BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY

In the Matter of Malibu Boats, LLC 5075 Kimberly Way, Loudon, TN 37774	)	
Permit No. 563414	)	Petition to Object to Issuance of a Title V State Operating Permit
Issued by Tennessee Department of Environment and Conservation	)	Petition No. _____

PETITION REQUESTING THE ADMINISTRATOR TO OBJECT TO ISSUANCE OF THE TITLE V OPERATING PERMIT FOR THE MALIBU BOATS, LLC, FACILITY IN LOUDON, TENNESSEE

INTRODUCTION

Pursuant to § 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Petitioners BCAAT, Inc., Ronald Moore, and John Rogers, petition the Administrator of the United States Environmental Protection Agency to object to the Title V Operating Permit for the Malibu Boats, LLC, manufacturing facility in Loudon, Tennessee, Permit Number 563414 (the "Permit"), issued by the Tennessee Department of Environment and Conservation, Division of Air Pollution Control ("TDEC"). A copy of the Permit is attached as Exhibit 1. A copy of TDEC's Addendum #1 To Title V Permit Statement of the Basis for the Permit is attached as Exhibit 2.

PROCEDURAL BACKGROUND

The previous Title V Operating Permit for the Malibu facility was issued in 2004 with an expiration date of October 2012. According to TDEC, the Permit was previously modified on July 7, 2005, to add a lamination booth, on August 20, 2010, to add 3 new gelcoat booths, and on December 20, 2011, to add 2 more gelcoat booths. See Ex. 2 at 4. Malibu submitted the current major modification application on March 13, 2013, and TDEC originally published a draft Permit for the major modification which is the subject of this Petition on June 3, 2013.

Petitioners submitted written comments to TDEC and requested that TDEC conduct a public hearing concerning the draft permit. A public hearing was held on September 19, 2013, at which time BCAAT representatives, including Mr. Moore and Mr. Rogers, appeared and made oral comments and also submitted written comments. TDEC responded in writing to the comments from the public on November 6, 2013, and, thereafter, sent a proposed permit to EPA Region 4, beginning EPA's 45-day review period. TDEC's Response to Comments is attached as Exhibit 3.

Prior to, and during the 45 days afforded EPA under 42 U.S.C. § 7661d(b)(2), Petitioners provided EPA with a copy of their written comments requesting that EPA object to the Permit. EPA took no action within the 45-day period, which expired on December 20, 2013, and TDEC's final permit was issued on January 13, 2014. This Petition is filed within sixty days following the end of EPA's 45-day review period, as required by § 505(b)(2) of the Clean Air Act ("CAA"), 42 U.S.C. § 7661d(b)(2).

The Administrator must grant or deny this Petition within 60 days of its filing. *Id.* If the Administrator determines that the Permit does not comply with the requirements of the CAA or fails to include any applicable requirement, she must object to issuance of the permit under 42 U.S.C. § 7661d(b)(2). Applicable requirements include all provisions of the State of Tennessee State Implementation Plan ("SIP"), any Prevention of Significant Deterioration ("PSD") requirements, and any standard or requirement under CAA § 111, 112, 114(a)(3) or 504. 42 U.S.C. §§ 7411, 7412, 7414(a)(3), or 7661c; 40 C.F.R. § 70.2.

SUMMARY OF PETITIONERS' ARGUMENTS

Petitioners request that the Administrator object to the Permit because the Permit fails to comply with the Clean Air Act and CAA regulations and Tennessee law as incorporated in and applied by the Tennessee SIP, for the following reasons:

1. The Permit should require PSD review prior to construction of the major modification to the major stationary source, because Malibu was likely a major stationary source for PSD purposes at the time of the application.
2. The Permit does not satisfy PSD review requirements by simply incorporating the National Emission Standards for Boat Manufacturing.
3. The Permit does not comply with the Tennessee SIP requirements to prevent, abate, and control air pollution to protect human health and to assess and reduce air pollutants from multiple sources.

