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|  | Michigan Department of Environment, Great Lakes, and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N1328 | **STAFF REPORT** | MI-ROP-N1328-20XX |

**REC BOAT HOLDINGS L.L.C. - CRUISER**

State Registration Number (SRN): N1328

Located at

609 13th Street, Cadillac, Wexford County, Michigan 49601

Permit Number: MI-ROP-N1328-2022

Staff Report Date: May 23, 2022

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).

**TABLE OF CONTENTS**

MAY 23, 2022 - STAFF REPORT 3

JUNE 23, 2022 - STAFF REPORT ADDENDUM 10

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environment, Great Lakes, and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N1328 | MAY 23, 2022 - STAFF REPORT | MI-ROP-N1328-2022 |

**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.

**General Information**

|  |  |
| --- | --- |
| Stationary Source Mailing Address: | Rec Boat Holdings L.L.C. - Cruiser  609 13th Street  Cadillac, Michigan 49601 |
| Source Registration Number (SRN): | N1328 |
| North American Industry Classification System (NAICS) Code: | 366612 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? |  |
| Application Number: | 202000166 |
| Responsible Official: | Mr. Rick Videan, Vice President of Operations  231-779-2352 |
| AQD Contact: | Ms. Sharon LeBlanc,  989-217-0055 |
| Date Application Received: | November 23,2020 |
| Date Application Was Administratively Complete: | November 23, 2020 |
| Is Application Shield in Effect? |  |
| Date Public Comment Begins: | May 23, 2022 |
| Deadline for Public Comment: | June 22, 2022 |

**Source Description**

Rec Boat Holdings L.L.C. – Cruiser Plant (N1328) is a fiberglass boat manufacturing plant located in an industrial park within the City of Cadillac, Wexford County, Michigan.

Region

With a population of 10,355 (2010 census), and a total area of 9.02 miles, the City of Cadillac is a major commercial and industrial hub for the area. The city encompasses Lake Cadillac (1.37 miles south of the Cruiser Plant). Other nearby surface water bodies include nearby Lake Mitchell (approximately 2.5 miles SW of the Cruiser Plant) and the Clam Lake Canal. The city is bounded on the eastern edge by the Manistee National Forest and extends north to 13th street. The city limits extend from the intersection of 13th and US-131 business to the north to encompass the Wexford County Airport.

Located in Northern Michigan, Wexford County is predominantly a rural county with manufacturing being the greatest employer since the logging industry ended early in the 20th century. Christmas tree farming is important to the agricultural industry in Wexford County.

Major roadways in the area include U.S. Highway 131(US-131) (N-S) Michigan Highway 55 (M-55 (E-W) and M-115 (NW-SE). Business US-131 passes through Cadillac’s downtown business and travels approximately 0.5-miles east of the Plant.

Adjacent Properties

The Cruiser Plant is bounded to the north across 13th Street and east along 13th Street by residential properties.  To the NW of the facility is St. Ann Catholic Church and St. Ann Elementary School (pre-K – 7) which is the largest of 4 private schools located in Cadillac, Michigan.  Properties to the south and west of the facility include other industrial facilities.

The Cadillac Public School system consists of 2 high schools, 1 Jr. high school and 4 elementary schools. The closest Public School is Lincoln Elementary School located approximately ¾-miles E-SE of the plant. The Cadillac High School is located approximately 1-mile S of the plant.

Other locations of interest include:

* Wexford County Airport (3/4-mile N)
* Wexford County Civic Arena and Fairgrounds (0.60-mile E-NE)
* Cadillac Leisure Mobile Home Park (0.54-mile S-SE)
* Cadillac Renewable Energy LLC, Atlantic Power Corp (0.95 W-SW)

Plant Activities/History

The Rec Boat Holdings L.L.C. – Cruiser manufactures boats of various sizes and types and is one of the three major employers for the area. Processes at the facility that emit air contaminants include the spray application, open and closed mold application of gelcoats and resin to construct fiberglass boat parts, cleanup activities utilizing acetone, and use of adhesives in the boat assembly process.

Production onsite began in approximately 1985.  The facility has expanded since that time and has purchased adjacent properties. The expansions allowed the facility to expand not only their production area, but to add pools to test their product in, and expand shipping and storage space.  Rec Boats now makes use of a total of 9 locations ranging from an engine warehouse to a rental location referred to as the Warranty Bldg. 2019 Data for the community indicated that Rec Boat Holdings, L.L.C. is one of the top 3 employers for the area.

