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

State Registration Number N6028

# RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number

MI-ROP-N6028-2019

## Green For Life (GFL) North Michigan Landfill Elk Run Landfill

State Registration Number (SRN): N6028

Located at:

20667 Five Mile Highway, Onaway, Presque Isle County, Michigan 49765

Permit Number: MI-ROP-N6028-2019

Staff Report Date: May 6, 2019

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**

MAY 6, 2019 - STAFF REPORT	3
JUNE 11, 2019 - STAFF REPORT ADDENDUM	7

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

State Registration Number

#### RENEWABLE OPERATING PERMIT

**ROP Number** 

N6028

MAY 6, 2019 - STAFF REPORT

MI-ROP-N6028-2019

#### **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:	GFL Environmental USA Inc 1307 Higgins Drive Cheboygan, Michigan 49721
	<u> </u>
Source Registration Number (SRN):	N6028
North American Industry Classification System (NAICS) Code:	562212
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Initial Issuance
Application Number:	201800160
Responsible Official:	Mr. Chris Gee, General Manager 989-733-6075
AQD Contact:	Mr. Rob Dickman, Senior Environmental Quality Analyst 231-878-4697
Date Application Received:	December 10, 2018
Date Application Was Administratively Complete:	December 18, 2018
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	May 6, 2019
Deadline for Public Comment:	June 5, 2019

#### **Source Description**

GFL North Michigan Landfill is a Type II Sanitary Landfill, with a design capacity of 2.7 million cubic meters. It is located approximately five miles south of the town of Onaway in Presque Isle County. Land around the facility is mostly rolling hills. Land use within a mile of the facility is a mix of agricultural and forest lands and is sparsely populated with some residential homes. The nearest resident is approximately 200 yards due west of the entrance to the facility.

The facility accepts municipal solid waste (MSW), inert wastes, and a minimal amount of asbestos containing waste. The MSW is transported to the facility to an area (cell) where it is deposited on the working surface. The deposited waste is covered with soil daily. 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).

The facility received a Solid Waste Disposal Area Construction Permit to increase the landfill's design capacity on June 18, 2001. LFG is currently not being collected. Because the landfill was modified after May 30, 1991 and the design capacity is now above 2.5 million megagrams due to a recent increase in waste density, the GFL North Michigan Landfill is subject to 40 CFR Part 60, Subpart WWW.

The landfill is required to calculate the non-methane organic compound (NMOC) emission rate and submit non-methane organic compound (NMOC) emission rate reports until the NMOC emission rate exceeds 50 megagrams (Mg) per year. Once the NMOC estimated emission rate exceeds 50 Mg per year, the Landfill will have 12 months to submit a landfill gas collection and control system design plan. In July of 2018 GFL North Michigan Landfill provided NMOC estimates which demonstrated that NMOC emissions would not exceed 8.5 Mg/year in the next five years, which is below the 50 Mg per year threshold. Therefore, no landfill gas collection and control system is required under 40 CFR Part 60, Subpart WWW requirements. However, the facility is voluntarily operating several solar powered passive flares for odor control purposes

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	<b>EMISSIONS</b>

Pollutant	Tons per Year
Carbon Monoxide (CO)	10.2
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	2.7
Particulate Matter (PM)	1.3
Sulfur Dioxide (SO <sub>2</sub> )	0.9
Volatile Organic Compounds (VOCs)	0.3
Non-Methane Organic Compounds (NMOC)	3.6

This source is a true minor source of Hazardous Air Pollutants (HAPs), therefore, no HAPs 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 Presque Isle 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 40 CFR Part 70, because the source is subject to 40 CFR Part 60, Subparts A and WWW. Subpart WWW requires affected facilities with a design capacity equal to or greater than 2.5 million cubic meters and 2.5 million megagrams to obtain an ROP. The potential to emit of NMOCs does not exceed 50 Mg per year.

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 emissions 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 all criteria pollutants was less than 250 tons per year.

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 now 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.

Although EULANDFILL<50 was installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. However, future modifications may be subject to NSR.

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.

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

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. However, this facility does not contain any conditions established pursuant to Rule 201, 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

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
EUNATGASHEATER	Multiple natural gas comfort heaters: 1 - 80,000 BTU/hr & 2 – 100,000 BTU/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EULEACHATETANK	Two underground leachate storage tanks – 20,000 gallons each	R 336.1212(4)(i)	R 336.1285(2)(aa)
EUPORTTORCHCUT	Portable cutting torch for equipment repair and maintenance.	R 336.1212(4)(e)	R 336.1285(2)(j)(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 the 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/Gaylord 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.

# Michigan Department of Environment, Great Lakes, and Energy

Air Quality Division

State Registration Number N6028

### RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-N6028-2019

**JUNE 11, 2019 - STAFF REPORT ADDENDUM** 

#### **Purpose**

A Staff Report dated May 6, 2019, 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. Chris Gee, General Manager 989-733-6075
AQD Contact:	Rob Dickman, Environmental Quality Analyst 231-878-4697

#### **Summary of Pertinent Comments**

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

#### Changes to the May 6, 2019 Draft ROP

No changes were made to the draft ROP.