

State Registration Number
N8248

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N8248-2020a

Montmorency-Oscoda-Alpena Solid Waste Management Authority

State Registration Number (SRN): N8248

Located at

6751 Landfill Road, Atlanta, Montmorency County, Michigan 49709

Staff Report Date: April 6, 2020

Amended Date: April 11, 2022

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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State Registration Number
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RENEWABLE OPERATING PERMIT

APRIL 6, 2020 - STAFF REPORT

ROP Number
MI-ROP-N8248-2020

Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan’s Administrative Rules for Air Pollution Control promulgated under Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source’s applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	MOA Solid Waste Management Authority P.O. Box 13 Atlanta, Michigan 49709
Source Registration Number (SRN):	N8248
North American Industry Classification System (NAICS) Code:	562212
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900126
Responsible Official:	Mr. Albert LaFleche, Chairman 989-742-4196
AQD Contact:	Ms. Caryn Owens, Environmental Engineer 231-878-6688
Date Application Received:	July 18, 2019
Date Application Was Administratively Complete:	July 18, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	April 13, 2020
Deadline for Public Comment:	May 13, 2020

Source Description

Montmorency-Oscoda-Alpena Solid Waste Management Authority (SWMA) Landfill is a Type II Sanitary Landfill, which accepts municipal solid waste (MSW) and inert wastes. The facility also accepts a minimal amount of asbestos containing waste. The solid waste is transported to the facility to an area (cell) where it is deposited on the working surface. The deposited waste is covered with soil on a daily basis. When a cell reaches its design capacity, a liner is installed to cover the waste. Over time, the waste decomposes producing landfill gas (LFG). The LFG is comprised of methane, carbon dioxide, carbon monoxide, and volatile organic compounds (VOCs). MSW initially undergoes aerobic microbial activity producing predominately nitrogen gas and carbon dioxide. As oxygen levels decline, gas composition changes to a mixture of methane and carbon dioxide. LFG typically contains a small percentage of non-methane organic compounds (NMOC). The NMOC fraction consists of various organic hazardous air pollutants (HAPs), greenhouse gases, and volatile organic compounds (VOCs).

Montmorency-Oscoda-Alpena SWMA has a design capacity of 2.76 million cubic meters which was last modified October 14, 2004, when the facility was issued a Solid Waste Disposal Area Construction Permit to increase the landfill's design capacity. LFG is currently not being collected.

The facility itself is located approximately five miles south of the town of Atlanta in Montmorency County. The area surrounding the facility is fairly remote and sparsely populated. The nearest resident appears to be at least a mile due north of the facility. The only other industry remotely close to the facility is a number of oil and gas wells scattered around the area.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2018**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	1.5
Lead (Pb)	0
Nitrogen Oxides (NO _x)	0
Particulate Matter (PM)	1.0
Sulfur Dioxide (SO ₂)	0
Volatile Organic Compounds (VOCs)	0
Non-Methane Organic Compounds (NMOC)	3.6

This source is a true minor source of Hazardous Air Pollutants (HAPs), thus no HAP emissions data is listed.

See Parts C and D in the ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is in Montmorency County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the source is subject to 40 CFR Part 60, Subparts A and WWW and has a design capacity of greater than 2.5 million megagrams and 2.5 million cubic meters.

The stationary source is a minor source of HAP emissions because the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year.

No emission units at the stationary source are currently subject to the Prevention of Significant Deterioration regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451, because at the time of New Source Review permitting the potential to emit of each criteria pollutant was less than 250 tons per year.

EULANDFILL<50 at the stationary source is subject to the Standards of Performance for Municipal Solid Waste Landfills promulgated in 40 CFR Part 60, Subparts A and WWW.

MSW landfills are regulated under National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills promulgated in 40 CFR Part 63, Subparts A and AAAA. However, EULANDFILL<50 is not currently subject to this standard. Although it has a design capacity of greater than 2.5 million megagrams and 2.5 million cubic meters, it has uncontrolled NMOC emissions of less than 50 megagrams per year.

Montmorency-Oscoda-Alpena SWMA accepts asbestos containing materials and therefore is regulated under the National Emission Standards for Hazardous Air Pollutants: National Emission Standards for Asbestos promulgated in 40 CFR Part 61, Subparts A and M. These requirements are contained in EUASBESTOS.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

No emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-Wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-Wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

Currently, no PTIs have been issued to this source. Therefore, no Source-Wide PTI will be issued.

Streamlined/Subsumed Requirements

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

Non-applicable Requirements

Part E of the ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the ROP Application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

There were no processes listed in the ROP Application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

Draft ROP Terms/Conditions Not Agreed to by Applicant

This draft ROP does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by EGLE, AQD

The AQD proposes to approve this ROP. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft ROP and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Shane Nixon, Cadillac District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP Application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

State Registration Number

N8248

RENEWABLE OPERATING PERMIT

MAY 18, 2020 - STAFF REPORT ADDENDUM

ROP Number

MI-ROP-N8248-
2020

Purpose

A Staff Report dated April 6, 2020, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Mr. Albert LaFleche, Chairman 989-742-4196
AQD Contact:	Ms. Caryn Owens, Environmental Engineer 231-878-6688

Summary of Pertinent Comments

No pertinent comments were received during the 30-day public comment period.

Changes to the April 6, 2020 Draft ROP

No changes were made to the draft ROP.

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RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-N8248-2020a

APRIL 11, 2022 - STAFF REPORT FOR RULE 217(2) REOPENING

Purpose

On July 7, 2020, the Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N8248-2020 to MOA Solid Waste Management Authority pursuant to Rule 214 of the Michigan Air Pollution Control Rules. Once issued, the AQD is required to reopen the ROP if the criteria described in Rule 217 are met. Only those conditions to be added or changed in the ROP are to be considered during this public comment period. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 217.