Other permitted locations associated with the Facility/Company includes:

* Rec Boat Holding LLC – Sport and Engineering (N1470) at 925 Frisbie Street, Cadillac
* Rec Boat Holdings - Trailer (N1772) at 1552 Miltner Street, Cadillac, and
* Rec Boat Holdings - Cabinetry (N7941) at 701 6th Street, Cadillac

In 2009, due to decreased sales Rec Boat Holdings LLC transferred production in the Sport Plant to the Cruiser Plant.  Based on discussions during the March 16, 2018, site inspection, it was indicated that increasing sales had reached a point where production of the smaller boats would be returning to the nearby sport plant.  Hours of operation for the facility have ranged from 10-15 hours/day depending on orders.  Since the 2018 site inspection at the Sport Plant, “sport boat” production has completed transfer to the sport plant.

Process

Production begins in the lamination section of the facility and ends with finished boats in the pool for testing and others ready for wrapping prior to storage and shipping.  The process begins with application of fiberglass (EULAMINATION) and gel coats (EUGELCOAT) onto molds (FGOPENMOLDING), the finished boat component is removed from the mold and is ground at the edges and cutouts completed (EUGRINDBOOTH) prior to assembly. All stages of production and assembly are conducted onsite, with each boat moving thru the various stages of production.  The pace is dependent on the size, number of colors, and other components of the special order.  Production at the plant has ranged from 3-6 production “lines”.  Cleanup activities utilize acetone (EUACETONECLEANUP).  The facility also makes use of adhesives (EUADHESIVES) during boat assembly.

In comparison with other facilities which operate specific pieces of equipment (ex. turbines, boilers, dehydrators) that require permitting the Rec Boat Holdings LLC – Cruiser Division consists of workstations along production lines utilizing materials which are sources of emissions. Discussions with permit staff, and a review of historic files indicated that to allow the facility the maximum flexibility, the number of independent stations under each emission unit is open, as is the location of those workstations within the facility.

None of the process applications are atomized, materials are pumped with no air added.   Materials used during the process include (but are not limited to) resin, gelcoat, flotation foams, adhesives, and cleanup solvents.  Curing occurs between each stage, and results from the chemical reaction which occurs at ambient temperature.

Cutting and grinding are conducted in special booths (EUGRINDCUTBOOTH). A dust collection system is associated with each of the three grinding and cutout booths (EUGRINDCUTBOOTH) and a magnahelic gauge is associated with the dust collection system for one.  The other two have electronic differential pressure readers, which are monitored via computer.  The dust collection system vents into the general work area.

Air collection devices (plenums) with filters to control any particulate generated in the general work area are vented out one of 5 stacks associated with the facility. Each plenum gets turned on when a work area is in use.  Each fabric filter is monitored, with at least a weekly visual check.  None of the 5 plenums and their associated fabric filters were reported to have a magnahelic gauge associated with them.  Particulate captured consists primarily of that generated in the lamination and gel coating processes.

Gelcoat is received in 55-gallon drums weekly or biweekly, and resins by tanker on average twice per week.  The onsite lab tests the materials for quality control, and maintains records documenting the chemical composition (certified product data sheets) of all the materials.  Every shipment of production resin (EULAMINATION, EUGELCOAT) includes a certificate of analysis indicating the chemical composition of the materials.

Heat is provided by natural gas fired heaters.  The facility reports that there is no emergency generator or other reciprocating internal combustion engine onsite.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2020**.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | None Reported |
| Lead (Pb) | None Reported |
| Nitrogen Oxides (NOx) | None Reported |
| Particulate Matter (PM) | None Reported |
| Sulfur Dioxide (SO2) | None Reported |
| Volatile Organic Compounds (VOCs) | 48.947 |

The following table lists Hazardous Air Pollutant emissions as reported to the MAERS for the year 2020:

|  |  |
| --- | --- |
| **Individual Hazardous Air Pollutants (HAPs) \*\*** | **Tons per Year** |
| Methyl Methacrylate | 6.12 |
| Styrene | 52.18 |
| Xylene | 0.01 |
| **Total Hazardous Air Pollutants (HAPs)** | **58.31** |

\*\*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 in Wexford 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 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 than10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

The stationary source is considered a “synthetic minor” source in regard to the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of to less than tons per year.

