

NORTH CAROLINA DIVISION OF
AIR QUALITY

Application Review

Issue Date:

Region: Washington Regional Office
County: Craven
NC Facility ID: 2500048
Inspector's Name: Robert Bright
Date of Last Inspection: 09/11/2024
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): White River Marine Group - New Bern

Facility Address:
White River Marine Group - New Bern
110 North Glenburnie Road
New Bern, NC 28560

SIC: 3732 / Boat Building and Repairing
NAICS: 336612 / Boat Building

Facility Classification: Before: Title V After: Title V
Fee Classification: Before: Title V After: Title V

Permit Applicability (this application only)

SIP: 15A NCAC 02D .0515, 02D .0521,
02D .1806, 02D .1111,
NSPS: N/A
NESHAP: 40 CFR 63 MACT VVVV
PSD: N/A
PSD Avoidance: 02Q .0317
NC Toxics: 02Q .0711 and 02D .1100
112(r): N/A
Other:

Contact Data

Facility Contact

Authorized Contact

Technical Contact

Michael Michaud
Sr. Manufacturing
Manager
(417) 371-7241
2500 East Kearney Street
Springfield, MO 65898

Joe Stoops
Bass Pro Divisional
EHSS Manager
(417) 368-7011
2500 East Kearney Street
Springfield, MO 65898

Alica Alexander
Sr. Environmental
Compliance Manager
(417) 371-3027
2500 East Kearney Street
Springfield, MO 65898

Application Data

Application Number: 2500048.23A, 24C and 25A
Date Received: 01/23/2023, 07/15/2024.
01/24/2025,
Application Type: Renewal, 502(b)(10)
Application Schedule: TV-Renewal
Existing Permit Data
Existing Permit Number: 02742/T18
Existing Permit Issue Date: 01/06/2025
Existing Permit Expiration Date: 06/30/2025

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2023	---	---	65.24	---	1.51	43.73	37.03 [Styrene]
2022	---	---	49.91	---	1.51	35.44	29.76 [Styrene]
2021	---	---	15.70	---	1.51	12.69	9.53 [Styrene]
2020	---	---	12.01	---	1.51	4.54	3.30 [Styrene]
2019	---	---	22.99	---	1.51	9.83	7.85 [Styrene]

Review Engineer: Conzuela Cogdell

Review Engineer's Signature: Date:

Comments / Recommendations:

Issue 02742/T19
Permit Issue Date:
Permit Expiration Date:

1. Purpose of Application

White River Marine Group-New Bern (WRMG) currently holds Title V Permit No. 02742T19 with an expiration date of June 30, 2025, for a boat manufacturing facility in New Bern, North Carolina. This permit application is for TV Permit Renewal and the technical review of two existing 502(b)(10) notifications:

- Application 2500048.23A (502(b)(10)): WRMG notified DAQ of their intent to use facility-wide painting and finishing operations for additional boat lamination and gelcoat purposes. This directly affected ESs: P-1-PSA, P-1-PSB and P-1-BF1. Because WRMG's boat lamination and gelcoat activities are now performed at emission sources P-1-PSA and P-1-BF1, they are now subject to 40 CFR 63 Subpart VVVV, and the permit was updated accordingly. These emission sources are controlled by CD-LAM3 and CD-LAM4,
- Application 2500048.24C (502(b)(10)): WRMG notified DAQ that laminated hulls, decks and other parts were transferred to the Fiberglass working in trim and grind area. The Fiberglass working in trim and grind area was removed during the minor-modification process and is reflected in the current Permit. The referenced lamination activity was grouped under the emission source BM01.
- Application 2500048.25A (TV-Renewal): This application does not have a permit shield due to original application was received 01/25/2025 with a postmark date of 01/02/2025.

2. Facility Description

WRMG operates a boat manufacturing facility in New Bern, NC. The facility manufactures boats ranging from 15 feet to over 100 feet in length. The bulk of the boats and ancillary parts are manufactured through the application of fiberglass reinforced resin onto an open mold through spray application and by hand rolling of resin. Some boats and ancillary components are made via closed mold injection of the resin. The remaining assembly may include trimming, sanding, painting and touch-up activities.

The facility is a Title V facility, because emissions of hazardous air pollutants (HAPs) exceed the major source thresholds of 10 tons per year of any single HAP and/or 25 tons per year of all HAPs combined and has the potential to emit VOCs at a rate greater than 100 tons per year. Specifically, actual emissions of styrene (single HAP) exceed 10 tons per year threshold (refer to page 1 of this document).