SPECIFIC OBJECTIONS

I. THE PERMIT SHOULD REQUIRE PSD REVIEW PRIOR TO CONSTRUCTION OF THE MAJOR MODIFICATION TO THE MAJOR STATIONARY SOURCE.

The Malibu factory was likely a major stationary source for VOCs prior to this Title V major modification application, and, therefore, should be required to undergo PSD review prior to construction of the major modification allowed by the challenged Title V permit.[1] As required by EPA rules, "major stationary source" is defined in the Tennessee SIP and Tennessee Air Pollution Control Rule ("TAPCR") 1200-03-09-.01(4)(b)1., in relevant part as:

[1] For purposes of this Petition, based on the EPA Region 4 designations, Petitioners are assuming that Loudon County, Tennessee, was in attainment for the 2008 air quality standard for ground level ozone at the time of the application.

> (b) ... any stationary source which emits or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant.
> (c) Any physical change that would occur at a stationary source not otherwise qualifying under part (b)1. as a major stationary source if the change would constitute a major stationary source by itself.

"Potential to emit" is defined as:

> [T]he maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

There is nothing in the record to establish the potential to emit for the Malibu facility prior to the application for this Title V permit, other than the previous permit's maximum allowable emissions for VOCs. However, the previous permit's overall emissions limit of 196 tons per year ("TPY") of VOCs is not the potential to emit. EPA has taken the position, upheld by the courts, that state permit conditions expressly limiting volatile organic compound emissions to a level below 250 tons per year are not components of "potential to emit" within meaning of Clean Air Act. *See, e.g., United States v. Louisiana-Pac. Corp.*, 682 F. Supp. 1122, 1132 (D. Colo. 1987). *See also*, Terrell E. Hunt, U.S. EPA, "Guidance on Limiting Potential to Emit in New Source Permitting," June 13, 1989. The applicant must establish the potential to emit based on the maximum capacity of the source "under its physical and operational design," because the prior permit does not contain restrictions on hours of operation or on the type or amount of material processed that would be legally enforceable.

It is clear from the math that the physical and operational design of the Malibu facility was much greater than the VOC emissions limit of 196 TPY at the time of the permit application. The challenged Title V modification only adds 2 gelcoat booths to the 8 existing booths; yet, without adding other equipment, the VOC emissions included in the new Title V permit more than double with the addition of 230 tons per year.

The history of additions of gelcoat booths at the Malibu facility makes it is clear that the addition of 2 gelcoat booths in the challenged modification cannot be responsible for the emission of an additional 230 TPY of VOCs. As described in TDEC's "Addendum #1 to Title V Permit Statement of the Basis," Ex. 3 at 4, for the modification at issue:

- The previous Title V permit had 3 gelcoat booths with VOC limits of 160 TPY.
- An April 10, 2010, Significant Modification added 3 gelcoat booths which increased VOC emissions 36 TPY (from 160 TPY to 196 TPY).

- A December 20, 2011, Minor Modification added 2 gelcoat boots with no increase in VOC emissions.

Obviously, prior gelcoat booth additions have not increased emissions at the rate of 230 TPY for 2 booths or 115 TPY per booth.

Malibu and TDEC have both admitted that the facility had higher potential to emit for VOCs prior to this modification and that the modification would simply utilize existing manufacturing capacity at a higher rate than before. Malibu stated in its cover letter with its application for the modification, dated March 13, 2013:

> Based on current market demand, projected market recovery, and projected market share, Malibu foresees the need to increase permitted VOC and PM limits, in order to accommodate anticipated boat production levels. Malibu can provide confidential analyses of market share projections, based on current and recent past data, as well as data supporting the increased emissions on the basis of boat number and associated emissions per boat, if requested.

See Exhibit 4, attached.

Malibu's Chief Operating Officer, Ritchie Anderson, was quoted in the Loudon County *News-Herald* discussing at the TDEC public hearing the contribution of VOCs from other parts of the facility as follows:

> If you look in our facility, actually where most of the VOCs are emitted, it's not out of those [gelcoat] booths. Those booths are just your actual gelcoat booths, so you've got all your lamination going on out here in the main part of your building, so you're actual styrene and your processes out there are what's generating emissions, so it's not really all just about that booth.