No EUs were installed prior to August 15, 1967. As a result, none of the equipment is considered "grandfathered” or not subject to New Source Review (NSR) permitting requirements.

EULAMINATION, EUGELCOAT, EURESINMIXING, EUGELCOATMIXING, EUADHESIVE, EUVOCCLEANUP AND EUACETONECLEANUP at the stationary source subject to the National Emission Standard for Hazardous Air Pollutants for Boat Manufacturing promulgated in 40 CFR Part 63, Subparts A and VVVV.

EUGRINDCUTBOOTH was installed under PTI number 101-07A and is included in the current ROP. EUGRINDCUTBOOTH is controlled by a dust collector, which emits its exhaust to in-plant environment. The booth could be exempt under Rule 285(l)(vi) as the fiberglass is considered a plastic (specifically a reinforced plastic) under 40 CFR Part 63, Subpart WWWW – Reinforced Plastic Composites Production; however, it was determined that the permittee could not use the exemption due to Rule 278(2) & (3) and the proposed expansion activities at the time of permitting was a major source of HAPS under 40 CFR 63.2.

EUSPACEHTR at the stationary source are not subject to the National Emission Standard for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD because these natural gas heaters are used for space heat and do not meet the definition of process heater as defined in this subpart.

EULAMINATION, EUGELCOAT, EUADHESIVE, EUVOCCLEANUP and EUACETONECLEANUP were evaluated for Best Available Control Technology (BACT) under one or more PTIs, which were incorporated into the ROP. The use of non-atomized applicators, and low VOC (including styrene and vinyl toluene) and HAP content materials, as well as better reclaim technologies for cleanup solvents was determined to be BACT for the stationary source.

EULAMINATION, EUGELCOAT, EUADHESIVE, EUVOCCLEANUP and EUACETONECLEANUP at the stationary source have been assigned emission limits to address Rule 205, 225 and/or 702(c) State Air Toxics Rules.

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 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.

The Stationary Source has proposed no changes as part of the present ROP renewal cycle. No significant changes have been made to the previous ROP as part of the renewal process.

No EUs at the stationary source are subject to the Cross-State Air Pollution Rule NOx Annual Trading Program pursuant to 40 CFR Part 97, Subpart AAAAA, nor the Cross-State Air Pollution Rule NOx Ozone Season Group 2 Trading Program pursuant to 40 CFR Part 97, Subpart EEEEE.

No EUs at the stationary source are subject to the Cross-State Air Pollution Rule SO2 Group 1 Trading Program pursuant to 40 CFR Part 97, Subpart CCCCC.

No EUs at the stationary source are subject to the Federal Acid Rain program promulgated in 40 CFR Part 72.

No enforcement or compliance issues have occurred since the last ROP issuance. Therefore, no compliance schedule is required to be included in Appendix 2 of the ROP.

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."

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-N1328-2016 are identified in Appendix 6 of the ROP.

| **PTI Number** | | | |
| --- | --- | --- | --- |
| 196-10 | 292-03 | 101-07A | 296-02 |
| 1240-91D |  |  |  |

**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** |
| --- | --- | --- | --- |
| EUSPACEHTR | Eight 50 MMBtu/Hr NG Fired Space Heaters | R 336.282(b)(i) | R 336.212(4)(b) |

**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 at the time of issuance of the ROP except for requirements listed in Appendix 2. The table in Appendix 2 contains a Schedule of Compliance developed pursuant to Rule 119(a)(i). The applicant must adhere to this schedule and provide the required certified progress reports at least semiannually or in accordance with the schedule in the table. A Schedule of Compliance for any applicable requirement that the source is not in compliance with at the time of ROP issuance is supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.

**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 Shane Nixon, Cadillac/Gaylord 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 Environment, Great Lakes, and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N1328 | JUNE 23, 2022 - STAFF REPORT ADDENDUM | MI-ROP-N1328-20XX |

**Purpose**

A Staff Report dated May 23, 2022, 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: | Rick Videan, Vice President of Operations  231-779-2352 |
| AQD Contact: | Sharon G. LeBlanc, Environmental Quality Analyst  989-217-0055 |

**Summary of Pertinent Comments**

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

**Changes to the May 23, 2022 Draft ROP**

No changes were made to the draft ROP.