3. History/Background/Application Chronology

History/Background

July 19, 2021	TV permit renewal issued. Air Permit No. 02742T16 was issued on July 19, 2021, with an expiration date of June 30, 2025.
January 21, 2022	Air Permit No. 02742T17 was issued for a TV State Only Modification. WRMG installed two new Gel Booths in Building N25 (Lamination Bldg.), installed fully enclosed trim and sanding booth that will have its own dust collection system that will vent back into the booth (insignificant activity) and removed five wall-mounted filters (CD-1.1-CD-1.5) from fiberglass work area (FW-1)
January 8, 2025	Air Permit 02742T18 was issued for Minor Modification. <ol style="list-style-type: none"> 1. All emission sources and associated control devices regulated by MACT VVVV were grouped under one name descriptor "BM01" 2. Emission source FW1 and associated control devices (CD-D1.6-CD-D1.12) were removed 3. Three new control devices (CD-LAM2, CD-LAM3 and CD-LAM4) for future gel/lamination booths (L2, L3 and L4) located in Main building, Building F-1, and Paint Shop B respectively were installed. 4. Small Parts Lamination emission source "L2" was renamed as "SP" and associated control device CD-SP was added to the permit 5. Two cyclones (700mm diameter) installed in series with one canister-type fabric filter (34 square meters of filter area) were removed, one each from Paint Shop B and Building F-1.
February 18 th , 2025	Semi-annual report received to resolve NOV issued: Failure to submit semi-annual reports by January 30, 2025.

Application Chronology

January 23 2023	Received 502(b)(10) notification 2500048.23A, referencing modifications to facility-wide painting and finishing operations (P-1-PSA, P-1-PSB and P-1-FB1)
June 27, 2024	Received application 2500048.24B for State Only modification and Toxic Dispersion modeling analysis.
July 12, 2024	Received 502(b)(10) notification 2500048.24C referencing modification to ES FW-1
August 14, 2024	Toxics Air Dispersion Modeling Review performed by Air Quality Analysis Branch (AQAB) confirming compliance
August 28, 2024	Application 2500048.24B changed to Minor Modification
December 31, 2024	DAQ Regional office received electronic submission of TV Permit Renewal application
January 6, 2025	TV Permit 02742T18 issued.
January 24, 2025	Original hard copy of TV Permit renewal application received by DAQ WARO
March 10, 2025	Draft Statement of Basis and Permit Forwarded to Supervisor for review/comments.
March 11, 2025	Draft Statement of Basis and Permit Forwarded to WARO for review/comments
March 13, 2025	Received WARO comments
March 20, 2025	Received Supervisor Comments, draft documents updated
March 24, 2025	Draft Statement of Basis and Draft Permit emailed to Facility for comments
March 26, 2025	Received updated Form A due to staffing change.
March 28, 2025	Spoke to Facility Consultant: confirmed both paint operations and gel booth/lamination operations will be performed at ES P-1-PSB and P-1-BF1
March 31, 2025	TVEE verified
April 10, 2025	Received comments from facility
April 14, 2025	Forwarded draft documents for notice.
April 15, 2025	TVEE approved and Final Documents forward to Section Chief for notice.

4. Permit Modifications/Changes and TVEE Discussion

This permit renewal application has been processed, and changes to the Title V Equipment Editor are not needed.

Page No.	Section	Description of Changes
	Throughout	Updated dates and permit number

5. Regulatory Review

WRMG is subject to the following regulations.

- 15A NCAC 02D .0515: "Particulates from Miscellaneous Industrial Processes
- 15A NCAC 02D .0521: "Control of Visible Emissions"
- 15A NCAC 02D .0541: "Control of Emissions from Abrasive Blasting"
- 15A NCAC 02D .1100: "Control of Toxic Air Pollutants" [State-enforceable only]
- 15A NCAC 02D .1111: "Maximum Achievable Control Technology" [40 CFR 63 Subpart VVVV]
- 15A NCAC 02D .1806: "Control and Prohibition of Odorous Emissions" [State-enforceable only]
- 15A NCAC 02Q .0317: "Avoidance Conditions for 15A NCAC 02D .0530: Prevention of Serious Deterioration"
- 15A NCAC 02Q .0711: "Emission Rates Requiring a Permit" [State-enforceable only]

Due to extensive changes to the previously issued permit, which was immediately followed by the submission of the current TV Renewal Application, the regulatory review below is based on existing documentation.

