

State Registration Number
N5432

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N5432-2022a

**Southeast Berrien County Landfill Authority
and
North American Natural Resources-SBL, LLC – Southeast Berrien Generating Station**

State Registration Number (SRN): N5432

Located at

3200 Chamberlain Road, Buchanan, Berrien County, Michigan 49107

Permit Number: MI-ROP-N5432-2022a

Staff Report Date: July 25, 2022

Amended Date: October 7, 2024

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).

TABLE OF CONTENTS

JULY 25, 2022 STAFF REPORT	3
SEPTEMBER 1, 2022 - STAFF REPORT ADDENDUM	7
OCTOBER 7, 2024 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT	8

State Registration Number

N5432

RENEWABLE OPERATING PERMIT

JULY 25, 2022 STAFF REPORT

ROP Number

MI-ROP-N5432-2022

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:	Southeast Berrien County Landfill Authority 3200 Chamberlain Road Buchanan, Michigan 49107
Source Registration Number (SRN):	N5432
North American Industry Classification System (NAICS) Code:	562212
Number of Stationary Source Sections:	2
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	202100001
Responsible Official – Section 1:	Tyler Ganus, General Manager 269-695-2500
Responsible Official - Section 2	Richard Spranger - Director of Operations 517-719-1322
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-303-8326
Date Application Received:	January 4, 2021
Date Application Was Administratively Complete:	January 4, 2021
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	July 25, 2022
Deadline for Public Comment:	August 24, 2022

Source Description

Southeast Berrien County Landfill (SEBCL) is a Type II Municipal Solid Waste Landfill (MSWL) and is owned and operated by the SEBCL Authority. The landfill is located approximately one mile SE of the City of Buchanan and approximately three miles west of the City of Niles in Berrien County, Michigan. The area immediately surrounding the landfill is rural / agricultural. The SEBCL has a design capacity greater than 2.5 million megagrams (Mg) and has estimated uncontrolled NMOC emissions greater than 34 megagrams per year (Mg/yr). Because of the landfills design capacity and uncontrolled NMOC emissions amount, it is subject to the Federal Plan Requirements for MSWL as codified in 40 CFR Part 62, Subpart OOO which took effect on June 21, 2021, because they began construction on or before July 17, 2014 and the landfill hasn't been modified or reconstructed since that date. The landfill is also subject to the federal National Emission Standards for Hazardous Air Pollutants (NESHAP) at MSWL codified in 40 CFR Part 63, Subpart AAAA which took effect on September 27, 2021. The NESHAP applicability has the 2.5 million Mg design capacity as well but the uncontrolled NMOC emission requirement is if it's over 50 Mg/yr which the landfill exceeds as well. In July 2009, North American Natural Resources (NANR) installed three engines with generators to operate off the landfill gas and provide power to the electric utility grid. The SEBCL still has an open flare as a backup control device. The ROP has two sections: one contains the requirements for SEBCL; the other the requirements for NANR.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2021**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	176.61
Nitrogen Oxides (NO _x)	25.71
Particulate Matter (PM)	12.51
Sulfur Dioxide (SO ₂)	17.02
Volatile Organic Compounds (VOCs)	37.19
Non-Methane Organic Compound (NMOCs)	65.11

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.

Berrien County is currently designated by the United States Environmental Protection Agency (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 of CO exceeds 100 tons per year, the potential to emit of any single hazardous air pollutant (HAP) regulated by the federal Clean Air Act, Section 112, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year, and the source is subject to 40 CFR Part 62, Subpart OOO.

The stationary source is considered a "synthetic minor" source in regards to the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of Carbon Monoxide to less than 250 tons per year.

EUGENERATOR2 and FGENGINES at the stationary source are subject to the NSPS for Stationary Spark Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and JJJJ.

EUASBESTOS, FGLANDFILL-OOO, and FGLANDFILL-AAAA at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Asbestos promulgated in 40 CFR Part 61, Subparts A and M.

FGLANDFILL-OOO, FGACTIVCOLL-OOO, EUOPENFLARE, FGOPENFLARE-OOO, and FGTREATMENTSYS-OOO at the stationary source are subject to the Federal Plan Requirements for Municipal Solid Waste Landfills promulgated in 40 CFR Part 62, Subparts A and OOO.

