

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

State Registration Number

B1470

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number

MI-ROP-B1470-2019a

**Neenah Paper Michigan, Inc.
Neenah Paper Michigan, Inc. – Munising, Michigan**

SRN: B1470

Located at

501 E. Munising Avenue, Munising, Alger County, Michigan 49862

Permit Number: MI-ROP-B1470-2019a

Staff Report Date: September 4, 2018

Amended Date: August 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) 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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RENEWABLE OPERATING PERMIT

SEPTEMBER 4, 2018 - STAFF REPORT

ROP Number

MI-ROP-B1470-2019

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 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:	Neenah Paper Michigan, Inc. 501 E. Munising Avenue Munising, Michigan 49862
Source Registration Number (SRN):	B1470
North American Industry Classification System (NAICS) Code:	322121
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201700084
Responsible Official:	David Schultz, Mill Manager 906-387-7567
AQD Contact:	Sydney Bruestle, Environmental Quality Analyst 906-236-3995
Date Application Received:	June 16, 2017
Date Application Was Administratively Complete:	June 16, 2017
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	September 4, 2018
Deadline for Public Comment:	October 3, 2018

Source Description

Neenah Paper Michigan, Inc., Munising Mill (Neenah Paper) operates a non-integrated paper mill in Munising, Michigan. It obtains large bales of pulp from pulp suppliers; the bales are soaked in water then go to a hydro-pulper. Additives may be added during the pulping depending on the end product needed. Once the pulp leaves the pulper, it goes to the headbox of the paper machine where the paper is formed. Water drains from the paper as it is fed through rapidly rotating rollers and dried. The mill has two (2) paper machines, and operates a latex coater and a dryer in conjunction with their #1 Paper Machine.

The facility has two (2) boilers that are used to produce steam. Boiler #1 (EU05) is a coal-fired unit with a capacity of 202 MMBtu/hr heat input. Boiler #2 (EU15) is currently limited to firing No. 2 fuel oil only and also has a capacity of 202 MMBtu/hr heat input. The unit is considered "limited use" and is used only as a backup to Boiler #1 (EU05) if it becomes unavailable for any reason. There are also two (2) emergency generators, and one (1) emergency fire pump that operate on No. 2 fuel oil.

Neenah Paper is located on the shore of Lake Superior within the city limits of Munising in Alger County. The area surrounding the mill is zoned commercial so there are no homes located adjacent to the mill property.

The main source of emissions from the mill is the 202 MMBtu/Hr spreader stoker coal-fired Boiler #1 (EU05). A new baghouse was installed on this boiler in 1996 to meet the 0.30 pound per 1,000 pound particulate limit. A spray dry absorber (SDA) was installed on the boiler in 2015 to reduce emissions of acid gas hazardous air pollutants (HAPs).

An "opt-out" permit was issued February 3, 2015 to limit facility emissions to less than major source thresholds for any single HAP and for all HAPs combined. The installation of the SDA was in coordination with the opt-out permit. The SDA primarily controls hydrogen chloride (HCl) emissions from Boiler #1 (EU05). The facility adjusts the concentration of the scrubber solution as needed to comply with the HAP emission limit. The emission factors for each set concentration are outlined in the Preventative Maintenance Plan. These emission factors are based on several stack tests. The opt-out permit was issued prior to the first compliance date of Title 40 of the Code of Federal Regulations (CFR) Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. Neenah Paper is currently considered an area source of HAPs.

On January 25, 2018, U.S. Environmental Protection Agency (USEPA) rescinded the "Once In, Always In" policy (May 1995 Seitz Memorandum) regarding the applicability of maximum achievable control technology (MACT) standards. The new guidance memorandum, "Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act" became effective on February 8, 2018. Under the new guidance, if a source reduces emissions of HAPs to below major source thresholds, the source is no longer required to comply with any applicable major source MACT standards. The owner/operator of Neenah Paper has requested removal of the provisions of the National Emission Standard for Hazardous Air Pollutants for Paper and Other Web Coating promulgated in 40 CFR Part 63, Subpart JJJJ with this ROP renewal. The stationary source accepted a legally enforceable permit condition limiting the potential to emit of HAPs to below major source thresholds. The AQD is processing the request but recognizes that USEPA's withdrawal of its "once in, always in" policy is being challenged in court.

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)	117
Lead (Pb)	3E-3
Nitrogen Oxides (NO _x)	258
Particulate Matter (PM)	5
Sulfur Dioxide (SO ₂)	474
Volatile Organic Compounds (VOC)	22

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2017 by MAERS:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Hydrogen Chloride (HCl)	8.2
Formaldehyde	0.13
Mercury	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 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 Alger 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 CO, NO_x, particulate matter less than or equal to 10 microns (PM₁₀), and SO₂ exceeds 100 tons per year.

