State Registration Number

N7374

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

RENEWABLE OPERATING PERMIT STAFF REPORT ROP Number MI-ROP-N7374-2020

# **Plastic Plate Kraft**

State Registration Number (SRN): N7374

Located at

5675 Kraft Avenue SE, Grand Rapids, Kent County, Michigan 49512

Permit Number: MI-ROP-N7374-2020

Staff Report Date: March 23, 2020

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).

March 23, 2020 - STAFF REPORT	3
April 27, 2020 - STAFF REPORT ADDENDUM	7

March 23, 2020 - STAFF REPORT

State Registration Number N7374

# RENEWABLE OPERATING PERMIT

**ROP Number** 

MI-ROP-N7374-2020

#### <u>Purpose</u>

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.

Stationary Source Mailing Address:	Plastic Plate Kraft 3505 Kraft Avenue SE
	Grand Rapids, Michigan 49512
Source Registration Number (SRN):	N7374
North American Industry Classification System (NAICS) Code:	336390
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900137
Responsible Official:	Dan Jaracz, Director of Operations 616-455-5551
AQD Contact:	April Lazzaro, Senior Environmental Quality Analyst 616-558-1092
Date Application Received:	August 13, 2019
Date Application Was Administratively Complete:	August 13, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	March 23, 2020
Deadline for Public Comment:	April 22, 2020

#### General Information

# Source Description

The Plastic Plate Kraft facility conducts decorative hexavalent chrome electroplating primarily on plastic automotive parts, but also on plumbing fixtures, household appliances and business machines. The process consists of pretreatment, alkaline cleaning, acid dipping, and strike plating of copper, copper electroplating, nickel electroplating, and chromium electroplating. The emissions originating from the electroless copper, conditioner, and rack stripping tanks are controlled by wet scrubbers while the emissions originating from the chrome plating and etching tanks are controlled by the use of chemical fume suppressant that is free of perfluoroctane sulfonic acid (PFOS) and composite mesh pad scrubbers.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2018**.

Pollutant	Tons per Year
Carbon Monoxide (CO)	1.1
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	5.5
Particulate Matter (PM)	0.5
Sulfur Dioxide (SO <sub>2</sub> )	0.03
Volatile Organic Compounds (VOCs)	1.8

# TOTAL STATIONARY SOURCE EMISSIONS

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2018 by the company based on actual stack test data and hours of operation:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Chromium	0.004
Formaldehyde	0.5
Methanol	0.96
Nickel	0.005
Total Hazardous Air Pollutants (HAPs)	1.42

\*\*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 nonapplicability 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 Kent 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 any single HAP regulated by Section 112 of the federal Clean Air Act, is equal to or more than 10 tons per year and the potential to emit of all HAPs combined is equal to or more 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 volatile organic compounds was less than 250 tons per year.

Except for the boilers and the emergency generator, all emission units are subject to the toxic air contaminant requirements under Rule 225. In addition, EUCONDITIONER, EUELECTROLESSCU, and FGNICKEL are subject to Rule 702 Best Achievable Control Technology (BACT).

EUELECTROLESSCU was subject to a case-by-case Maximum Achievable Control Technology (MACT) review under Section 112(g) of the federal Clean Air Act because HAP emissions for formaldehyde and methanol are greater than 10 tons per year for an individual HAP and 25 tons per year for combined HAPs. Section 112(g) (and adopted by reference in Rule 299)) requires that any constructed or reconstructed major source of HAPs be equipped with MACT to control HAP emissions if a source specific MACT standard for the source category has not been promulgated under Section 112(d) or Section 112(h). MACT for EUELECTROLESSCU was determined to be a packed bed scrubber system with methanol and formaldehyde emission limits. Rule 299 was rescinded in 2016, and the equivalent rule is now Rule 902.

EUKPGENSET at the stationary source is subject to the Standards of Performance for Stationary Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and JJJJ.

FGCHROME1 at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks promulgated in 40 CFR Part 63, Subparts A and N. FGBOILERS is also subject to the NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters promulgated under 40 CFR Part 63, Subparts A and DDDDD. EUKPGENSET is subject to the NESHAP for Reciprocating Internal Combustion Engines under 40 CFR Part 63, Subparts A and ZZZZ.

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 (CAM) 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 of criteria pollutants over the major source thresholds.

PTI No. 192-19 was issued on January 29, 2020 for the installation of: EUPREETCHTANK which is one (1) tank used to pre-etch plastic parts prior to plating.

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.

PTI Number				
23-12A				

# 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

There were no processes listed in the ROP Application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

## 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 Heidi Hollenbach, Grand Rapids 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

State Registration Number

# Air Quality Division RENEWABLE OPERATING PERMIT

ROP Number

N7374

# April 27, 2020 - STAFF REPORT ADDENDUM

MI-ROP-N7374-2020

#### <u>Purpose</u>

A Staff Report dated March 23, 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:	Dan Jaracz, Director of Operations 616-455-5551
AQD Contact:	April Lazzaro, Senior Environmental Quality Analyst 616-558-1092

#### Summary of Pertinent Comments

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

#### Changes to the March 23, 2020 Draft ROP

No changes were made to the draft ROP.