15A NCAC 02D .0515: Particulates from Miscellaneous Industrial Processes

This regulation limits the amount of particulate a source can emit as a function of its maximum process rate (excluding any liquid or gaseous fuel). Emission sources (ID Nos BMO1, P-1-PSB, and P-1-BF1) are subject to this regulation. WRMG calculates PM by the following equation:

Sample PM Emissions Equation

$$\frac{\text{Pounds PM}}{\text{Hour}} = \frac{\text{Pounds of Material}}{\text{hours of application time}} \times (\text{wt}\%) \times (1 - \text{delivery}\%) \times (1 - \text{control}\%)$$

Where:

wt % is the unreacted constituent

delivery% is delivery efficiency of the gel coat and lamination (i.e. spray guns)

control% is the control device efficiency

Weight percentage (wt.%), calculated as 1-VOC or 1-e-factor, is either the weight percent of an unreacted constituent, such as MEK, or the MACT determined e-factor for reactive constituents such as styrene or VOC.

WRMG particulate emissions are based on the maximum number of potential solids delivered to the mold through gelcoat application or lamination, similar to organic emissions. WRMG estimates their delivery efficiency for gelcoat and other parts as 65%, lamination as 85% and that the filter units achieve 99% control of overspray. Due to the conservative nature of the values, it is assumed, as a worst-case scenario, that all PM is equal to combined PM10 and PM2.5.

Based on these assumptions WRMG's estimates its PM emissions after the modification as follows:

Activity (Facility Wide)	Max PM (lb./hr.)
Open Gelcoat Usage	0.340
Open Molded Lamination Usage	0.026
Other Open Parts and Material Usage	0.262

Given an assumed unit process rate of 1 ton per hour, the maximum allowable PM emissions under this rule is 4.10 lbs. per hour. Since WRMG's expected PM emissions are less than those allowed under 02D .0515, compliance with the rule is expected. Consistent with sources controlled by bagfilters, the following monitoring will be required:

Particulate matter emissions from the sources in Table 2.1 A above shall be controlled as described in Table 2.1 A above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

- i. a monthly visual inspection of the overspray filters; and
- ii. a monthly visual inspection of the systems' ductwork for leaks.

Typical recordkeeping and reporting will also be required. Continued compliance is expected.

15A NCAC 02D .0521: Control of Visible Emissions

Emission sources (ID Nos BMO1, P-1-PSB, P-1-BF1, A-2, A-3, WW-1 and WW-2) are subject to this regulation.

WRMG's has seven-point sources for the various stages of their boat manufacturing processes, each with a dedicated stack. Visible emissions are limited to 20% opacity for ID Nos. BMO1, P-1-PSB and P-1-BF1, (lamination and paint areas) and 40% for all remaining emission sources A-2, A-3, WW-1 and WW-2 (glue operations and woodworking operations).

WRMG's monthly observations for VE are logged as required by current permit and confirmed during recent inspection. Compliance is indicated via record documentation review. Continued compliance is expected.

15A NCAC 02D .1111: Hazardous Air Pollutants (MACT 40 CFR 63 Subpart VVVV)

WRMG is subject to 40 CFR Part 63 Subpart VVVV, "National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing." More discussion on MACT is provided below in Section 6.

15A NCAC 02D .1806: State Enforceable Only - Odorous Emissions

WRMG has not received any complaints within the last several years nor were they detected during the last inspection. Continued compliance is expected.

15A NCAC 02Q .0317: Volatile Organic Compounds (PSD Avoidance)

This rule allows facilities to accept enforceable limits in the Title V permit to avoid triggering requirements of certain rules. WRMG has accepted a permit limit on VOC emissions to avoid 15A NCAC 02D .0530, Prevention of Significant Deterioration (PSD). The limit is for VOC emissions to be less than 250 tons per year, facility wide.

To demonstrate compliance with the limit, WRMG calculates facility wide VOC emissions using either UEF, AP-42 factors or other such factors approved by the Division. The calculation is made monthly and reported twice per year. The most current VOC emission rolling summary from February 2023-June 2024 is shown below. WRMG's potential for continued compliance has been demonstrated based on available data.

Month and Year	tons/12-mo	
	VOC Limit =	250
	Condition 2.2.A.3.	Condition 2.2.A.3.
	VOC tons/mo	VOC tons/12-mo
Feb-23	5.28	55.28
Mar-23	6.60	58.74
Apr-23	7.01	62.87
May-23	5.72	65.44
Jun-23	7.41	68.71
Jul-23	6.57	71.20
Aug-23	8.21	74.24
Sep-23	6.16	74.14
Oct-23	3.67	71.22
Nov-23	2.10	68.34
Dec-23	1.74	65.24
Jan-24	3.23	63.70
Feb-24	3.12	61.54
Mar-24	3.29	58.23
Apr-24	9.86	61.08
May-24	6.93	62.29
Jun-24	7.22	62.10

6. NSPS, NESHAPS/MACT, PSD, 112(r), and CAM,

NSPS

The facility is not currently subject to any New Source Performance Standards. This renewal permit does not change the facility's NSPS status.