Copy of Article attached as Exhibit 5.

> TDEC stated in its Response to Comments on this issue:
>
> The assessment on the increase in the number of booths is correct. However, the additional VOC allowable emissions are not coming entirely from the two new booths, but from <u>existing sources of the operation</u> [emphasis added]. This construction permit application is for a modification of the entire source.

See Ex. 3 at 2. TDEC also stated in its "Addendum #1 to Title V Permit Statement of the Basis:"

> The purpose of this significant modification is to add two new gelcoat booths, and to increase material usage based on projected increase in production [emphasis added].

See Ex. 2 at 5.

These statements also make it clear that the factory had a much greater potential to emit than 196 TPY prior to the current modification application, which only adds the 2 new gelcoat booths. The Malibu facility was likely a major stationary source prior to the application for the challenged Title V permit modification. At the very least, EPA should require submission of data and perform an analysis of what the potential to emit was for the Malibu facility and whether it was a major stationary source for purposes of PSD permitting at the time of this permit application. Then, the modification should be analyzed to determine if it is a major modification for PSD review.

Rule 1200-03-09-.01(4)(b)2. defines major modification as:

> [A] project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in part (b)34. of this paragraph), and a significant net emissions increase (as defined in parts (b)4. and 24.of this paragraph). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

Under TAPCR 1200-03-09-.01(4)(b)24(i)(V), a significant emissions increase for VOCs would be 40 tons per year. Whether there is a significant net emissions increase would be determined under TAPCR 1200-03-09-.01(4)(b)4. Malibu did not provide the data necessary to perform this analysis, and TDEC did not require this analysis.

EPA should object to this permit because it is likely that the permit allows construction of a major modification to a major stationary source without PSD review. EPA should require TDEC to reopen the permit and require Malibu to submit sufficient data and information to establish its potential to emit and to determine whether the modification adding VOC emissions is a major modification. If the modification is a major modification to a major stationary source, PSD review should be required.

II. COMPLIANCE WITH THE NATIONAL EMISSION STANDARDS FOR BOAT MANUFACTURING DOES NOT SATISFY PSD REVIEW.

TDEC and the applicant have claimed that PSD review for VOCs and ozone should not be required because Malibu is complying with MACT as part of the National Emission Standards for Boat Manufacturing, which would be more stringent than BACT required under PSD review. However, there is more to PSD review than the BACT requirement. Among other things, PSD review would require:

- A demonstration by performing source impact analysis that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reduction (including secondary emissions) would not cause or contribute to air pollution in violation of: (i) Any Tennessee ambient air quality standard in the source impact area. (ii) Any applicable maximum allowable increase over the baseline concentration in any area. TAPCR 1200-3-09-.01(e)1. and 2.

- A preapplication air quality analysis, including continuous air monitoring. TAPCR 1200-3-09-.01(e)7.; and

- Estimates of ambient concentrations based on EPA-approved air quality models, data bases, and other requirements. TAPCR 1200-3-09-.01(k).

Finally, Tennessee's Growth Policy for attainment and unclassified areas provides:

> The Technical Secretary shall not grant a permit for the construction or modification of any air contaminant source in an attainment or unclassified area if such construction or modification will interfere with the maintenance of an air quality standard or PSD increment where applicable, or will violate any provisions of the Tennessee Air Quality Act, or section 165 (a)(3) of the Clean Air Act, Amendments of 1990.

TAPCR 1200-3-.09-.01(5)(a). TDEC has argued in its Response to Comments that the Malibu modification and addition of 230 tons per year of VOCs will not interfere with the maintenance of the air quality standards for ground level ozone. However, no such analysis or demonstration has been performed by the applicant or TDEC for the area in question, which has several other major sources of VOC emissions.

III. THE PERMIT DOES NOT COMPLY WITH TENNESSEE'S STATE IMPLEMENTATION PLAN, WHICH REQUIRES THE PERMIT TO PREVENT, ABATE, AND CONTROL AIR POLLUTION TO PROTECT HUMAN HEALTH AND TO ASSESS AND REDUCE AIR POLLUTANTS FROM MULTIPLE SOURCES.

