

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: January 6, 2025

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

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Authorized Contact

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Application Data

Application Number: 2500048.24B
Date Received: 06/27/2024
Application Type: Modification
Application Schedule: TV- Minor
Existing Permit Data
Existing Permit Number: 02742/T17
Existing Permit Issue Date: 01/21/2022
Existing Permit Expiration Date: 06/30/2025

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
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]
2018	---	---	20.89	---	1.51	8.17	5.75 [Styrene]

Review Engineer: Conzuela Cogdell

Review Engineer's Signature: *Conzuela B. Cogdell* **Date:** 01/06/2025

Comments / Recommendations:

Issue 02742/T18

Permit Issue Date: 01/06/2025

Permit Expiration Date: 06/30/2025

1. Purpose of Application

White River Marine Group-New Bern (WRMG) currently holds Title V Permit No. 02742T17 with an expiration date of June 30, 2025, for a boat manufacturing facility in New Bern, North Carolina. This permit application is for minor modifications to the existing TV Permit to allow the addition of additional boating manufacturing operations to several locations at the site. WRMG seeks to accomplish this by modifying the following:

1. consolidate all Emission Sources regulated by MACT VVVV Boat Manufacturing under one ID No. and emission source description to simplify future permitting and regulatory compliance.
2. add new control device to Building NS (Assembly Building) (CD-LAM2) for future gel/lamination booth (L2)
3. add new control device to building N4, Building F-1, (CD-LAM3), and Building N23, Paint Shop B, (CD-LAM 4) for future gel/lamination booths (L3 and L4)
4. change the name designation for Building N14, Small Parts Lamination, from L-2 to SP, and list existing control device (CD-SP) and
5. the removal of emission source FW-1 and all associated control devices (CD-1.6 through CD-1.12).

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. 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)

Application Chronology

June 27, 2024	Received application 2500048.24B for State Only modification and Toxic Dispersion modeling analysis.
July 1, 2024	An acknowledgment letter sent indicating that the application for permit modification was complete.
August 14, 2024	Toxics Air Dispersion Modeling Review performed by Air Quality Analysis Branch (AQAB) confirming compliance
August 28, 2024	Teams meeting with Facility Consultant to discuss permit application type (State Only to Minor modification), required forms, emission source locations and sample calculations. Upon review the permit application will be processed as a TV minor modification pursuant to 15A NCAC 02Q .0515.
September 17, 2024	Received Form A, A-1 Minor, E1, E2, E5 to convert State Only Modification to Minor Modification Application.
November 5, 2024	Draft Permit and review forwarded to Supervisor Joe Voelker for comments
December 6, 2024	Draft permit and review forwarded to SSCB, regional office and Supervisor for comments. Return due date of December 13, 2024
December 12, 2024	SSCB replied that it does not have comments
December 13, 2024	Sent Draft Statement of Basis and Permit to Facility Owner for comments
December 19, 2024	Received Comments from Applicant. Was informed Guy Roberts is no longer with White River and Mr. Dan Hoy will take his position.
December 19, 2024	Dan Hoy (RO) updated information in I-Beam
December 31, 2024	Updated TVEE and forwarded Tracking Sheet, Draft Permit and Statement of Basis of review/approval
January 2, 2025	TVEE approved
January 6, 2025	Final Draft Permit approved and Signed by Section Chief
January 8, 2025	Signed documents forward to applicant and uploaded to Laserfiche

4. Permit Modifications/Changes and TVEE Discussion

This minor modification permit application is being processed, and changes to the Title V Equipment Editor are needed.

WRMG submitted a TV minor modification application June 27, 2024, indicating the following proposed changes to their current permit:

- Group all emission sources and associated control devices regulated by MACT VVVV under one name descriptor “BMO1”
- Remove Emission source FW1 and associated control devices (CD-D1.6-CD-D1.12)
- Add three new wall filters as 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.
- Update Emission source naming convention for Small Parts Lamination to SP from L2 and list associated control device CD-SP omitted from previous permit
- Remove two cyclones (700mm diameter) installed in series with one canister-type fabric filter (34 square meters of filter area) one each from Paint Shop B and Building F-1.

