

Michigan Department of Environmental Quality  
Air Quality Division

State Registration Number  
N2896

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-N2896-2017

**C&C Landfill**

SRN: N2896

Located at

14800 P Drive North, Marshall, Calhoun County, Michigan 49068

Permit Number: MI-ROP-N2896-2017

Staff Report Date: October 31, 2016

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) requires that the Michigan Department of Environmental Quality (MDEQ), 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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Michigan Department of Environmental Quality  
Air Quality Division

State Registration Number

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**RENEWABLE OPERATING PERMIT**

**January 26, 2017 STAFF REPORT**

ROP Number

MI-ROP-N2896-2017

**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 of 1990 and Michigan's Administrative Rules for Air Pollution Control pursuant to 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:	C&C Landfill 14800 P Drive North Marshall, Michigan 49068
Source Registration Number (SRN):	N2896
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:	201600080
Responsible Official:	James Porter, General Manager 269-775-3034
AQD Contact:	Monica Brothers, Environmental Quality Analyst 269-567-3552
Date Application Received:	April 22, 2016
Date Application Was Administratively Complete:	May 3, 2016
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	October 31, 2016
Deadline for Public Comment:	November 30, 2016

## Source Description

The C&C Expanded Sanitary Landfill (Landfill) is located near Marshall, Michigan. The stationary source includes an active municipal solid waste (MSW) landfill with an active landfill gas collection system. Previous ROPs had two sections, with each section representing a separate company. Section 1 covered landfill operations, and Section 2 covered landfill gas-to-energy equipment owned and operated by C&C Energy, LLC (C&C Energy). Both facilities requested that they be issued a separate ROP, which was approved. The AQD still considers them to be one stationary source. The C&C Energy has been assigned State Registration Number P0222.

The Landfill is licensed as a Type II MSW landfill and serves as a disposal point for residential waste, industrial non-hazardous waste, and municipal solid waste. The decomposing waste encapsulated within the landfill produces a gas that is primarily composed of methane and CO, along with other trace gases. The landfill gas generated within the waste mass is collected through a series of wells and other collection points that are under vacuum. The landfill gas is then routed to the off-site user C&C Energy to be combusted in either their turbine or internal combustion engines for electrical generation and emissions control. When C&C Energy is not in operation or there is excess landfill gas present, the open flare owned by the Landfill is used for emission control.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System for the year **2015**.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	3.36
Nitrogen Oxides (NO <sub>x</sub> )	1.48
Particulate Matter (PM)	14.67
Sulfur Dioxide (SO <sub>2</sub> )	3.35
Volatile Organic Compounds (VOC)	0.24
Non-Methane Organic Compounds (NMOC)	12.41

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 located in Calhoun County, which is currently designated by the U.S. 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 exceeds 100 tons per year, and the source is subject to New Source Performance Standards for Municipal Solid Waste Landfills.

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 CO was less than 250 tons per year.

The EU-LANDFILL, EU-ACTIVECOLL, EU-ASBESTOS, and FU-FLARE1 at the stationary source are subject to the Standards of Performance for Municipal Solid Waste promulgated in 40 CFR, Part 60, Subparts A and WWW.

The EU-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.

The EU-LANDFILL, EU-ACTIVECOLL, EU-ASBESTOS, and FU-FLARE1 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 limitations or standards for EU-LANDFILL, EU-ACTIVECOLL, EU-FLARE1, and EU-ASBESTOS 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 WWW; 40 CFR, Part 61, Subparts A and M; and 40 CFR, Part 63, Subparts A and AAAA.

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. The PTIs issued after the effective date of ROP No. MI-ROP-N2896-2011a are identified in Appendix 6 of the ROP.

PTI Number			
NA	NA	NA	NA

**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.

<b>Exempt Emission Unit ID</b>	<b>Description of Exempt Emission Unit</b>	<b>Rule 212(4) Exemption</b>	<b>Rule 201 Exemption</b>
EU-DIESELFUEL	10,000 gallon diesel fuel AST	R 336.1212(3)(e)	R 336.1284(d)
EU-GASOLINE	525 gallon gasoline AST	R 336.1212(4)(c)	R 336.1284(g)
EU-KEROSENE	275 gallon kerosene AST	R 336.1212(3)(e)	R 336.1284(d)
EU-WASTEOIL	530 gallon waste oil tank	R 336.1212(3)(e)	R 336.1284(c)
EU-MOTOROIL	350 gallon motor oil tank	R 336.1212(3)(e)	R 336.1284(c)
EU-HYDRAULICOIL	350 gallon hydraulic oil tank	R 336.1212(3)(e)	R 336.1284(c)
EU-TRANSFLUID	330 gallon transmission fluid tank	R 336.1212(3)(e)	R 336.1284(c)
EU-HEATERS	Natural gas heaters. Three 0.3 mmBTU/hr and one 0.1 mmBTU/hr heaters in the shop. One 0.1 mmBTU/hr heater in the main office.	R 336.1212(4)(b)	R 336.1282(b)(i)
EU-WATERHEAT	Two 0.04 mmBTU/hr natural gas hot water heaters. One in the shop and one in the main office.	R 336.1212(4)(b)	R 336.1282(b)(i)
EU-LPTANK	1,000 gallon liquid propane tank	R 336.1212(4)(c)	R 336.1284(b)
EU-LEACHATE	Two 130,000 gallon leachate storage tanks	R 336.1212(3)(f)	R 336.1285(aa)

### **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 MDEQ, 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 Ms. Mary Douglas, 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.

**Purpose**

A Staff Report dated October 31, 2016, was developed in order to set forth the applicable requirements and factual basis for the draft ROP terms and conditions as required by R 336.1214(1). 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 R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

**General Information**

Responsible Official:	James Porter, General Manager 269-775-3034
AQD Contact:	Monica Brothers, Environmental Quality Analyst 269-567-3552

**Summary of Pertinent Comments**

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

**Changes to the October 31, 2016 Draft ROP**

No changes were made to the draft ROP.