FGENGINES at the stationary source is subject the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ.

FGLANDFILL-AAAA, FGACTIVCOLL-AAAA, EUOPENFLARE, FGOPENFLARE-AAAA, and FGTREATMENTSYS-AAAA at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Municipal Solid Waste Landfills as promulgated in 40 CFR Part 63, Subparts A and AAAA.

The AQD's Rules 287 and 290 were revised on December 20, 2016. FGRULE287(2)(c) and FGRULE290 are flexible group tables created for emission units subject to these rules. Emission units installed before December 20, 2016, can comply with the requirements of Rule 287 and Rule 290 in effect at the time of installation or modification as identified in the tables. However, emission units installed or modified on or after December 20, 2016, must comply with the requirements of the current rules as outlined in the tables.

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 FGLANDFILL-OOO, FGLANDFILL-AAAA, FGACTIVCOLL-OOO, FGACTIVCOLL-AAAA, EUOPENFLARE, FGOPENFLARE-OOO, FGOPENFLARE-AAAA, EUASBESTOS, EUGENERATOR2, FGENGINES, FGTREATMENTSYS-OOO, and FGTREATMENTSYS-AAAA at the stationary source are exempt from the federal Compliance Assurance Monitoring regulation under 40 CFR Part 64, because they are addressed by either 40 CFR Part 60, Subparts A and JJJJ; 40 CFR Part 61, Subpart M; 40 CFR Part 62, Subparts A and OOO; and 40 CFR Part 63, Subparts A and AAAA or ZZZZ.

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-N5432-2021 are identified in Appendix 6 of the ROP.

PTI Number			
296-08	474-94		

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
EUGASOLINE	One (1) 500-gallon gasoline above ground storage tank.	R 336.1212(4)(c)	R 336.1284(2)(g)(i)
EUGENERATOR	One (1) 7,500 watt Genpro Generator.	R 336.1212(4)(d)	R 336.1285(2)(g)
EUPOWER-WASHER	One (1) 32,000 btu gas fired power washer.	R 336.1212(4)(d)	R 336.1285(2)(g)
EULP-HEATER1	Three (3) liquid propane fired heaters located in the material recovery facility.	R 336.1212(4)(b)	R 336.1282(2)(b)(i)
EULP-HEATER2	Three (3) liquid propane fired heaters located in maintenance building.	R 336.1212(4)(b)	R 336.1282(2)(b)(i)
EULP-HEATERS3-4	Two (2) liquid propane fired heaters.	R 336.1212(4)(b)	R 336.1282(2)(b)(i)

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.

State Registration Number
N5432

RENEWABLE OPERATING PERMIT
SEPTEMBER 1, 2022 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-N5432-2022

Purpose

A Staff Report dated July 25, 2022, 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 – Section 1:	Tyler Ganus, General Manager 269-695-2500
Responsible Official – Section 2	Richard Spranger - Director of Operations 517-719-1322
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 July 25, 2022 Draft ROP

No changes were made to the draft ROP.

State Registration Number
N5432

RENEWABLE OPERATING PERMIT

ROP Number
MI-ROP-N5432-2022a

OCTOBER 7, 2024 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT

Purpose

On October 21, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N5432-2022 to Southeast Berrien County Landfill Authority and North American Natural Resources SBL-LLC 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(1)(a)(i-iv).

General Information

Responsible Official:	Anthony Hopwood, Director of Operations 317-832-6363
AQD Contact:	Caryn Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202400129
Date Application for Administrative Amendment was Submitted:	August 8, 2024

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for an Administrative Amendment pursuant to Rule 216(1)(a)(iv).

Description of Changes to the ROP

Administrative Amendment Number 202400129 was to update the Company name to be consistent with the legal name of the facility, so the name changed from North American Natural Resources SBL-LLC to North American Natural Resources-SBL, LLC – Southeast Berrien Generating Station. No change in ownership occurred with this change.

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 Administrative Amendment to the ROP.

Action Taken by EGLE

The AQD approved an Administrative Amendment to ROP No. MI-ROP-N5432-2022, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.