State Registration Number

N5656

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

RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number

MI-ROP-N5656-2020

Nylok LLC

State Registration Number (SRN): N5656

Located at

15260 Hallmark Drive, Macomb, Macomb County, Michigan 48042

Permit Number:

MI-ROP-N5656-2020

Staff Report Date: April 6, 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).

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APRIL 6, 2020 - STAFF REPORT

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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.

Stationary Source Mailing Address:	Nylok LLC 15260 Hallmark Drive Macomb, Michigan 48042
Source Registration Number (SRN):	N5656
North American Industry Classification System (NAICS) Code:	332812
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900169
Responsible Official:	Martin Lewis, General Manager 586-786-1503
AQD Contact:	Kerry Kelly, Senior Environmental Quality Analyst 586-506-9817
Date Application Received:	October 1, 2019
Date Application Was Administratively Complete:	October 25, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	April 6, 2020
Deadline for Public Comment:	May 6, 2020

General Information

Source Description

Nylok LLC (Nylok) is located in central Macomb County, Michigan. The facility is immediately surrounded by commercial and industrial properties. The nearest residential properties are located 500 feet north of Nylok.

Nylok currently uses 16 liquid coating lines (10 gravity-fed adhesive coating lines, one line with intermittent air driven machines, 3 flow coating lines, 2 other liquid coating lines) and 17 powder coating lines to apply specialty coatings and adhesives to a variety of metal materials, including stainless steel, aluminum, and chromium, to prevent galvanic corrosion and to enhance the lock-ability of fasteners. These products are commonly used in automotive, aerospace, military, and agricultural equipment. Volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from the gravity-fed lines and intermittent air driven machines are captured using a permanent total enclosure (PTE) and controlled by a regenerative thermal oxidizer (RTO). Emissions from the flow coating and other liquid coating lines are uncontrolled.

Since the issuance of MI-ROP-N5656-2015, a dip-spin primer application process (EUDS1) was removed from the facility. Nylok modified their ROP in 2017 to remove EUDS1 from the permit. Although Nylok is no longer mixing coatings and adhesives at the facility, the company would like to keep the conditions for the mixing process (EU-MIXING) in the source-wide PTI and ROP in case it is needed in the future.

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 EMISSIONS

Pollutant	Tons per Year
Volatile Organic Compounds (VOCs)	0.75

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2018 by Nylok:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Total Hazardous Air Pollutants (HAPs)	<0.40

**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.

Macomb County is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard.

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/or 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.

VOC and HAP emissions from the emission units in FG-COATINGLINEA are captured using a permanent total enclosure (PTE) and are controlled by a regenerative thermal oxidizer (RTO). The emission units in FG-COATINGLINEA use Precote and 3M coatings/adhesives. These coatings have been previously determined to be best available control technology (BACT). The PTE and RTO meet BACT for VOCs for FG-COATINGLINEA under Rule 702(a).

FG-COATINGLINEB operates under the exempted emission rates in Rule 621(10), satisfying BACT requirements under Rule 702(d).

EU-PR1, EU-PR2, EU-PR4, EU-PR5, EU-PR6, EU-PR7, EU-PR8, EU-PR9, EU-PR10, EU-PRB1, EU-PRN3, EU-NTQ1, EU-PB3, EU-WN3, EU-WN9, EU-HDN1 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products promulgated in 40 CFR Part 63, Subparts A and MMMM.

In 2014 and 2015, EGLE and Nylok entered into Stipulations for Entry of a Final Order by Consent (Consent Order Nos. 44-2014 and 28-2015) to bring the facility into compliance with the State and Federal air pollution regulations in response to referrals from AQD District Staff.

In Violation Notices dated September 13, 2013 and January 28, 2014, EGLE alleged that Nylok exceeded the emission limit for HAPs in Permit to Install No. 253-06; exceeded the major source threshold for HAPs, did not submit an application for an ROP, and did not comply with the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products (40 CFR 63, Subpart MMMM). The Company and EGLE stipulated to the termination of these violation proceedings by entry into a Final Order by Consent (Consent Order No. 44-2014). The compliance program and implementation schedule contained in Consent Order No. 44-2014 requires Nylok to comply with PTI No. 133-13 and any subsequent permit revisions, fully comply with the ROP and any subsequent ROP revisions, submit a Notification of Compliance Status to the U.S. Environmental Protection Agency, Region 5, pursuant to the 40 CFR 63, Subpart MMMM, and comply with all applicable requirements of 40 CFR 63, Part MMMM.

