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|  | Michigan Department of Environment, Great Lakes and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N6515 | **STAFF REPORT** | MI-ROP-N6515-2017a |

**Advanced Fibermolding, Inc.**

SRN: N6515

Located at

23095 14 Mile Road, Leroy, Osceola County, Michigan 49655

Permit Number: MI-ROP-N6515-2017a

Staff Report Date: March 6, 2017

Amended Date: March 2, 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) 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).

**TABLE OF CONTENTS**

MARCH 6, 2017 - STAFF REPORT 3

APRIL 17, 2017 - STAFF REPORT ADDENDUM 7

MARCH 2, 2020 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION 8

|  |  |  |
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|  | Michigan Department of Environmental Quality  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N6515 | MARCH 6, 2017 - STAFF REPORT | MI-ROP-N6515-2017 |

**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: | Advanced Fibermolding, Inc  23095 14 Mile Road  Leroy, Michigan 49655 |
| Source Registration Number (SRN): | N6515 |
| North American Industry Classification System (NAICS) Code: | 326199 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 2016000141 |
| Responsible Official: | Mr. Dennis Webster, President  231-768-5177  Mr. Richard Dostal  231-768-5177 |
| AQD Contact: | Mr. Kurt Childs, Senior Environmental Quality Analyst  231-876-4411 |
| Date Application Received: | September 6, 2016 |
| Date Application Was Administratively Complete: | September 6, 2016 |
| Is Application Shield In Effect? | Yes |
| Date Public Comment Begins: | March 6, 2017 |
| Deadline for Public Comment: | April 5, 2017 |

**Source Description**

Advanced Fibermolding manufactures various fiberglass products including boat parts, agricultural fan shrouds and restaurant seats. The plant is located in a rural area of Osceola County with few residences nearby. The manufacture of these products requires the operation of Resin Transfer Molding (EURTM), gelcoat spray application, hand-held and robotic resin spray lay-up processes, and finishing operations. The robotic spray layup booth (EUROBOTLAYUP) is a new addition, permitted under PTI 126-12B, that will replace an existing hand-held mechanical resin spray booth (EULAYUP2). Hand-held mechanical spray application is still utilized in EULAYUP1and is also allowed in EUROBOTLAYUP.

Small parts are made using the RTM process which involves on-site production of a mold into which gelcoat is sprayed. The gelcoat is applied mechanically by hand using High Volume Low Pressure (HVLP) applicators in one of the two gelcoat application booths (EUGELCOAT1 and EUGELCOAT2). The booths are equipped with filter panels but no additional control devices. Fiberglass and foam laminates are also applied to the mold by hand. The mold is closed and resin is injected under pressure. The resulting part is removed and trimmed using a water jet booth. Emissions from EURTM are discharged to the general plant environment. The water jet booth is enclosed with no emission point.

Larger parts are also produced starting with the mold to which gelcoat is applied in the gelcoat spray booths. The mold is then moved into either the resin layup booth or the resin robotic layup booth where chopped fiberglass and resin are applied mechanically either by hand or robotically. Both booths are also equipped with filter panels. Resin is applied to parts that are too large for the booths in the general plant environment outside the layup booths. Resin is applied using hand-held mechanical spray applicators or the robotic spray applicator.

Molded parts undergo finishing (trimming, drilling, sanding, etc.) operations on the plant floor with emissions to the general plan environment.

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

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | NA |
| Lead (Pb) | NA |
| Nitrogen Oxides (NOx) | NA |
| Particulate Matter (PM) | NA |
| Sulfur Dioxide (SO2) | NA |
| Volatile Organic Compounds (VOCs) | 24 |

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

|  |  |
| --- | --- |
| **Individual Hazardous Air Pollutants (HAPs) \*\*** | **Tons per Year** |
| Methyl Ethyl Ketone | **4** |
| Methyl Methacrylate | **1** |
| Styrene | **20** |
| **Total Hazardous Air Pollutants (HAPs)** | **45** |

\*\*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.

Advanced Fibermolding was constructed and first began operation in 1998 upon issuance of PTI 490-97. Subsequent permit applications addressed production increases and changes to emission and material use limits associated with these increases. The most recent change was the replacement of EULAYUP2 with EUROBOTLAYUP an automated resin/fiberglass application process.