The stationary source is considered to be a “synthetic minor” source in regard to HAP emissions because the stationary source accepted a legally enforceable permit condition limiting the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, to less than 90% of 10 tons per year and the potential to emit of all HAPs combined to less than 90% of 25 tons per year.

No emissions units at the stationary source have been subject to the Prevention of Significant Deterioration (PSD) regulations of the Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality or 40 CFR 52.21 because the major process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations. Any future modifications at Neenah Paper may be subject to New Source Review (NSR) which could include a PSD review.

EU05 (Boiler #1) and EU15 (Boiler #2) at the stationary source are subject to the National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources promulgated in 40 CFR Part 63, Subparts A and JJJJJJ.

EUPOWERGENERATOR, EUFIREPUMPGEN, and EUWWTPGENERATOR are 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.

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 particulate matter and acid gas HAPs (specifically HCl) from EU05 (Boiler #1) at the stationary source is 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 particulate matter and acid gas HAPs (specifically HCl) greater than the major source threshold levels.

Emission Unit ID	Pollutant / Emission Limit	UAR(s)	Control Equipment	Monitoring	Presumptively Acceptable Monitoring?
EU05	PM-10/0.30 lbs/1000 lbs of exhaust gases corrected to 50% excess air	R 336.1331(a)	Fabric Filter Bag House	Continuous Opacity Monitor, Baghouse Pressure Drop Monitoring, Stack Testing for Particulate Matter (PM)	No
EU05	Individual and all HAPs combined less than 90% of major source thresholds	R 336.1205(3)	SDA	SDA Reagent Specific Gravity Monitor, SDA Flue Gas Exit Temperature	No

The Compliance Assurance Monitoring (CAM) plan for emissions of particulate matter from EU05 (Boiler #5) includes periodic compliance testing, pressure drop monitoring, and continuous opacity monitoring as an indicator of PM emissions. The opacity limits of a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity per R 336.1301(1)(a) are indicative of compliance with the PM emission limit assessed per R 336.1331(1)(a).

The CAM plan for emissions of acid gas HAPs (specifically HCl) from EU05 (Boiler #5) includes reagent specific gravity monitoring and flue gas exit temperature monitoring. The specific gravity set point is between 1.030-1.045. The flue gas exit temperature set point is maintained at 265 °F.

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-B1470-2013 are identified in Appendix 6 of the ROP.

PTI Number			
218-96A	530-89	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

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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RENEWABLE OPERATING PERMIT

ROP Number
MI-ROP-B1470-2019

NOVEMBER 8, 2018 - STAFF REPORT ADDENDUM

Purpose

A Staff Report dated September 4, 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:	David Schultz, Mill Manager 906-387-7567
AQD Contact:	Sydney Bruestle, Environmental Quality Analyst 906-236-3995

Summary of Pertinent Comments

The company made the following comments and requested the changes below. Changes made to the September 4, 2018, Draft ROP are indicated in the comments with (Change).

Comment 1 (Change): EU05 - The company noted both Section III., Condition 4 and Section VI., Condition 9 define an excursion as one 6-minute average per hour of not more than 27%. The facility requests the excursion be defined by two or more consecutive 1-hour block average opacity values greater than 20%.

Response: AQD agrees defining an excursion in Section III. and Section VI. is redundant, condition 9. in Section VI. was removed. For CAM purposes opacity is used as an indicator for proper baghouse operation not as an indicator of PM limit exceedance. AQD changed the excursion definition to two or more consecutive 1-hour block average opacity values greater than 20%.

Comment 2 (Change): EU05 - The company requested references to Performance Specification 3 in Section VI. Condition 5 be removed as they are not required to operate oxygen or carbon dioxide monitors.

Response: AQD removed Performance Specification 3 from Condition 5 in Section VI and modified the condition to read Procedure 3 of Appendix F.

Comment 3 (Change): EU05 - The facility requested to remove the defined indicator ranges in Section VI. Condition 10 and add language referencing the PM/MAP.

Response: AQD will remove the ranges in Section VI. Condition 10 and add the proposed PM/MAP language.

Comment 4 (Change): EU05 - Neenah Paper requested to remove a reference to Relative Accuracy Test Audits (RATAs) in Section VII., Condition 6 because they are not required for the Continuous Opacity Monitoring System (COMS).

Response: AQD has removed the reference to RATAs in Section VII., Condition 6.

Comment 5 (Change): EU05 - The facility requested to remove language outlining when a Quality Improvement Plan should be submitted in Section IX., Condition 3.

