



UPS Tracking No.: 1Z82F3F50325053918

October 13, 2022

EGLE - Air Quality Division
Grand Rapids District Office
350 Ottawa Ave NW
Grand Rapids, MI 49503

Subject: Sumpter Energy Associates, ROP minor modification application submittal
Pine Tree Acres Landfill

Enclosed please find completed Renewable Operating Permit (ROP) modification application forms for the Sumpter Energy Associates facility at the Pine Tree Acres Landfill (SRN: N5984, Section 02 of MI-ROP-N5984-2019).

Impact Compliance and Testing, Inc. is submitting, on behalf of Sumpter Energy Associates (SEA), this ROP modification application to support the issuance of a ROP with modified monitoring and recordkeeping conditions at the SEA Pine Tree Acres Landfill facility located in Lennox Township, Macomb County, Michigan.

The documents were prepared under the supervision of Mr. Ed Werkheiser, Senior Asset Manager for SEA.

Please contact Andy Rusnak at (517) 481-3283 or andy.rusnak@impactcandt.com or Kate Henry at (734) 464-4834 or kate.henry@impactcandt.com to address any issues relating to the application.

Sincerely,

Impact Compliance & Testing, Inc.

A handwritten signature in black ink, appearing to read "Andy Rusnak".

Andy Rusnak
Technical Manager

A handwritten signature in black ink, appearing to read "Kate Henry".

Kate Henry
Environmental Consultant

October 13, 2022 ☐

Page 2
October 13, 2022

Enclosure: M-001/C-001/AI-001 forms
Marked-up ROP pages

cc:



Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

RENEWABLE OPERATING PERMIT APPLICATION C-001: CERTIFICATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.

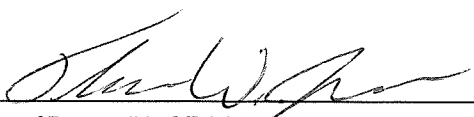
This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

| | |
|-----------------|-----------|
| Form Type C-001 | SRN N5984 |
|-----------------|-----------|

| | |
|---|------------------|
| Stationary Source Name Sumpter Energy Associates at the Pine Tree Acres Landfill | |
| City Lennox Township | County Macomb |

| | |
|--|--|
| SUBMITTAL CERTIFICATION INFORMATION | |
| 1. Type of Submittal <i>Check only one box.</i> | |
| <input type="checkbox"/> Initial Application (Rule 210) | <input checked="" type="checkbox"/> Notification / Administrative Amendment / Modification (Rules 215/216) |
| <input type="checkbox"/> Renewal (Rule 210) | <input type="checkbox"/> Other, describe on AI-001 |
| 2. If this ROP has more than one Section, list the Section(s) that this Certification applies to <u>02</u> | |
| 3. Submittal Media <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> FTP <input type="checkbox"/> Disk <input checked="" type="checkbox"/> Paper | |
| 4. Operator's Additional Information ID - Create an Additional Information (AI) ID that is used to provide supplemental information on AI-001 regarding a submittal. | |
| AI | |

| | |
|-------------------------------|--|
| CONTACT INFORMATION | |
| Contact Name Ed Werkheiser | Title Sr. Asset Manager - Compliance |
| Phone number 484-294-8253 | E-mail address ewerkheiser@eppservice.com |

| | | | | |
|--|-------------|-------------------|-----------------------------------|----------------|
| This form must be signed and dated by a Responsible Official. | | | | |
| Responsible Official Name Thomas Judge | | | Title Sr. Vice President | |
| Mailing address 1605 N. Cedar Crest Blvd., Suite 509 | | | | |
| City Allentown | State PA | ZIP Code 18104 | County Lehigh | Country USA |
| As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate and complete. | | | | |
|  _____ Signature of Responsible Official | | | <u>9/23/2022</u> _____ Date | |



