

State Registration Number
N2407

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N2407-2021b

Forest Lawn Landfill, Inc.

State Registration Number (SRN): N2407

Located at

8230 West Forest Lawn Road, Three Oaks, Berrien County, Michigan 49128

Permit Number: MI-ROP-N2407-2021b

Staff Report Date: October 26, 2020

Amended Dates: May 2, 2022
November 28, 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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RENEWABLE OPERATING PERMIT

ROP Number
MI-ROP-N2407-2021

OCTOBER 26, 2020 - STAFF REPORT

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:	Forest Lawn Landfill, Inc. Republic Services, 4100 Frontage Road Hillside, Illinois 60612
Source Registration Number (SRN):	N2407
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:	20200095
Responsible Official:	Kyung Kho, Midwest Area Environmental Manager 708-297-3949
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-303-8326
Date Application Received:	June 11, 2020
Date Application Was Administratively Complete:	June 11, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	October 26, 2020
Deadline for Public Comment:	November 25, 2020

Source Description

Forest Lawn Landfill, Inc. (FLL) is a CLOSED Type II municipal solid waste landfill as defined in 40 Code of Federal Regulations (CFR) 60.751 that began accepting waste in 1971 and ceased accepting waste in January of 2017. It received final closure from the Materials Management Division (MMD) of EGLE on November 25, 2019. The FLL has/had a design capacity greater than 2.5 million megagrams (FLL reported it as approximately 24 million cubic yards) and has/had estimated uncontrolled NMOC emissions greater than 50 megagrams per year, which makes it subject to certain federal regulations to be discussed below. The FLL currently has a gas collection and control system in place that actively draws out landfill gas from extraction wells that is routed to an open flare and/or leachate evaporator. FLL is located in a rural area approximately 3 miles to the SW of Three Oaks, Michigan and approximately 5 miles to the SE of New Buffalo, Michigan.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2019**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	120.65
Lead (Pb)	NONE Reported
Nitrogen Oxides (NO _x)	21.99
Particulate Matter (PM)	12.87
Sulfur Dioxide (SO ₂)	9.39
Volatile Organic Compounds (VOCs)	24.58
NMOC	27.07

The following table lists Hazardous Air Pollutant emissions as calculated for the year: None Reported

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
NA	NONE Reported
Total Hazardous Air Pollutants (HAPs)	NONE Reported

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

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 Berrien County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants except for Ozone. Berrien County is currently designated by the USEPA as a non-attainment area with respect to the 8-hour ozone standard.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit CO exceeds 100 tons per year and also because the source is subject to 40 CFR Part 60, Subpart WWW (New Source Performance Standards for Municipal Solid Waste Landfills) that requires a 40 CFR Part 70, permit if the design capacity of the landfill is equal to or 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 CO was less than 250 tons per year.

EULANDFILL, EUACTIVECOLL, EUOPENFLARE, and EUEVAPSYS at the stationary source are subject to the Standards of Performance for Municipal Solid Waste Landfills promulgated in 40 CFR Part 60, Subparts A and WWW.

The EUASBESTOS at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Asbestos promulgated in 40 CFR Part 61, Subparts A and M.

The EULANDFILL, EUACTIVECOLL, EUOPENFLARE, and EUEVAPSYS at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Municipal Solid Waste Landfills promulgated in 40 CFR Part 63, Subparts A and AAAA.

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."

The emission limitation(s) or standard(s) for EULANDFILL, EUACTIVECOLL, EUOPENFLARE, EUASBESTOS, and EUEVAPSYS at the stationary source are exempt from the federal Compliance Assurance Monitoring (CAM) regulation under 40 CFR Part 64, because they are addressed by either 40 CFR Part 60, Subparts A and WWW; 40 CFR Part 61, Subparts A and M; and 40 CFR Part 63, Subparts A and AAAA; thus meeting the CAM exemption for NSPS or MACT Standards proposed after November 15, 1990.

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.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-N2407-2016 are identified in Appendix 6 of the ROP.

PTI Number			
131-12	54-05	971-90	70-90

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

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EUHEATER	One (1) Propane Space Heater	R 336.1212(4)(c)	R 336.1282(2)(b)
EUTIPPERENGINE	One (1) Diesel Fired Tipper Engine	R 336.1212(4)(e)	R 336.1285(2)(g)

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 Rex Lane, Kalamazoo 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.

