICEENGINES, on a monthly and 12-month rolling time period basis as determined at the end of each calendar month, as required by SC VI.3. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1702, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.4243)

- 8. The permittee shall keep records of the following information for each engine included in FGICEENGINES:
  - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification;
  - b. Maintenance conducted on EUICEENGINE1 or EUICEENGINE2;
  - c. If EUICEENGINE1 or EUICEENGINE2 is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable;
  - d. If EUICEENGINE1 or EUICEENGINE2 is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that EUICEENGINE1 or EUICEENGINE2 meet the emission standards.<sup>2</sup> (40 CFR 60.4245(a))
- 9. The permittee shall maintain the following record for each engine in FGICENGINES:
  - a. Engine manufacturer;
  - b. Date engine was manufactured;
  - c. Engine model number and model year;
  - d. Maximum engine power;
  - e. Engine serial number;
  - f. Engine specification sheet;
  - g. Date of initial startup of the engine;
  - h. Date engine was removed from service at this stationary source;
  - i. Date replacement engine was installed at this stationary source;
  - j. Manufacturer's data, specifications, and operating and maintenance procedures for each engine;
  - k. Maintenance activities conducted according to the MAP.

The permittee shall keep the records on file in a format acceptable to the AQD District Supervisor and make them available to the Department upon request. (R 336.1213(3), R 336.1911)

10. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

#### See Appendices 3-2, 4-2, and 7-2

#### VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.<sup>2</sup> (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 30.2 (R 336.1213(3)(c)(i))
- 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.<sup>2</sup>
  (R 336.1213(4)(c))
- 4. In accordance with R 336.1285(2)(a)(vi), engine replacements can only be done under a normal maintenance program. If EUICEENGINE1 or EUICEENGINE2 is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall notify the AQD District Supervisor of such change-out and submit a description of the engine and acceptable emissions data to show that the alternate engine is equivalent-emitting or lower-emitting. The data shall be submitted within 30-days of the engine change out. (R 336.1213(3))
- 5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

#### See Appendix 8-2

## VIII. STACK/VENT RESTRICTIONS

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. SVICEENG1	13.7 <sup>2</sup>	65.0 <sup>2</sup>	R 336.1225, R 336.2803,
			R 336.2804, 40 CFR 52.21(c) & (d)
2. SVICEENG2	13.7 <sup>2</sup>	65.0 <sup>2</sup>	R 336.1225, R 336.2803,
			R 336.2804, 40 CFR 52.21(c) & (d)

## IX. OTHER REQUIREMENTS

- 1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine in FGICEENGINES.<sup>2</sup> (40 CFR Part 60, Subparts A and JJJJ)
- 2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, as they apply to each engine in FGICEENGINES.<sup>2</sup> (40 CFR Part 63, Subparts A and ZZZZ)

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## FGRICEMACT FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

New and Reconstructed Engines located at a Major Source > 500 HP, Non-emergency firing Landfill/Digester Gas. Commenced Construction or Reconstruction on or after December 19, 2002. Compliance date is upon start-up. (PTI 130-08a)

Emission Unit ID: EUICEENGINE1, EUICEENGINE2

## **POLLUTION CONTROL EQUIPMENT**

NA

## I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. Each engine in FGRICEMACT shall operate in a manner which reasonably minimizes HAP emissions.<sup>2</sup> (40 CFR 63.6625(c))
- 2. Each engine in FGRICEMACT shall operate in a manner which minimizes time spent at idle during startup and minimize the startup time to a period needed for appropriate and safe loading of each engine, not to exceed 30 minutes.<sup>2</sup> (40 CFR 63.6625(h))

#### IV. DESIGN/EQUIPMENT PARAMETERS

1. The engines in FGRICEMACT shall equip and maintain separate fuel meters to monitor and record the daily fuel usage and volumetric flow rate of each fuel used.<sup>2</sup> (40 CFR 63.6625(c))

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3), 40 CFR 63.6660)