RENEWABLE OPERATING PERMIT M-001: RULE 215 CHANGE NOTIFICATION RULE 216 AMENDMENT/MODIFICATION APPLICATION

This information is required by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment.

| | | |
|---|-------------------------------|---|
| 1. SRN N5984 | 2. ROP Number N5984-2019 | 3. County Macomb |
| 4. Stationary Source Name Sumpster Energy Associates at the Pine Tree Acres Landfill | | |
| 5. Location Address 36450 29 Mile Road | | 6. City Lennox |
| <p>7. Submittal Type - <i>The submittal must meet the criteria for the box checked below. Check only one box. Attach a mark-up of the affected ROP pages for applications for Rule 216 changes.</i></p> <p><input type="checkbox"/> Rule 215(1) Notification of change. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 215(2) Notification of change. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 215(3) Notification of change. Complete Items 8 – 11 and 14</p> <p><input type="checkbox"/> Rule 215(5) Notification of change. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 216(1)(a)(i)-(iv) Administrative Amendment. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 216(1)(a)(v) Administrative Amendment. Complete Items 8 – 14. Results of testing, monitoring & recordkeeping must be submitted. See detailed instructions.</p> <p><input checked="" type="checkbox"/> Rule 216(2) Minor Modification. Complete Items 8 – 12 and 14</p> <p><input type="checkbox"/> Rule 216(3) Significant Modification. Complete Items 8 – 12 and 14, and provide any additional information needed on ROP application forms. See detailed instructions.</p> <p><input type="checkbox"/> Rule 216(4) State-Only Modification. Complete Items 8 – 12 and 14</p> | | |
| 8. Effective date of the change. (MM/DD/YYYY) <i>See detailed instructions.</i> 09/21/2022 | | 9. Change in emissions? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>10. Description of Change - <i>Describe any changes or additions to the ROP, including any changes in emissions and/or pollutants that will occur. If additional space is needed, complete an Additional Information form (AI-001).</i></p> <p>SEA is requesting SC Nos. VI.4. and 5. for FG-ENGINES be removed from the permit. See AI-001 for additional information.</p> | | |
| <p>11. New Source Review Permit(s) to Install (PTI) associated with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, enter the PTI Number(s) _____ - _____ - _____ - _____ - _____</p> | | |
| <p>12. Compliance Status - <i>A narrative compliance plan, including a schedule for compliance, must be submitted using an AI-001 if any of the following are checked No.</i></p> <p>a. Is the change identified above in compliance with the associated applicable requirement(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Will the change identified above continue to be in compliance with the associated applicable requirement(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>c. If the change includes a future applicable requirement(s), will timely compliance be achieved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | | |
| 13. Operator's Additional Information ID - <i>Create an Additional Information (AI) ID for the associated AI-001 form used to provide supplemental information.</i> | | AI 001 |
| 14. Contact Name Ed Werkheiser | Telephone No. 484-294-8253 | E-mail Address ewerkheiser@eppservice.com |
| <p>15. This submittal also updates the ROP renewal application submitted on ____/____/____ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A <i>(If yes, a mark-up of the affected pages of the ROP must be attached.)</i></p> | | |

NOTE: A CERTIFICATION FORM (C-001) SIGNED BY A RESPONSIBLE OFFICIAL MUST ACCOMPANY ALL SUBMITTALS

For Assistance
Contact: 800-662-9278

www.michigan.gov/egle

EQP 5775 (Rev.04-2019)



RENEWABLE OPERATING PERMIT APPLICATION

AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: N5984

Section Number (if applicable): 02

1. Additional Information ID

AI-001

Additional Information

2. Is This Information Confidential?

 Yes No

SEA is requesting SC Nos. VI.4. and 5. for FG-ENGINES be removed from the permit.

The purpose of these monitoring and recordkeeping requirements is to provide a means of demonstrating ongoing compliance with the NOx emission limit. Experience of SEA operators has determined that measurement of the temperature of the air/fuel mixture at the aftercooler is not a good indicator of compliance with the NOx emission limit.