The stationary source is located in Osceola 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 any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

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 each criteria pollutant was less than 250 tons per year.

EURTM, EUGELCOAT1, EUGELCOAT2, EULAYUP1, EULAYUP2 and EUROBOTLAYUP at the stationary source are existing sources subject to the National Emission Standard for Hazardous Air Pollutants for Reinforced Plastic Composites Production promulgated in 40 CFR Part 63, Subparts A and WWWW. The compliance date for this source was April 21, 2006. Though EUROBOTLAYUP is a new emission unit at the facility it is still regulated under 40 CFR Part 63, Subpart WWWW as an existing source since the distinction between an existing and a new affected source is made at the facility level not the emission unit level and Advanced Fibermolding, Inc. is already and existing affected source under 40 CFR Part 63, Subpart WWWW.

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." Monitoring is primarily based on the requirements of 40 CFR Part 63, Subpart WWWW which require tracking the HAP content and usage rate of each material.

No emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule under 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 over the major source thresholds.

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-N6515-2012A are identified in Appendix 6 of the ROP.

| **PTI Number** | | | |
| --- | --- | --- | --- |
| 490-97 | 5-05A | 5-05B | 126-12 |

**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). However, the following table lists processes that were later identified during an inspection of the facility. These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

| **Exempt**  **Emission Unit ID** | **Description of**  **Exempt Emission Unit** | **Rule 212(4)**  **Exemption** | **Rule 201**  **Exemption** |
| --- | --- | --- | --- |
| EUCONTAINERS | Resin and gelcoat storage tanks | R 336.1212(4)(d) | R 336.1284(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 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 Shane Nixon, Cadillac 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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|  | Michigan Department of Environmental Quality  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
|  | APRIL 17, 2017 - STAFF REPORT ADDENDUM | MI-ROP-N6515-2017 |

**Purpose**

A Staff Report dated March 6, 2017, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (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: | Mr. Dennis Webster, President  231-768-5177  Mr. Richard Dostal  231-768-5177 |
| AQD Contact: | Mr. Kurt Childs, Senior Environmental Quality Analyst  231-876-4411 |

**Summary of Pertinent Comments**

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

**Changes to the March 6, 2017 Draft ROP**

No changes were made to the draft ROP.

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|  | Michigan Department of Environment, Great Lakes, and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N6515 | MARCH 2, 2020 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION | MI-ROP-N6515-2017a |

**Purpose**

On June 5, 2017, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N6515-2017a to Advanced Fibermolding 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(2).

**General Information**

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| --- | --- |
| Responsible Official: | Mr. Dennis Webster, President  231-768-5177 |
| AQD Contact: | Caryn E. Owens, Environmental Engineer  231-878-6688 |
| Application Number: | 202000018 |
| Date Application for Minor Modification was Submitted: | February 5, 2020 |

**Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to Rule 216(2).

The existing FGGELCOAT conditions and emission limit of 17.4 tpy VOC (including styrene and MMA) will not be changed. Potential maximum hourly emissions from FGGELCOAT will not change with the robotic application in emission unit EUROBOTGEL. The PTI does not include any increase in permitted emission limits and does not change the existing source wide conditions in the ROP. Material limits and application technology have been previously reviewed and found to be acceptable under BACT. The material limits and application technology were reviewed, and are still considered to be BACT.

**Description of Changes to the ROP**

Minor Modification Application Number 202000018 was to incorporate PTI 126-12D into the ROP, which was to modify existing emission unit EUGELCOAT2. This Emission Unit was a manually operated gelcoat spray booth. EUGELCOAT2 was converted to EUROBOTGEL and the gelcoat application was changed to both manual application and robotic application. The robotic application of gelcoat does not change the maximum application rate of gelcoat from the spray booth and uses the same current gelcoats as the manual gelcoat operations.

Existing emission units EUGELCOAT1 and EUTOOLING are carried forward without change.

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

**Action Taken by EGLE**

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-N6515-2017a, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the 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 Minor Modification 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 any affected states or the USEPA.