

State Registration Number

N5397

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number

MI-ROP-N5397-2024

**Waste Management of Michigan, Inc. – People’s Landfill**

and

**People’s LFG, LLC**

State Registration Number (SRN): N5397

Located at

4143 East Rathbun Road, Birch Run, Saginaw County, Michigan 48415

and

4516 Rathbun Road, Birch Run, Saginaw County, Michigan 48415

Permit Number: MI-ROP-N5397-2024

Staff Report Date: December 11, 2023

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

N5397

**RENEWABLE OPERATING PERMIT**

**DECEMBER 11, 2023 - STAFF REPORT**

ROP Number

MI-ROP-N5397-2024

**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:	Section 1: Waste Management of Michigan, Inc. – People’s Landfill 4143 East Rathbun Road Birch Run, Michigan 48415 Section 2: People’s LFG, LLC 4516 Rathbun Road Birch Run, Michigan 48415
Source Registration Number (SRN):	N5397
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:	202300109
Responsible Official:	Section 1: John Gall, Senior District Manager 810-621-9080 Section 2: Brian Evans, Owner 734-627-9000
AQD Contact:	Gina McCann, Environmental Quality Specialist 989-439-2282
Date Application Received:	August 2, 2023
Date Application Was Administratively Complete:	August 2, 2023
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	December 11, 2023
Deadline for Public Comment:	January 10, 2024

## Source Description

People's Landfill is a municipal solid waste (MSW) landfill in Birch Run owned and operated by Waste Management of Michigan, Inc. The facility is located in Birch Run, Saginaw County. People's Landfill has a design capacity greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) of non-methane organic compounds. The landfill was modified since May 30, 1991. The most recent construction permit for accepting solid waste was issued December 5, 2002. This stationary source includes a Type II sanitary landfill, active municipal solid waste landfill (MSW) with an active landfill gas collection system, both of which are operated year-round. The collection system is comprised of a series of gas wells, a network of collection piping and headers, condensate drains, open flare, and one Landfill Gas-to-Energy Facility: People's LFG, LLC (formerly SRN P0415). Solid waste arrives in a variety of vehicles that potentially generate fugitive dust emissions. The primary standard industrial code is 4953 (Municipal Solid Waste Landfill).

The landfill gas (LFG) is collected at the People's Landfill facility by an active gas collection system through a series of vertical extraction wells that are installed into the depths of the landfill refuse, which remove landfill gas by vacuum applied to the well from a blower. The LFG is then routed to People's LFG, LLC for generation of electricity. Any excess LFG, or when the generating station is down, is routed to the open flare. The collection system is periodically modified by adding a gas well and/or collection piping as needed when sections of the landfill begin to produce significant gas quantities. The design capacity of the open flare is 2,500 standard cubic feet per minute (scfm).

The two companies have a contractual agreement in which People's Landfill sells landfill gas to People's LFG, LLC and People's LFG, LLC is dependent upon People's Landfill to provide landfill gas which is combusted in its five internal combustion engines. The contractual and spatial relationship of the two facilities establishes People's Landfill and People's LFG, LLC as a single stationary source based on the definition in Michigan's Rule 336.1119(r). Formerly, the two companies were operating under separately issued ROPs. People's LFG, LLC operated previously under SRN P0415; however, due to AQD policy change, was combined under People's Landfill's SRN N5397.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2022**.

### TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	105.83
Lead (Pb)	
Nitrogen Oxides (NO <sub>x</sub> )	62.89
PM10*	8.23
Sulfur Dioxide (SO <sub>2</sub> )	11.37
Volatile Organic Compounds (VOCs)	8.36

\* Particulate matter (PM) that has an aerodynamic diameter less than or equal to a nominal 10 micrometers.