NESHAP/MACT

WRMG is a major source of HAPs because its potential emissions of styrene, a HAP, exceed 10 tons per year. As such, the facility is subject to 40 CFR Part 63 Subpart VVVV, "National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing."

In 2001, EPA promulgated the National Emissions Standards for Hazardous Air Pollutants for Boat Manufacturing, 40 CFR Part 63 Subpart VVVV (2001 NESHAP). The 2001 NESHAP established organic hazardous air pollutant (HAP) emission limits based on low-HAP resins and gel coats and low-emitting resin applications. In 2020, EPA reviewed 40 CFR Part 63 Subpart VVVV. The rule was amended at 85 FR 15971, March 20, 2020, and became effective March 30, 2020. The following were addressed: Startup, Shutdown and Malfunction (SSM), amended provisions regarding electronic reporting of performance tests and performance evaluation results and semiannual reports, removal of regulatory language that is inconsistent with the requirement that the standards apply at all times, inclusion of language requiring electronic reporting of reporting of performance test and evaluation results and semiannual reports and an amendment to the NESHAP to clarify that mixers that route to a capture and control device system with at least 95-percent efficiency overall are not required to have covers. The numeric emission limits of the standards for both source categories remain unchanged.

This permit renewal does not change the facility's MACT status.

PSD

This facility is currently minor for PSD purposes as it is subject to a single facility-wide PSD avoidance limit for VOC (See discussion in Section 5 above). Craven County has triggered increment tracking under PSD for PM₁₀, SO₂ and NO_x. This renewal does not consume or expand increments of any pollutant. See Section 5 above for additional discussion.

112(r).

The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the 112(r) thresholds. No change with respect to 112(r) is anticipated under this TV renewal permit.

CAM

The CAM rule (40 CFR 64; 15A NCAC 02D .0614) applies to each pollutant specific emissions unit (PSEU) located at facilities required to hold Title V permits, where all three of the following criteria are met:

- The unit is subject to any (non-exempt: e.g. pre-November 15, 1990, Section 111, or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- The unit uses any control device to achieve compliance with any such emission limitation or standard.
- The unit has potential pre-control device emissions of the applicable regulated air pollutant that are 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 (i.e. 100 tons per year for criteria pollutants or 10/25 tons per year for HAPs).

WRMG currently or will employ overspray dry filters, (ID Nos. CD-LAM1 through CD-LAM4, CD-SP, CD-G1 and CD-G2) for its laminating operations. These filters are in place to collect overspray from the boat manufacturing process and are used to meet the PM emission standard of 15A NCAC 02D .0515.

Each emission source at the facility does not emit PM (uncontrolled or controlled) in quantities greater than the major source threshold; therefore, CAM does not apply.

7. Facility Wide Air Toxics

Facility Air Toxics was discussed in detail during WRMG's Minor Modification Permit issued December 2024 (See Attachment A). No changes are necessary to the permit with respect to these TAPs.

8. Facility Emissions Review

The facility-wide potential emissions have not changed because of this TV permit renewal. Current emissions for criteria pollutants and HAPs for the previous five years reporting periods are provided in the header of this permit review

9. Compliance Status

DAQ has reviewed the compliance status of WRMG. During the most recent inspection, conducted on September 13th, 2024, the facility appeared to be in compliance with all applicable requirements. Further, the facility has had one air quality violation within the last five years. WRMG failed to submit their semi-annual compliance reports for July

01,2024, to December 31, 2024, by January 30th, 2025. This NOV was resolved February 18, 2025. The facility's last Annual Compliance Certification was received on April 3, 2024, and indicated compliance with all applicable requirements in 2023.

10. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. No affected states or local agencies are within 50 miles of this facility.

11. Other Regulatory Considerations

- A P.E. seal is NOT required for this renewal application.
- A zoning consistency determination is NOT required for this renewal application.
- A permit fee is not required for this TV Renewal application.

12. Recommendations

The permit TV-Renewal application for White River Marine Group-New Bern has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 2742T19.

**ATTACHMENT A:
PERMIT REVIEW FOR PERMIT NO: 02742T18
(APPLICATION No. 2500048.24B)**

DRAFT