Response: AQD has removed this condition, the facility is still subject to 40 CFR 64.8.

Comment 6 (Change): EU15 - The facility commented on new language added in Section I. and Section II. The facility explained the limits added apply to non-road locomotive and marine diesel fuel engines and do not apply to boilers like EU15.

Response: Section I. and II. are changed to how they were written in the most recent ROP.

Comment 7: FGPM1COATER - Neenah Paper requested to reduce the testing requirement for PM (Section III Condition 2) from every 3 years to upon request.

Response: The language for FGPM1COATER came from EUCOATER (now called FGPM1COATER per the facility's request) in PTI 108-16. To change the testing requirements for FGPM1COATER the facility must submit a PTI modification. Section III., Condition 2 will remain as written.

Comment 8 (Change): FGPM1COATER - Neenah Paper requested to remove Condition 5 in Section VI. and eliminate the requirement to perform non-certified VE readings. The facility comments this unit is fired by natural gas and VE readings are rarely required on such equipment and requests daily VE readings be changed to weekly VE readings.

Response: Condition 6 of Section I. limits visible emissions to 0%. Previously, there was no monitoring requirement in place to verify compliance with this limit. AQD will change this to weekly non-certified visible emission observations to verify compliance with the emission limit. This visible emission limit came from PTI 108-16, if the facility would like to remove visible emission observation requirements a permit modification is needed to remove the opacity limit of 0%. Condition 5 of Section VI. will remain in the ROP.

Comment 9 (Change to Appendix 7): FGPM1COATER - Neenah Paper requested that Condition 3 Of Section VI. read as it did in a 1999 permit and MI-ROP-B1470-2013(a).

Response: The additional record keeping language in Condition 3 of Section VI. is necessary to verify the Neenah Paper's compliance with the VOC limits in Section I. (VOC limits originated from PTI 108-16). The language will remain as written. AQD updated Appendix 7 with language from MI-ROP-B1470-2013(a).

Comment 10 (Change): FGEMERGENCYENGINES - Neenah Paper requested to remove the material limits in Section II. and Conditions 2 and 3 from Section VI. The facility comments they are not subject to these requirements.

Response: AQD made the requested changes to FGEMERGENCYGENERATORS.

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RENEWABLE OPERATING PERMIT

**AUGUST 6, 2019 - STAFF REPORT FOR RULE
216(1)(a)(v) ADMINISTRATIVE AMENDMENT**

ROP Number

MI-ROP-B1470-2019a

Purpose

On March 12, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B1470-2019 to Neenah Paper Michigan, Inc. pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(1)(a)(v).

General Information

Responsible Official:	Brian Houghton, Mill Manager
AQD Contact:	Caryn Owens, Environmental Engineer 231-878-6688
Application Number:	201900079
Date Application for Administrative Amendment was Submitted:	April 30, 2019

Regulatory Analysis

The stationary source has requested that the Permit to Install (PTI) No. 108-16A, issued on April 4, 2019, be incorporated into their ROP. The AQD has determined that the change requested meets the following criteria for an Administrative Amendment pursuant to Rule 216(1)(a)(v): the PTI includes terms and conditions that comply with the permit content requirements contained in Rule 213; the procedure used to issue the PTI was substantially equivalent to the requirements of Rule 214 regarding public participation and review by affected states; and the process or process equipment is in compliance with, and no changes are required to, the terms and conditions of the PTI that are to be incorporated into the ROP. Also, the permittee notified the AQD in writing within 30 days of commencing operation of the processes covered by the PTI and has submitted certified results of all required testing, monitoring and recordkeeping performed to demonstrate compliance with the PTI.

PTI 108-16A went through a public comment period from February 27, 2019, until March 29, 2019, for Neenah Paper, Inc. This public comment period met the public participation requirements for an administrative amendment to the ROP.

Description of Changes to the ROP

Administrative Amendment Number 201900079 was to incorporate PTI 108-16A into the ROP. The PTI was to increase the emission limits for HAPs for the existing paper mill. Additionally, the PTI removed some permitted Conditions, and made the Flexible Group and Emission Unit names consistent throughout the permit. The two emission limits that were removed were associated with the facility since 1989 and requesting to have them removed was not due to difficulties in meeting the limits but rather the burden from the configuration of the equipment. The PTI did not go through New Source Review, since the main change was to increase the HAP opt-out limits.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the change as of the date of approval of the Administrative Amendment to the ROP.

Action Taken by EGLE

The AQD proposes to approve an Administrative Amendment to ROP No. MI-ROP-B1470-2019, as requested by the stationary source. A final decision on the Administrative Amendment to the ROP will not be made until the United States Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Administrative Amendment will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by the USEPA.