Each Title V permit must include "enforceable emission limitations and standards, a schedule of compliance...and such other conditions as are necessary to assure compliance by the source with all applicable requirements of [the] Act, including the requirements of the applicable implementation plan." 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.1. Tennessee's State Implementation Plan incorporates the rules promulgated by the Tennessee Air Pollution Control Board, which, in turn, incorporate the statutory requirements of the Tennessee Air Quality Act. Tenn. Code Ann. §§ 68-201-101, *et seq.*

TAPCR 1200-3-9-.02(6) states that "[o]peration of each air contaminant source shall be in accordance with the provisions and stipulations set forth in the operating permit,

all provisions of these regulations, and all provisions of the Tennessee Air Quality Act." The Tennessee Air Quality Act at Tenn. Code Ann. § 68-201-103 states:

> It is the intent and purpose of this part to maintain purity of the air resources of the state consistent with the protection of normal health, general welfare and physical property of the people, maximum employment and the full industrial development of the state. The board and department shall seek the accomplishment of these objectives through the prevention, abatement and control of air pollution by all practical and economically feasible methods.

Tenn. Code Ann. § 68-201-102(3) defines "air pollution" as:

> presence in the outdoor atmosphere of one (1) or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant or animal life or property or which unreasonably interfere with the enjoyment of life and property.

TAPCR 1200-3-31-.03(3), dealing with case by case determinations of hazardous air pollutant control requirements, states:

> To the extent possible, it is the Board's intent to impose MACT and GACT limitations equivalent to that required by the United States Environmental Protection Agency at the time of the case by case determination. Should there be a prudent reason to be more stringent than the federal equivalent, the Technical Secretary may issue a more stringent MACT or GACT requirement.

TAPCR 1200-3-1-.01(5) states, in part:

> When multiple sources of a pollutant exist in an area, a limitation of the emission from each source must be exercised, and the individual contribution to the total pollutant load in the area must be reduced to insure compliance with the ambient air quality standards. This is accomplished by the application of emission standards.

As pointed out by Petitioners in the TDEC public hearing, Malibu is a major source of styrene emissions. Malibu's reported 2012 TRI releases of styrene were 179,812 pounds. According to the National Toxicology Program's ("NTP") *Report on Carcinogens, Twelfth Edition* (2011), styrene is reasonably anticipated to be a human carcinogen based on limited evidence of carcinogenicity from studies in humans, sufficient evidence of carcinogenicity from studies in experimental animals, and supporting data on mechanisms of carcinogenesis. The NTP based its conclusion, in part, on the association of styrene exposure with lymphohematopoietic cancer and malignant lymphoma in workers in the reinforced plastics industry.

There are also 3 other boat manufacturers emitting styrene not far from the Malibu facility. The other three boat manufacturers (Mastercraft Boat Co., Sea Ray Boats, and Yamaha Jet Boat) reported releases of 525,581 pounds for 2012. This makes a total of 705,393 pounds of styrene emitted each year in the area.

Petitioners commented that air dispersion modeling and risk assessment should be performed to insure that the emission limits in the permit would not result in residents in the area being exposed to levels of styrene and other air toxics that could increase their risk of cancer. With cumulative exposures to emissions from all 4 facilities, as well as other major air toxics emission sources in the area, the federal NESHAP for the Malibu permit may not be protective enough to comply with TDEC rules and the Tennessee Air Quality Act. Modeling and risk assessment may show that there are prudent reasons to require MACT limitations more stringent than the federal NESHAP for the Malibu plant, but TDEC refused to even consider the cumulative effects of the Malibu emissions together with the styrene and other air toxics emissions from the other nearby facilities.

Similarly, there are also other significant sources of VOCs in the area near the Malibu facility, including the Viskase Corporation facility, which can emit 1,169 tons per year of VOCs, and the Tate & Lyle facility, which can emit 396 tons per year. Pursuant to TAPCR 1200-3-1-.01(5), even if PSD review is not triggered, TDEC should have considered the impacts of all the VOC emissions in the area on compliance with ambient air quality standards.