On December 29, 2014, Nylok submitted the Notification of Compliance Status pursuant to the 40 CFR 63, Subpart MMMM and EGLE determined that Nylok failed to comply with the HAP emission limit for toluene in PTI No. 133-13 and 40 CFR 63, Subpart MMMM. In a Violation Notice dated January 6, 2015, EGLE alleged that, beginning in November 2014, Nylok failed to comply with Consent Order No. 44-2014 and 40 CFR 63, Subpart MMMM. On May 4, 2015, EGLE issued to Nylok PTI No. 133-13B and ROP No. MI-ROP-N5656-2015. The ROP includes a Schedule of Compliance, including but not limited to, the installation of control equipment to control toluene emissions. Nylok and EGLE stipulated to the termination of this violation proceeding by entry into Consent Order No. 28-2015. In the event that there is a conflict in the terms of Consent Order No. 44-2014 and Consent Order No. 28-2015, the terms of Consent Order No. 28-2015 apply. The compliance program and implementation schedule contained in Consent Order No. 28-2015 requires Nylok to comply with PTI No. 133-13B and any subsequent permit revisions, fully comply with MI-ROP-N5656-2015 and any subsequent ROP revisions, and comply with the Schedule of Compliance in the ROP, including, but not limited to, the installation of the control equipment to control to emissions.

June 5, 2015, EGLE received an application to modify MI-ROP-N5656-2015 to incorporate PTI 133-13B into the ROP. PTI 133-13B adds RTO and PTE requirements in FG-MACT MMMM table. EGLE approved this modification to ROP No. MI-ROP-N5656-2015. MI-ROP-N5656-2015 was renumbered MI-ROP-N5656-2015a.

April 1, 2016, EGLE issued a violation notice to Nylok for failure to install a continuous parameter monitoring system (CPMS) by March 8, 2016 as required in the Schedule of Compliance in the ROP and

Consent Order 28-2015. A CPMS is required to demonstrate continuous compliance with the PTE operating limit.

EGLE received an application to modify MI-ROP-N5656-2015a on September 8, 2017. In the application Nylok requested to remove a decommissioned dip spin line (EUDS1) from the ROP and to incorporate PTI 133-13C into the ROP. In PTI 133-13C, FGCOATINGLINE is separated into two Flexible Groups, FG-COATINGLINEA and FG-COATINGLINEB. FG-COATINGLINEA is controlled and FG-COATINGLINEB is uncontrolled. In addition, PTI 133-13C permitted the installation and operation of one new gravity fed adhesive coating line, EU-PR1. EU-PR1 will be controlled by the facility's existing PTE and RTO and is added to FG-COATINGLINEA. EGLE approved this modification to ROP No. MI-ROP-N5656-2015a. MI-ROP-N5656-2015a was renumbered MI-ROP-N5656-2015b.

In the renewal application for MI-ROP-N5656-2015b, Nylok proposed to remove the Schedule of Compliance in Appendix 2 of MI-ROP-N5656-2015b stating that as of April 8, 2016, Nylok has completed the tasks associated with the Schedule of Compliance and has submitted all required Progress Reports and as of January 2017, Nylok has been in compliance with the organic HAP emission limit of 2.6 lbs/gal of coating solids required by 40 CFR Part 63, Subpart MMMM and the ROP.

According to the last two full compliance evaluations conducted of the source by EGLE (March 30, 2017 and February 7, 2019), the company is in compliance with federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; the Air Pollution Control Rules; ROP No. MI-ROP-N5656-2015a and b; Consent Order (CO) AQD No. 44-2014; CO AQD No. 28-2015; and 40 CFR Part 63 Subpart MMMM. In addition, review of violation notices issued to Nylok indicate all violations were resolved by June 22, 2017.

A permit to install (PTI 133-13D) was approved on July 1, 2019. PTI 133-13D permits the installation of two additional gravity-fed adhesive coating lines (EU-PR2 and EU-PR3) at the facility. VOC and HAP emissions from EU-PR2 and EU-PR3 are captured by the PTE and controlled by the RTO. These emission units were added to FG-COATINGLINEA in the PTI. On November 5, 2019, AQD Warren District Office received notification that Nylok completed installation of EU-PR3 and EU-PR2 on October 11, 2019 and October 18, 2019 respectively. The notification was received within 30 days of completion of installation as required in in PTI 133-13D. The conditions in PTI 133-13D were added to the ROP and Source-wide PTI. EU-PR3 was re-named EU-PR4 in the ROP and Source-wide PTI at the request of Nylok.

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."

EU-MIXING and the emission units in FG-COATINGLINEB do not have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because EU-MIXING and FG-COATINGLINEB do not have a control device.

The emission limitation(s) or standard(s) for organic HAPs at the stationary source with the underlying applicable requirement(s) of 40 CFR 63.3890(b)(1) from EU-PR1, EU-PR2, EU-PR4, EU-PR5, EU-PR6, EU-PR7, EU-PR8, EU-PR9, EU-PR10, EU-PRB1, EU-PRN3, EU-NTQ1, EU-PB3, EU-WN3, EU-WN9, EU-HDN1 are exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR 64.2(b)(1)(i) because the organic HAP limit of 2.6 lbs/gallon of coating solids meets the CAM exemption for NSPS or MACT proposed after November 15, 1990.