Page No.	Section	Description of Changes
	Throughout	Updated DAQ's official header Updated dates and permit number
4	1	<ul style="list-style-type: none"> • To simplify regulatory compliance and to promote consistency between other similar permitted facilities, the existing equipment list in Section 1 was revised as follows: <ul style="list-style-type: none"> ▪ Created a new ID No. (ID No. BMO1) and source descriptor: “Facility-wide boat manufacturing operations including gelcoat, lamination, upholstery adhesive, and application equipment cleaning operations” ▪ Consolidated the following MACT VVVV subject operations (ID Nos L1, G1, G2, L2 and A1 under the new ID No. BMO1. ▪ Reassociated the following existing control devices to ID No. BMO1: <ul style="list-style-type: none"> ○ Overspray filters (1,120 square feet of filter area) (ID No. CD-LAM1) ○ Spray booth filter wall (820 square feet of filter area) (ID No. CD-G1) ○ Spray booth filter wall (807 square feet of filter area) (ID No. CD-G2) • Added the following control devices to ID No. BMO1: <ul style="list-style-type: none"> ▪ Overspray filter wall (600 square feet of filter area) (ID No. CD-LAM2) ▪ Overspray filter wall (400 square feet of filter area) (ID No. CD-LAM3) ▪ Overspray filter wall (280 square feet of filter area) (ID No. CD-LAM4) ▪ Overspray filter wall (400 square feet of filter area) (ID No. CD-SP) • Removed the following control device from facility-wide painting and finishing operations Paint shop B (ID No. P-1-PSB): “one cyclone (700 mm in diameter) installed in series with one canister-type fabric filter (34 square meters of filter area) (ID No. CD-F2)” • Added the following control device to facility-wide painting and finishing operations Paint shop B (ID No. P-1-PSB): “Overspray filter wall (280 square feet of filter area) (ID No. CD-LAM4)” • Removed the following control device from facility-wide painting and finishing operations Building F-1 (ID No. P-1-BF1): one cyclone (700 mm in diameter) installed in series with one canister-type fabric filter (34 square meters of filter area) (ID No. CD-F3) • Added the following control device to facility-wide painting and finishing operations Building F-1 (ID No. P-1-BF1) “Overspray filter wall (400 square feet of filter area) (ID No. CD-LAM3)” • The following sources and controls were removed from the permit: Fiberglass working in trim and grind area (ID No. FW-1) with seven bagfilters (ID Nos. CD-D1.6 through CD-D1.12). These PM generating operations will continue to occur but with no direct exhaust to the atmosphere.

Page No.	Section	Description of Changes
5	2.1 A	<ul style="list-style-type: none"> Revised this section to address all MACT affected operations facility-wide consistent with the revisions discussed for Section 1 above. Organized the source and the associated control devices into Table 2.1 A to facilitate readability and practical enforceability. Removed reference to 02D. 1100 and 02Q .0711 as the sources in Section 2.1 A are all subject MACT VVVV and therefore not subject to these regulations. Updated 02Q .0317 reference in applicable regulations table to include reference to Section 2.2 A.3 Updated 02D .1806 reference in applicable regulations table to include reference to Section 2.2 A.2
8	2.1 B	<ul style="list-style-type: none"> Removed reference to Upholstery Gluing and Adhesive Operations (ID No. A-1). throughout. These operations were consolidated into the sources included in Section 2.1 A for permitting purposes. Removed reference to MACT JJJJ in applicable regulations table as the remaining sources in this section are not subject to this regulation Updated references for Toxic Air Pollutants (02D .1100), Odorous Emissions (02D .1806), and PSD Avoidance (02D .0530) in applicable regulations table as the current permit was incorrect.
9	2.1 C	<ul style="list-style-type: none"> The following sources and controls were removed from the permit: Fiberglass working in trim and grind area (ID No. FW-1) with seven bagfilters (ID Nos. CD-D1.6 through CD-D1.12). These PM generating operations will continue to occur but with no direct exhaust to the atmosphere. Section will be referenced as RESERVED to maintain numbering continuity until the next renewal application is processed.
12	2.1 E	<ul style="list-style-type: none"> Removed the following control device from facility-wide painting and finishing operations Paint shop B (ID No. P-1-PSB): “one cyclone (700 mm in diameter) installed in series with one canister-type fabric filter (34 square meters of filter area) (ID No. CD-F2)” Added the following control device to facility-wide painting and finishing operations Paint shop B (ID No. P-1-PSB): “Overspray filter wall (280 square feet of filter area) (ID No. CD-LAM4)” Removed the following control device from facility-wide painting and finishing operations Building F-1 (ID No. P-1-BF1): one cyclone (700 mm in diameter) installed in series with one canister-type fabric filter (34 square meters of filter area) (ID No. CD-F3) Added the following control device to facility-wide painting and finishing operations Building F-1 (ID No. P-1-BF1) “Overspray filter wall (400 square feet of filter area) (ID No. CD-LAM3)” Organized the sources and the associated control devices into Table 2.1 E to facilitate readability and practical enforceability. Added reference to 02Q .0711 in the applicable regulations table as these operations may use materials that contain TAPs.