A review of more recent air permits (when compared to the initial date of issuance of the SEA air permit) issued by EGLE-AQD for facilities operating similar equipment (LFG fueled CAT® Model G3516 RICE) reveals that EGLE-AQD no longer issues air permits that require air/fuel mixture temperature recordkeeping/monitoring for LFG fueled RICE. The more recent issued permits do not have any monitoring/recordkeeping conditions related to ongoing NOx compliance.

SEA is proposing that the following monitoring and recordkeeping condition be added to the permit to replace SC VI.4. and 5:

The permittee shall maintain records of all information necessary for all notifications and reports for each engine in FG-ENGINES, as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of the permit.

This information shall include, but shall not be limited to the following:

- a. Compliance tests and any testing required under the special conditions of this permit.
- b. Monitoring data for the hours of operation, volumetric flow rate and landfill gas usage.
- c. Calculated amount of landfill gas combusted in each engine on a monthly and 12-month rolling basis.
- d. Hours of operation on a monthly and 12-month rolling basis.
- e. Monthly average BTU content of the landfill gas burned.
- f. Manufacturer's data, specifications, and operating and maintenance procedures.
- g. Maintenance activities conducted according to the PM/MAP.
- h. All calculations necessary to show compliance with the limits contained in this permit.

Additional marked up ROP pages showing the deleted recordkeeping conditions are attached.

Section 2 – Sumpter Energy Associates, LLC

ROP No: MI-ROP-N5984-2019

Expiration Date: July 30, 2024

PTI No: MI-PTI-N5984-2019

Technical Programs Unit and 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 AQD Technical Programs Unit and 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)**

2. The permittee shall determine, by sampling on an annual basis, the chlorine compounds present in the landfill gas (LFG) stream influent to FG-ENGINES. Sampling shall be done by Method 18, or alternate method as approved by the AQD District Supervisor. No less than 30 days prior to testing, the permittee shall submit a complete sampling plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to sampling, 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 AQD Technical Programs Unit and 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)**
3. Within 180 days of permit issuance or five years from the last test date, whichever is later, and then every five years thereafter, the permittee shall verify the NO_x, CO, HCl and NMOC emission rates from each engine in FG-ENGINES. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. 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))**

See Appendix 7-2

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall continuously monitor and record the following parameters:
 - a. Electrical output (KW) of each generator driven by each internal combustion engine.
 - b. Hours of operation of each generator driven by each internal combustion engine.²
 - c. Total flow of landfill gas to FG-ENGINES (HCl compliance).

The permittee shall use the equations and emission factors as specified in Appendix 7-2 to calculate the emissions of CO, NO_x, HCl, and NMOC for each engine. Records of the monitored parameters and calculations shall be kept on file and made available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

2. The permittee shall measure and record the heating value of the landfill gas used as fuel in the ICEs on a weekly basis (for HCl compliance). **(R 336.1213(3))**
3. The permittee shall keep a written record of the chlorinated compound content of the LFG as determined in the most recent sampling and analysis. **(R 336.1213(3))**
- ~~4. The permittee shall monitor and record the temperature of the air/fuel mixture at the after cooler outlet a minimum of once per day, excluding holidays and weekends, when an engine operator is not scheduled or called in, to be on site. A list of excluded holidays shall be maintained on site and be made available to the Air Quality Division upon request. **(R 336.1213(3))**~~
- ~~5. The permittee shall record and report as a deviation any air/fuel mixture temperature reading greater than five degrees Fahrenheit in excess of the maximum air/fuel mixture temperature observed during the performance test in which compliance with the NO_x emission limit was established. **(R 336.1213(3))**~~
6. The permittee shall maintain a monthly log of all maintenance activities conducted on each engine in FG-ENGINES, including but not limited to the following: daily maintenance activities, top-end repairs, major overhauls, and engine replacements. **(R 336.1213(3))**