General Information

Responsible Official:	Mr. Chuck Varner, Chairman 989-742-4196
AQD Contact – District Inspector:	Ms. Caryn Owens, Environmental Engineer 231-878-6688
AQD Contact – REO ROP Writer:	Rob Dickman, Senior Environmental Quality Analyst 231-878-4697
Date Public Comment Begins:	April 11, 2022
Deadline for Public Comment:	May 11, 2022

Regulatory Analysis

The AQD has determined that the ROP must be reopened in order to remove obsolete requirements related to 40 CFR Part 60, Subpart WWW and to add new applicable requirements associated with 40 CFR Part 62, Subpart OOO.

MOA Solid Waste Management Authority had an NMOC emissions of 2.872 megagrams per year on October 6, 2020.

The ROP previously contained requirements to ensure compliance with 40 CFR Part 60, Subpart WWW for Municipal Solid Waste landfills with NMOC emissions less than 50 megagrams per year and required installation of a gas collection and control system once NMOC emissions reach 50 megagrams per year.

Similarly, the requirements of 40 CFR Part 62, Subpart OOO “Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been modified or Reconstructed Since July 17, 2014” requires an active gas collection and control system, but once NMOC emissions reach 34 megagrams per year instead of 50 megagrams per year.

Description of Changes to the ROP

Removal of all obsolete requirements associated with 40 CFR Part 60, Subpart WWW and insertion of applicable requirements of 40 CFR Part 62, Subpart OOO requirements. The emission unit table EULANDFILL <50 which included requirements from 40 CFR Part 60, Subpart WWW has been replaced with the EULANDFILL <34 which includes the requirements from 40 CFR Part 62, Subpart OOO. Additionally, Appendices 5 and 7 of the ROP have been updated with 40 CFR Part 62, Subpart OOO requirements.

Removal of all obsolete requirements associated with 40 CFR Part 60, Subpart WWW and insertion of applicable requirements of 40 CFR Part 62, Subpart OOO requirements in EUASBESTOS emission unit table.

Action Taken by the Department

The AQD proposes to approve this change to ROP No. MI-ROP-N8248-2020, which was reopened by the AQD to incorporate the requirements of 40 CFR Part 62, Subpart OOO and remove the requirements of 40 CFR Part 60, Subpart WWW. A final decision on the approval of the revised ROP will not be made until the public and any affected states have had an opportunity to comment on the proposed changes to the ROP and the United States Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is Shane Nixon, Cadillac/Gaylord District Supervisor. The final determination for approval of the revised ROP will be based on a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by the public, any affected states or the USEPA.

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RENEWABLE OPERATING PERMIT
MAY 16, 2022 - STAFF REPORT ADDENDUM FOR
RULE 217(2) REOPENING

ROP Number
MI-ROP-N8248-2020a

Purpose

A Staff Report dated April 11, 2022, was developed to set forth the applicable requirements and factual basis for the draft reopening to Renewable Operating Permit's (ROP) terms and conditions as required by Rule 214(3) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP reopening during the 30-day public and affected state(s) comment period as described in Rule 214(3) and (4). In addition, this addendum describes any changes to the proposed ROP reopening resulting from these pertinent comments.

General Information

Responsible Official:	Mr. Chuck Varner, Chairman 989-742-4196
AQD Contact – District Inspector:	Ms. Caryn Owens, Environmental Engineer 231-878-6688
AQD Contact – REO ROP Writer:	Rob Dickman, Senior Environmental Quality Analyst 231-878-4697

Summary of Pertinent Comments

The following comments were received by USEPA during the 30-day public comment period for the Pitsch Sanitary Landfill. Because the ROP for Montmorency-Oscoda-Alpena Solid Waste Management Authority contains the same information, an agreement was made between USEPA and AQD to address these comments in this ROP as well:

1. Appendix 5, Tier 4, Section (A): We recommend adding "at least" before 6,570 hours. This makes the incorporated language more consistent with 40 CFR 62.16718(a)(6)(viii)(A).
2. Appendix 7, equation 1: The index of summation included in the argument of the exponential function should be included as a subscript (e.g., $e^{(-kt_i)}$).
3. Appendix 7, Tier 2: The final paragraph of the section incorporates 40 CFR 62.16718(a)(3)(iv)(A) and (B) but does not include the option to conduct a SEM demonstration using the tier 4 procedures as allowed in 40 CFR 62.16718(a)(3)(iv)(C). We recommend including the option to conduct a SEM demonstration using the tier 4 procedures.
4. Appendix 7, tier 3: The first paragraph of this section refers to the tier 4 procedures as included in Appendix 5 of the draft permit instead of 40 CFR Part 62 Subpart OOO. We recommend citing 40 CFR 62.16718(a)(6) within this section of the appendix for further consistency with the Federal plan.

5. Appendix 7, "Calculating expected gas generation flow rates from the landfill": The first paragraph of this section states that USEPA Region V may approve site-specific factors. While this may be true in practice, we recommend referring to the Administrator for consistency with both the Federal plan requirements at 40 CFR 62.16720(a)(1) and the other references to the Administrator already proposed within the draft permit.
6. Appendix 7, Equations 5 and 6: Equations 5 and 6 appear to be missing from the draft permit. We recommend adding the equations to the permit.

Changes to the April 11, 2022 Draft ROP Reopening

All changes proposed by USEPA during the 30-day comment period were made to the draft ROP.