Page No.	Section	Description of Changes
17	2.2 A.1	<ul style="list-style-type: none"> • 02D .1100 (Toxics) condition • Simple renumbering was made. No changes in intent were made.
17	2.2 A.3.c	<ul style="list-style-type: none"> • Facility-wide PSD Avoidance Condition for VOCs • Added the term “facility-wide” to clarify that VOC emissions from all sources facility-wide shall be calculated each month.
19	2.2 B.1	<ul style="list-style-type: none"> • 02D .1111 (MACT VVVV) condition • At condition b added the following condition: For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.5779 shall apply. • At condition c added the following condition: The Permittee shall comply with the requirements of the General Provisions in 40 CFR 63, Subpart A, as specified in Table 8 to 40 CFR 63 Subpart VVVV. [40 CFR 63.5773] • Since the permit condition ostensibly allowed for the “MACT model point value averaging (emissions averaging) option,” the Permit must contain all applicable requirements under that option. The permit was revised to include the missing requirements. The missing requirements added include: <ul style="list-style-type: none"> -Implementation plan for open molding operations requirement pursuant to 40 CFR 63.5707 that use the emissions averaging option -Compliance requirements for the emissions averaging option pursuant to 40 CFR 63.5710 • The condition in general was substantially revised to be consistent with other VVVV permit conditions at other facilities with similar compliance options.
28	3	<ul style="list-style-type: none"> • Insignificant Activities moved from attachments to Section 3 of the permit
29	4	<ul style="list-style-type: none"> • General Conditions (GC) v6.0 updated to v8.0. Changes include the removal of GC J and modification to GC D.

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]

Only the regulations to which the proposed modification may affect compliance and with respect to the emission sources affected by the proposed modification will be discussed below.

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 review record documentation. Continued compliance is expected.

15A NCAC 02D .1100: State Enforceable Only - Toxic Air Pollutants:

See Section 7 for Toxics discussion.

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 last several years nor were detected during last inspection. Proposed modifications do not affect the terms of the existing permit. 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. Based on the VOC emission rolling summary from February 2023-June 2024 shown below, continued compliance is expected.

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

15A NCAC 02Q .0711: State Enforceable Only – Toxic Air Pollutants
See section 7 for Toxic Air Pollutants Conversation.

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

NSPS

The facility is not currently subject to any New Source Performance Standards. This minor modification 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.

Although the proposed modification affects the operations subject to this rule, no new requirements under the rule will result. The facility states that it utilizes the “MACT model point value averaging (emissions averaging) option.” However, upon review, it was noted the permit condition addressing this rule was deficient in a few ways, notably the following elements were missing:

- Implementation plan for open molding operations requirement pursuant to 40 CFR 63.5707 that use the emissions averaging option
- Compliance requirements for the emissions averaging option pursuant to 40 CFR 63.5710

As a result, the permit condition was substantially revised to bring it up to date to contain all applicable requirements under the rule, and to be consistent with other VVVV permit conditions at other facilities with similar compliance options.