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RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-N2407-2021

DECEMBER 4, 2020 - STAFF REPORT ADDENDUM

Purpose

A Staff Report dated October 26, 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:	Kyung Kho, Midwest Area Environmental Manager 708-297-3949
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-303-8326

Summary of Pertinent Comments

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

Changes to the October 26, 2020 Draft ROP

No changes were made to the draft ROP.

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RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-N2407-2021

FEBRUARY 8, 2021 - STAFF REPORT ADDENDUM

Purpose

A Staff Report dated October 26, 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 45-Day EPA comment period as described in Rule 214(3). In addition, this addendum describes any changes to the proposed ROP resulting from these pertinent comments.

General Information

Responsible Official:	Kyung Kho, Midwest Area Environmental Manager 708-297-3949
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-303-8326

Summary of Pertinent Comments

The following pertinent comments were received during the 45-Day EPA comment period.

The EPA recommends that the EGLE-AQD revise the dual authority citations to both 40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA included within the permit. In particular, the requirements citing 40 CFR 63.1955(a)(1) do not currently refer to a condition within 40 CFR 63 Subpart AAAA. I recommend that these provisions cite either 40 CFR 63.1930 or 40 CFR 63.1955(a), as appropriate.

Changes to the December 4, 2020 Proposed ROP

Under EULANDFILL

All Underlying Applicable Requirements (UARs) Citations of 40 CFR 63.1950, 63.1955, or 63.1955(a)(1) were changed to 40 CFR 63.1930(a) to reflect the updated MACT AAAA.

Under #1 of the Process/Operational Restrictions, the UARs cited in the condition language were changed from 63.1955(b) to 63.1955(a) and 63.1980 changed to 63.1975. Also, the UAR listed after the condition was changed from 63.1945(d) to 63.1930(a).

Under #5 of the Monitoring/Recordkeeping Requirements, the UARs cited in the condition language were changed from 63.1955(c) to 63.1955(b) and 63.1980(c) through (f) was changed to 63.1982(a) and (b). Also, the UAR listed after the condition was changed from 63.1980(g) to 63.1982(c).

Under #6 of the Reporting Requirements, the UARs 63.1955(c) and 63.1980(a) after the condition were deleted.

UNDER EUACTIVECOLL

All Underlying Applicable Requirements (UARs) Citations of 40 CFR 63.1955(a) were changed to 40 CFR 63.1930(a) to reflect the updated MACT AAAA.

Under #3(a) of the Process/Operational Restrictions, the UAR 63.1980(a) after the condition was deleted.

Under #4 of the Reporting Requirements, the UAR 63.1980(a) after the condition was deleted.

Under #4 of the Other Requirements, the UAR 63.1960 after the condition was changed to 63.1964(a).

UNDER EUEVAPSYS

All Underlying Applicable Requirements (UARs) Citations of 40 CFR 63.1955(a) were changed to 40 CFR 63.1930(a) to reflect the updated MACT AAAA

Under #4(b)(i) and (ii), the UAR 40 CFR 63.1980(a) was deleted.

UNDER EUOPENFLARE

All Underlying Applicable Requirements (UARs) Citations of 40 CFR 63.1955(a) were changed to 40 CFR 63.1930(a) to reflect the updated MACT AAAA

Under #4 and #4(a),(b), and (c), the UAR 40 CFR 63.1980(a) was deleted.

Under #2 of the Other Requirements, the UAR 40 CFR 63.1960 was changed to 63.1964(a).

APPENDICES

Under Appendix 7, changed the applicable UAR from 40 CFR 63.1955(c) to 63.1962(a)(3)(ii).

Under Appendix 7, deleted the UAR 40 CFR 63.1955(a) where it's non-applicable now.

State Registration Number
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RENEWABLE OPERATING PERMIT
MAY 2, 2022 - STAFF REPORT FOR RULE 217(2)
REOPENING

ROP Number
MI-ROP-N2407-2021a

Purpose

On February 8, 2021, the Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N2407-2021 to Forest Lawn Landfill, Inc. 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:	Kyung Kho, Area Environmental Manager 708-297-3949
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-303-8326
Date Public Comment Begins:	May 2, 2022
Deadline for Public Comment:	June 1, 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 40 CFR Part 63, Subpart AAAA, and to add new applicable requirements associated with 40 CFR Part 62, Subpart OOO and 40 CFR Part 63, Subpart AAAA.

