

State Registration Number
N1315

Michigan Department of Environmental Quality
Air Quality Division
**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N1315-2018

Louisiana-Pacific Corporation, Sagola Plant

SRN: N1315

Located at

N8504 Highway M-95, Sagola, Dickinson County, Michigan 49881

Permit Number: MI-PTI-N1315-2018

Staff Report Date: October 1, 2018

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
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RENEWABLE OPERATING PERMIT

OCTOBER 1, 2018 - STAFF REPORT

ROP Number

MI-ROP-N1315-2018

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:	Louisiana-Pacific Corporation, Sagola Plant N8504 Highway M-95 Sagola, Michigan 49881
Source Registration Number (SRN):	N1315
North American Industry Classification System (NAICS) Code:	321219
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201700123
Responsible Official:	Todd Maki, Plant Manager 906-542-7301
AQD Contact:	Sydney Bruestle, Environmental Quality Analyst 906-236-3995
Date Application Received:	September 20, 2017
Date Application Was Administratively Complete:	September 28, 2017
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	October 1, 2018
Deadline for Public Comment:	October 31, 2018

Source Description

The Louisiana Pacific Corporation (LP)—Sagola Plant is located approximately three miles south of the Village of Sagola. The facility was constructed in 1988 and manufactures resin-bonded oriented strand board. Processes at the plant include log storage and debarking equipment, a log flaker, three flake dryers with cyclone collectors, wet electrostatic precipitators, and a Regenerative Thermal Oxidizer, one wood or bark fired GEKA Thermal Oil Heater with multicyclone and dry electrostatic precipitator (ESP), a mat forming line and board press with a Regenerative Catalytic Oxidizer/Regenerative Thermal Oxidizer (RTO), cold cleaners using non-chlorinated solvent, and four fabric filter dust collectors serving various sawing and sanding operations, the chip screening operation, and the tongue and groove machine.

Emissions from the board press are controlled by a single device that oxidizes VOCs and HAPs either thermally (RTO) or catalytically (RCO). When operating as an RCO a layer of catalyst is placed in the combustion chamber, which allows the oxidation of VOC and HAPs to occur at lower temperatures. If the catalyst deactivates, the RCO can be converted to an RTO simply by increasing the temperature in the combustion chamber. Exposing the catalyst to high temperatures for prolonged periods of time deactivates the catalyst thus an RTO cannot be converted to an RCO unless the new layer of catalyst is placed in the combustion chamber.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2017**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	390
Lead (Pb)	0.004
Nitrogen Oxides (NO _x)	127.8
Particulate Matter (PM)	28.56
Sulfur Dioxide (SO ₂)	9.4
Volatile Organic Compounds (VOCs)	37.59

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	5.6
Phenol	0.6
Total Hazardous Air Pollutants (HAPs)	6.0

**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 stationary source is in Dickinson 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 all criteria pollutants exceeds 100 tons per year and the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than 10 tons per year.

All emission units at the stationary source were subject to review under the Prevention of Significant Deterioration regulations of The Michigan Air Pollution Control Rules Part 18, Prevention of Significant

Deterioration of Air Quality OR 40 CFR 52.21, because at the time of New Source Review permitting the potential to emit of each criteria pollutant was greater than 100 tons per year.

EUTOH-WOOD and EUTOH-NG at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD.

The Facility is subject to the National Emission Standard for Hazardous Air Pollutants for Plywood and Composite Wood Products promulgated in 40 CFR Part 63, Subparts A and DDDD.

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 PM and PM10 from EUFORMING, FGDRYERS, FGSANDER1, FGSANDER2, FGMAIN1, and FGMAIN3, at the stationary source are subject to the federal Compliance Assurance Monitoring rule under 40 CFR Part 64. This emission unit has a control device and potential pre-control emissions of PM and PM10 greater than the major source threshold level.

Emission Unit ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring	Presumptively Acceptable Monitoring?
EUFORMING	PM/0.9 pph PM10/0.9 pph	PM/ R 336.1301 PM10/ 40 CFR 52.21 (c), (d), and (j)	Baghouse	Visible Emission (VE) Readings Daily for one minute at (15 second intervals) Continuously monitor the pressure drop and record once per 12 hour shift	No
FGDRYERS	PM/ 10 pph PM10/ 10 pph	PM/ R 336.1301 PM10/ R 336.2803, R 336.2804, R 336.2810, & 40 CFR 52.21 (c), (d), and (j)	Wet Electrostatic Precipitators	Continuously monitor and record (twice per shift) the transformer voltage for both transformers (indicator range 40 kV to 70 kV)	No
FGSANDER1	PM/ 0.68 pph PM10/ 0.68 pph	PM/ R 336.1331 PM10/ 40 CFR 52.21 (c), (d), and (j)	Baghouse	Visible Emission (VE) Readings of the baghouse daily for one minute at (15 second intervals). Continuously monitor the pressure drop and record once per 12 hour shift.	No

Emission Unit ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring	Presumptively Acceptable Monitoring?
FGSANDER2	PM/ 1.24 pph PM10/ 1.24 pph	PM/ R 336.1301 PM10/ 40 CFR 52.21 (c), (d), and (j)	Baghouse	Visible Emission (VE) Readings of the baghouse daily for one minute at (15 second intervals). Continuously monitor the pressure drop and record once per 12 hour shift.	No
FGMAIN1	PM/ 1.6 pph PM10/ 1.6 pph	PM/ R 336.1301 PM10/ 40 CFR 52.21 (c), (d), and (j)	Baghouse	Visible Emission (VE) Readings of the baghouse daily for one minute at (15 second intervals). Continuously monitor the pressure drop and record once per 12 hour shift.	No
FGMAIN3	PM/ 1.1 pph PM10/ 1.1 pph	PM/ R 336.1301 PM10/ 40 CFR 52.21 (c), (d), and (j)	Baghouse	Visible Emission (VE) Readings of the baghouse daily for one minute at (15 second intervals). Continuously monitor the pressure drop and record once per 12 hour shift.	No

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-N1315-2013 are identified in Appendix 6 of the ROP.

PTI Number			
41-03F	41-03D	41-03A	19-88F

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 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 Ed Lancaster, Upper Peninsula 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.

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**NOVEMBER 5, 2018 - STAFF REPORT
ADDENDUM**

Purpose

A Staff Report dated October 1, 2018, 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:	Todd Maki, Plant Manager 906-542-7301
AQD Contact:	Sydney Bruestle, Environmental Quality Analyst 906-236-3995

Summary of Pertinent Comments

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

Changes to the October 1, 2018 Draft ROP

No changes were made to the draft ROP.