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 modification 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 minor modification 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. This permit minor modification does not change the facility’s CAM status.

7. Facility Wide Air Toxics

The regulations at 15A NCAC 02Q .0700 require, with some exceptions, a permit to emit any toxic air pollutant (TAP) at levels greater than the toxic air pollutant permitting emission rate (TPER) specified in 15A NCAC 02Q .0711. These regulations include the procedural rules used to comply with the TAP control requirements found at 15A NCAC 02D .1100. 15A NCAC 02D .1104 contains Acceptable Ambient Levels (AALs) for each TAP. Generally, a facility must conduct a dispersion modeling analysis to demonstrate that each TAP emitted above its respective TPER will not result in the respective AAL being exceeded beyond the facility’s premises. Collectively, these “toxics” rules are state-enforceable only and are not subject to the TV requirements found at 15A NCAC 02Q .0500.

All existing sources of the TAP styrene at the WRMG are subject to a MACT (i.e., MACT VVVV) and therefore meet the exemption set forth in 15A NCAC 02Q .0702(a)(27). As such, a permit is not required pursuant to 15A NCAC 02Q .0700 for these sources of TAPs at WRMG.

However, pursuant to 15 A NCAC 02Q .0706(d), sources meeting the exemption set forth in 15A NCAC 02Q .0702(a)(27) shall be reviewed by the Division pursuant to G.S. 143-215.107(a)(5)b. Thus, a determination needs to be made, if the operation of the facility after the modifications will pose an “unacceptable risk to human health.”

Styrene (CAS No. 100-42-5)

Although the sources of styrene at WRMG are exempt from the toxics rules as discussed above, WRMG provided the DAQ with a revised dispersion analysis for the TAP styrene to facilitate review. All other TAPs will continue to be emitted below their respective 02Q .0711 TPER or will be discussed separately.

The methodology for estimating the maximum short-term emission rates from lamination and gelcoat activities was conservatively based on the continuous production for the various sized boats as detailed in the application. The values listed in the application represent a sum of the worst-case values in the three bays that are available for boat manufacturing. The resin and gelcoat rates represent the worst-case usage across the three different bays in the Lamination Building and the various boat manufacturing activities including but not limited to gelcoating, open and closed lamination and closed foam.

The emission point characteristics for the sources of styrene emissions are as follows:

Release Characteristics – White River Marine Group, LLC, New Bern, Craven County, North Carolina

Source ID	Stack Release Type	Easting (X)	Northing (Y)	Base Elevation	Stack Height	Temperature	Exit Velocity	Stack Diameter
		(m)	(m)	(m)	(ft)	(°F)	(fps)	(ft)
45AL	DEFAULT	311356	3890660	6	10	70	9	3
L1	DEFAULT	311272	3890486	5	92	70	91	4
27AD	DEFAULT	311063	3890682	4	20	70	56	2
G1	DEFAULT	311279	3890436	5	79	70	43	3
G2	DEFAULT	311291	3890446	5	79	70	43	3
L2	DEFAULT	311263	3890580	5	24	70	20	6
L3	DEFAULT	311030	3890714	5	24	70	20	5
L4	DEFAULT	311151	3890764	5	24	70	20	4

The following emission rates were modeled:

Source ID	Styrene (lb/ hr)
45AL	16
L1	216
27AD	0
G1	20.2
G2	20.2
L2	22
L3	22
L4	22

The modeling was reviewed by the DAQ Air Quality Analysis Branch (AQAB) who issued a memo August 14, 2024, stating “The modeling adequately demonstrates compliance, on a source-by-source basis, for all toxics modeled.” The following table is reproduced from that memo.