This ROP previously contained requirements to ensure compliance with 40 CFR Part 60, Subpart WWW for Municipal Solid Waste Landfills with NMOC emissions greater than 50 megagrams per year combined with 40 CFR Part 63, Subpart AAAA requirements. On June 21, 2021, the facility became subject to the 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 as specified in 40 CFR Part 62, Subpart OOO. The landfill is considered a legacy landfill under the Federal Plan. For 40 CFR Part 63, Subpart AAAA, new applicable provisions per 40 CFR 63.1930(b) apply after September 28, 2021. The permittee has opted to comply with the provisions for the operational standards in 40 CFR 63.1958 (as well as the provisions in 40 CFR 63.1960 and 40 CFR 63.1961) for a Municipal Solid Waste Landfill with a gas collection and control system used to comply with the provisions of the Federal Plan.

Description of Changes to the ROP

The following emission unit special conditions which included requirements from 40 CFR Part 60, Subpart WWW and 40 CFR Part 63, Subpart AAAA have been replaced by flexible group special conditions for the new applicable requirements from 40 CFR Part 62, Subpart OOO and 40 CFR Part 63, Subpart AAAA. Additionally, Appendix 7 of the ROP has been updated with 40 CFR Part 62, Subpart OOO and 40 CFR Part 63, Subpart AAAA requirements.

EULANDFILL has been replaced by FGLANDFILL-OOO and FGLANDFILL-AAAA.

EUACTIVECOLL has been replaced by FGACTIVECOLL-OOO and FGACTIVECOLL-AAAA.

The existing emission unit EUOPENFLARE had to remain as is and cannot currently be deleted or edited to remove obsolete conditions because the conditions were established through the New Source Review (NSR) / Permit to Install (PTI) process. However, FGOPENFLARE-OOO and FGOPENFLARE-AAAA were added to the ROP to incorporate the updated applicable federal requirements that pertain to it.

The existing emission unit EUEVAPSYS had to remain as is and cannot currently be deleted or edited to remove obsolete conditions because the conditions were established through the NSR / PTI process.

EUASBESTOS has been updated with the requirements from 40 CFR Part 62, Subpart OOO in Special Conditions IV.1 and VI.3 replacing functionally identical but obsolete requirements from 40 CFR Part 60, Subpart WWW.

APPENDIX 7

Revision to the Appendix was made to incorporate the emission calculations for 40 CFR Part 62, Subpart OOO and 40 CFR Part 63, Subpart AAAA requirements.

Action Taken by the Department

The AQD proposes to approve this change to ROP No. MI-ROP-N2407-2021, which was reopened by the AQD to incorporate applicable requirements associated with 40 CFR Part 62, Subpart OOO and the updated 40 CFR Part 63, Subpart AAAA. . 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 Rex Lane, Kalamazoo 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.

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

State Registration Number
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RENEWABLE OPERATING PERMIT
JUNE 2, 2022 - STAFF REPORT ADDENDUM FOR
RULE 217(2) REOPENING

ROP Number
MI-ROP-N2407-2021a

Purpose

A Staff Report dated May 2, 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:	Kyung Kho, Area Environmental Manager 708-297-3949
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-303-8326

Summary of Pertinent Comments

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

Changes to the May 2, 2022 Draft ROP Reopening

No changes were made to the draft ROP reopening.

State Registration Number

N2407

RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-N2407-2021b

NOVEMBER 28, 2022 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

Purpose

On July 19, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N2407-2021a to Forest Lawn Landfill, Inc. pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(2).

General Information

Responsible Official:	Megan Crowley, Area Environmental Manager 574-402-0177
AQD Contact:	Caryn Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202200213
Date Application for Minor Modification was Submitted:	November 14, 2022

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to Rule 216(2).

Description of Changes to the ROP

Minor Modification Number 202200213 is to incorporate PTI No.126-22 which was for the removal of non-applicable NSPS WWW conditions from EUOPENFLARE and EUEVAPSYS. The changes in the PTI were considered administrative changes.

Also, due to comments received from EPA regarding the Landfill templates, minor changes to the Asbestos and FGOPENFLARE-AAAA templates were made and typos in the Appendix 7 have been corrected. The company was notified of these changes and were in agreement of them being made.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

Action Taken by EGLE

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-N2407-2021a, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states 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 the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.