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2022 by MAERS:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
NMOC	8.36
<b>Total Hazardous Air Pollutants (HAPs)</b>	<b>8.36</b>

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

## **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 Saginaw 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 potential to emit of carbon monoxide and nitrogen oxides exceeds 100 tons per year and the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act 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, Subparts OOO and 40 CFR Part 63, Subpart AAAA that requires a 40 CFR Part 70 permit.

No emission units at the stationary source were subject to the Prevention of Significant Deterioration regulations of the Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality of Act 451 or 40 CFR 52.21 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-ASBESTOS 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.

EUICE#6 at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

People's LFG, LLC replaced existing CAT G3520C with a CAT G3516LE landfill gas-fueled reciprocating internal combustion engine. The CAT G3520C was previously permitted under Permit to Install number 321-06. The replacement engine, CAT G3516LE, is exempt from the requirement to obtain a Permit to Install pursuant to R 336.1285(g).

The stationary source was subject to the Standards of Performance for Municipal Solid Waste Landfills promulgated in 40 CFR Part 60, Subparts A and WWW. 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 stationary source is considered a legacy landfill under the Federal Plan. Michigan is not currently the delegated authority and is implementing and enforcing this regulation through the ROP.

The stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills as promulgated in 40 CFR Part 63, Subparts A and AAAA. 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. The regulatory language in 40 CFR Part 62, Subpart OOO and 40 CFR Part 63, Subpart AAAA are similar but not identical. Where applicable, similar citations are grouped together.

EUGASTANK at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subparts A and CCCCC. The ROP contains special conditions for applicable requirements from 40 CFR Part 63, Subpart CCCCC. The AQD is not delegated the regulatory authority for this area source MACT.

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.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-N5397-2019 are identified in Appendix 6 of the ROP.

PTI Number			
321-06	437-97	13-20	13-20A

**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 Not in the Draft ROP**

The following table lists PTI exempt processes that were not included in the Draft ROP pursuant to Rule 212(4). These processes are not subject to any process-specific emission limits or standards.

Emission Unit ID	Description of Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EUGASTANK	500 Gallon Unleaded Fuel Tank	R 336.1284(b)	R 336.1212(4)
EUDIESELTANK_1	500 Gallon Off Road Diesel Tank	R 336.1284(b)	R 336.1212(4)
EUDIESELTANK_2	1,000 Gallon Off Road Diesel Tank	R 336.1284(b)	R 336.1212(4)
EUENGINE#5R	Caterpillar Model G3516LE	R 336.1285(g)	R 336.1212(4)
EUPROPANETANKS	Two (2) 1000-gallon Propane Storage Tanks	R 336.1284(2)(b)	R 336.1212(4)(d)
EUUSED OILTANK	One (1) 500-gallon used oil tank	R 336.1284(i)	R 336.1212(4)(c)
EULUBEOILTANKS	Three (3) 250-gallon lube oil tanks	R 336.1284(2)(i)	R 336.1212(4)(d)
EULEACHATETANKS	Two (2) 54,000 gallon above-ground leachate storage tanks	R 336.1291	R 336.1212(4)(i)

Emission Unit ID	Description of Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EUPROPANEHEATERS	Multiple propane fired space heaters and hot water heater for heating buildings <50 mmbtu	R 336.1282(2)(b)(i)	R 336.1212(4)(c)
EUICE#5	CAT® G3516LE	R 336.1285(g)	R 336.1212(4)(e)

**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 Chris Hare, Bay City 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  
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**RENEWABLE OPERATING PERMIT**  
**JANUARY 17, 2024 - STAFF REPORT ADDENDUM**

ROP Number  
MI-ROP-N5397-2024

**Purpose**

A Staff Report dated December 11, 2023, 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: John Gall, Senior District Manager 810-621-9080 Section 2: Brian Evans, Owner 734-627-9000
AQD Contact:	Gina McCann, Environmental Quality Specialist 989-439-2282

**Summary of Pertinent Comments**

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

**Changes to the December 11, 2023 Draft ROP**

No changes were made to the draft ROP.