Table 1. Maximum Impacts
White River Marine Group, LLC, New Bern, Craven County, North Carolina

Pollutant	Averaging Period	Max. Conc. (µg/m ³)	AAL (µg/m ³)	% of AAL
Styrene	1-hour	10,195	10,600	96.2%

Note that the sum of the modeled styrene emissions in the table above equals 338 lb./hr. Form D of the application estimates the maximum hourly emissions of styrene is 244.6 lb./hr. Given that facility modeled emission rates of styrene well above its potential emissions rates, compliance with the styrene AAL is expected by a wide margin. Thus, it is reasonable to conclude that the facility after the proposed modification will not pose an “unacceptable risk to human health” pursuant to G.S. 143-215.107(a)(5)b. No further review is necessary. No changes are necessary to the permit with respect to styrene.

Methyl ethyl ketone (CAS No. 78-93-3) and Toluene (CAS No. 108-88-3)

The existing permit contains the following emission limitations at Section 2.2 A.1

Emission Source	Toxic Air Pollutant(s) (CAS #)	Emission Limit(s)
Facility-wide sources	methyl ethyl ketone (78-93-3)	28.6 pounds per hour
Facility-wide non-MACT affected sources	toluene (108-88-3)	82.8 pounds per hour

A review of the 1st and 2nd Quarter Toxic Report as required by the existing Section 2.2 A.1.a of the existing permit shows the following:

Emission Source	Toxic Air Pollutant(s)	Emission Limit(s) (lbs./hr.)	1 st Qtr. 2024 Toxic Air Report (lbs./hr.)	2 nd Qtr. 2024 Toxic Air Report (lbs./hr.)	Compliance
Facility-wide sources	MEK	28.6	5.37	7.04	Yes
Facility-wide non-MACT affected sources	Toluene	82.8	12.19	8.87	Yes

In the current application the Permittee states that an increase in Toluene is not expected and an increase of approximately 0.35 lb./hr. maximum of MEK is expected from this modification. Thus, continued compliance is expected with respect to these TAP emission limits by a wide margin. No further review is necessary. No changes are necessary to the permit with respect to these TAPs.

8. Facility Emissions Review

The facility-wide potential emissions have not changed as a result of the modifications addressed in this application. Actual 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 no air quality violations within the last five years. The facility's 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 pursuant to 15A NCAC 02Q .0521 is not required for this Title V minor permit modification.

11. Other Regulatory Considerations

- A P.E. seal is NOT required for this minor modification application.
- A zoning consistency determination is NOT required for this minor modification application.
- A permit fee is required for this minor modification application.
- EPA has promulgated a rule (88 FR 47029, July 21, 2023), with an effective date of August 21, 2023, removing the emergency affirmative defense provisions in operating permits programs, codified in both 40 CFR 70.6(g) and 71.6(g). EPA has concluded that these provisions are inconsistent with the EPA's current interpretation of the enforcement structure of the CAA, in light of prior court decisions¹. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses² and will harmonize the EPA's treatment of affirmative defenses across different CAA programs.

As a consequence of this EPA action to remove these provisions from 40 CFR 70.6(g), it will be necessary for states and local agencies that have adopted similar affirmative defense provisions in their Part 70 operating permit programs to revise their Part 70 programs (regulations) to remove these provisions. In addition, individual operating permits that contain Title V affirmative defenses based on 40 CFR 70.6(g) or similar state regulations will need to be revised.

Regarding NCDAQ, it has not adopted these discretionary affirmative defense provisions in its Title V regulations (15A NCAC 02Q .0500). Instead, DAQ has chosen to include them directly in individual Title V permits as General Condition (GC) J.

Per EPA, DAQ is required to promptly remove such impermissible provisions, as stated above, from individual Title V permits, after August 21, 2023, through normal course of permit issuance. Hence, GC J was removed from the revised permit.

12. Recommendations

The permit minor modification 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. 2742T18.

¹ NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014).

² In newly issued and revised New Source Performance Standards (NSPS), emission guidelines for existing sources, and NESHAP regulations, the EPA has either omitted new affirmative defense provisions or removed existing affirmative defense provisions. See, e.g., National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule, 80 FR 44771 (July 27, 2015); National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 80 FR 72789 (November 20, 2015); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Final Rule, 81 FR 40956 (June 23, 2016).