FG-COATINGLINEA is subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64 because FG-COATINGLINEA is subject to an emission limitation or standard (VOC limit), a control device is used to achieve compliance with the VOC emission limitation, and FG-COATINGLINEA has potential pre-control device VOC emissions equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. There are 11 coating lines in FG-

COATINGLINEA. VOC emissions from all coating lines in FG-COATINGLINEA are captured by one PTE and destroyed by one RTO. The potential pre-control emissions from FG-COATINGLINEA were estimated using the controlled emission limit of 5 tons per year with an overall control efficiency of 95 percent and converting it to uncontrolled emissions. The potential pre-control emissions would be 100 tons per year for FG-COATINGLINEA.

Emission Unit/Flexibl e group ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/Flexible Group for CAM	PAM? *
FG- COATING LINEA	VOC/5 tpy	R 336.1702(a), Consent Order No. 44-2014(9), Consent Order 28-2015(9))	PTE & RTO	 Minimum of 0.007 inches of water pressure differential between the PTE and adjacent area on a continuous basis RTO combustion chamber temperature of 1,550°F on a three- hour average 	FG- COATING LINEA	Yes

The following Emission Units/Flexible Groups are subject to CAM:

*Presumptively Acceptable Monitoring (PAM)

Pursuant to 40 CFR 64.4(b)(4), a facility may rely in part on existing applicable requirements that establish appropriate monitoring for the applicable emission unit(s) (i.e., presumptively acceptable monitoring). If a facility relies on presumptively acceptable monitoring, no further justification should be necessary explaining the appropriateness of that monitoring, other than an explanation of the applicability of the monitoring to the emissions unit(s). Presumptively acceptable monitoring includes monitoring for NESHAP standards to the extent that such monitoring is applicable to the performance of the control device (and associated capture system) for the applicable emission unit(s).

Nylok is utilizing the applicable PTE and RTO monitoring requirements of 40 CFR Part 63 Subpart MMMM for compliance with CAM. As required by 40 CFR Part 63 Subpart MMMM, Nylok continuously monitors the differential pressure of the PTE and combustion chamber temperature of the RTO via the CPMS when the controlled coating lines are operating to ensure proper operation of the PTE and RTO.

As required by 40 CFR Part 63 Subpart MMMM, proper operation of the PTE and RTO are based on monitored parameters, as follows:

- Maintaining a minimum of 0.007 inches of water pressure differential between the PTE and adjacent area on a continuous basis; and
- Maintaining an RTO combustion chamber temperature of 1,550°F on a three-hour average (established via performance testing)

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-N5656-2015 are identified in Appendix 6 of the ROP.

PTI Number				
133-13	A	133-13	140-11	

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
EU-SPACEHEATERS	Natural gas-fired rooftop space heaters less than 50 MMBtu/hr	Rule 212(4)(c)	Rule 282(2)(b)(i)
EU- HOTWATERBLR	Natural gas-fired hot water heater rated at 0.076 MMBtu/hr	Rule 212(4)(c)	Rule 282(2)(b)(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 Ms. Joyce Zhu, Warren 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

N5656

Air Quality Division RENEWABLE OPERATING PERMIT

ROP Number

MAY 19, 2020 - STAFF REPORT ADDENDUM

MI-ROP-N5656-2020

<u>Purpose</u>

A Staff Report dated April 6, 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:	Martin Lewis, General Manager 586-786-1503
AQD Contact:	Kerry Kelly, Senior Environmental Quality Analyst 586-506-9817

Summary of Pertinent Comments

Nylok, LLC made the following comment:

On April 21, 2020, Michigan Department of Environment, Great Lakes, and Energy issued a Notice of Termination for Consent Orders AQD Nos. 44-2014 and 28-2015.

Therefore, I request that Consent Order references and Underlying Applicable Requirements be removed from the ROP on the basis that Consent Order Nos. 44-2014 and 28-2015 were terminated effective April 21, 2020. The ROP Staff Report should also be amended to reflect the termination status.

AQD Response:

Nylok sent a request to terminate Consent Order Nos. 44-2014 and 28-2015 to the AQD Division Director on April 9, 2020, via email. The AQD Division Director signed the written notice of termination of Consent Order Nos. 44-2014 and 28-2015 on April 21, 2020.

It is appropriate to remove references to Consent Order Nos. 44-2014 and 28-2015 in underlying applicable requirements and to void all conditions for which a Consent Order is the only identified underlying applicable requirement because the Consent Orders were terminated by the AQD Division Director effective April 21, 2020.

Changes to the April 6, 2020 Draft ROP

- Removed the Source-wide conditions because the Consent Orders were the only underlying applicable requirements for all Source-wide conditions
- Removed references to Consent Order Nos. 44-2014 and 28-2015 from all conditions in the ROP