1. Each engine in FGRICEMACT, which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, must monitor and record the daily fuel usage with separate fuel meters to measure the volumetric flow rate of each fuel.<sup>2</sup> (40 CFR 63.6625(c))

#### VII. REPORTING

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

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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 an annual report in accordance with Table 7 of 40 CFR Part 63, Subpart ZZZZ to the appropriate AQD district office by March 15th for the reporting period from January 1 to December 31. The following information shall be included in this annual report: (40 CFR 63.6650(g), 40 CFR 63.6650(b)(5))
  - a. The fuel flow rate and the heating values that were used in the permittee's calculations to determine the gross heat input on an annual basis. Also, the permittee must demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis;<sup>2</sup> (40 CFR 63.6650(g)(1))
  - b. The operating limits provided in the permittee's federally enforceable permit, and any deviations from these limits;<sup>2</sup> (40 CFR 63.6650(g)(2))
  - c. Any problems or errors suspected from the fuel flow rate meters.2 (40 CFR 63.6650(g)(3))

## VIII. STACK/VENT RESTRICTIONS

NA

#### IX. OTHER REQUIREMENTS

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, as they apply to each engine in FGRICEMACT.<sup>2</sup> (40 CFR Part 63, Subparts A and ZZZZ)

## Footnotes:

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

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

## **E. NON-APPLICABLE REQUIREMENTS**

At the time of the 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 1-2. Acronyms and Abbreviations

Appendix 1-2	ppendix 1-2. Acronyms and Abbreviations					
Common Acronyms			Pollutant / Measurement Abbreviations			
AQD	Air Quality Division	acfm	Actual cubic feet per minute			
BACT	Best Available Control Technology	BTU	British Thermal Unit			
CAA	Clean Air Act	°C	Degrees Celsius			
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide			
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent			
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot			
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter			
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit			
Department/	Michigan Department of Environment,	gr	Grains			
Department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant			
EGLE	Michigan Department of Environment,	Hg	Mercury			
	Great Lakes, and Energy	hr	Hour			
EU	Emission Unit	HP	Horsepower			
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide			
GACS	Gallons of Applied Coating Solids	kW	Kilowatt			
GC	General Condition	lb	Pound			
GHGs	Greenhouse Gases	m	Meter			
HVLP	High Volume Low Pressure*	mg	Milligram			
ID	Identification	mm	Millimeter			
IRSL	Initial Risk Screening Level	MM	Million			
ITSL	Initial Threshold Screening Level	MW	Megawatts			
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds			
MACT	Maximum Achievable Control Technology	NOx	Oxides of Nitrogen			
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram			
MAP	Malfunction Abatement Plan	PM	Particulate Matter			
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10			
NA	Not Applicable		microns in diameter			
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5			
			microns in diameter			
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour			
NCDC	Air Pollutants	ppm	Parts per million			
NSPS	New Source Performance Standards	ppmv	Parts per million by volume			
NSR	New Source Review	ppmw	Parts per million by weight			
PS	Performance Specification	%	Percent			
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute			
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge			
PTI	Permit to Install	scf	Standard cubic feet			
RACT	Reasonable Available Control Technology	sec	Seconds			
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide			
SC	Special Condition	TAC	Toxic Air Contaminant			
SCR	Selective Catalytic Reduction	Temp	Temperature			
SDS	Safety Data Sheet	THC	Total Hydrocarbons			
SNCR	Selective Non-Catalytic Reduction	tpy	Tons per year			
SRN	State Registration Number	μg	Microgram			
TEQ	Toxicity Equivalence Quotient	μm	Micrometer or Micron			
USEPA/EPA	United States Environmental Protection	VOC	Volatile Organic Compounds			
	Agency	yr	Year			
VE	Visible Emissions					

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

## Appendix 2-2. 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 3-2. 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 4-2. 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 5-2. 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 6-2. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N5985-2019. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-P0437-2019 is being reissued as Source-Wide PTI No. MI-PTI-N5985-2029.

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

## Appendix 7-2. 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 8-2. Reporting

## A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of

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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

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.