CONCLUSION

For the reasons set out in this Petition, Petitioners respectfully request the Administrator to object to the Malibu Title V permit modification and require TDEC to revise the permit to require PSD review for the modification and to require air modeling and risk assessment for setting emissions limits for styrene to insure protection of human health and compliance with the SIP.

Respectfully submitted.

Gary A. Davis
Davis & Whitlock, PC
21 Battery Park Ave., Suite 206
Asheville, NC 28801
(828) 622-0044
gadavis@enviroattorney.com
Attorney for Petitioners

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the original of the foregoing document and attached exhibits were served upon the Administrator of the EPA by overnight courier, and a true and exact copy of the foregoing document, together with attached, exhibits was served upon the following persons by U.S. Mail, postage prepaid:

Barry R. Stephens, Director
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Ritchie L. Anderson
Vice-President of Operations
Malibu Boats, LLC
5075 Kimberly Way
Loudon, TN 37774

This 17th day of February, 2014.

Gary A. Davis

EXHIBIT 1

TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531

SIGNIFICANT MODIFICATION #1 TO
OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: **August 20, 2010**
Date of Modification: **January 13, 2014**
Date Expires: **August 19, 2015**

Permit Number:
563414

Issued To:
Malibu Boats, LLC

Installation Address:
5075 Kimberly Way
Loudon

Installation Description:
Fiberglass Boat Manufacturing

SIGNIFICANT MODIFICATION #1 TO

Source 01- Gelcoat, Lamination, Adhesive Spraying and Grinding Operations with Exhaust Filter Control

Emission Source Reference No.: **53-0098**

Renewal Application Due Date: Between November 22, 2014, and February 20, 2015

Primary SIC: **37**

Responsible Official:
Name: Ritchie L. Anderson
Title: Vice President of Operations

Facility Contact Person:
Name: Donna Tallent
Title: EHS Manager
Phone: 865-458-5478

Information Relied Upon:

Minor Modification application dated April 29, 2011
Minor Modification application dated December 19, 2011
Significant Modification application dated March 15, 2013

(continued on the next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

53-0098	Facility Description:	Fiberglass Boat Manufacturing Source 01- Gelcoat, Lamination, Adhesive Spraying and Grinding Operations with Exhaust Filter Control

MM1E1. Fee payment: allowable emissions basis.

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 53-0098

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	Was 17.5 Now 22.0	N/A	
PM_{10}	N/A	N/A	
SO_2	N/A	N/A	
VOC	Was 196 Now 426.0	N/A	Includes all VOC HAPS
NO_X	N/A	N/A	
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*			
VOC FAMILY GROUP	N/A	N/A	
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD)**			
VOC FAMILY GROUP	N/A	AEAR	MACT Rule 40 CFR Part 63 Subpart VVVV Fee emissions are included in VOC above
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A	

NOTES

AAP The **Annual Accounting Period (AAP)** is a twelve (12) consecutive month period that **begins each July 1st and ends June 30th of the following year**. The **present Annual Accounting Period began July 1, 2013 and ends June 30, 2014.** The **next Annual Accounting Period begins July 1, 2014 and ends June 30, 2015.**

N/A N/A indicates that no emissions are specified for fee computation.

AEAR AEAR indicates that an Actual Emissions Analysis is **required** to determine the actual emissions of:

(1) **each regulated pollutant** (Particulate matter, SO_2, VOC, NO_X and so forth. See TAPCR 1200-3-26-.02(2)(i) for the definition of a regulated pollutant.),

(2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family), and

(3) the **Miscellaneous HAP Category** under consideration during the **Annual Accounting Period**.

* **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group, **the Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

** **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-3-11 or Chapter 1200-3-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group, **the Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

*** **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the **PM**, **SO_2**, **VOC** or **NO_x** emissions from each source in this permit. **For fee computation**, each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

END NOTES

(1) Pay major source annual **allowable based emission fees**, as requested by the responsible official, in accordance with the above **Fee Emissions Summary Table** for the **current** annual accounting period that began July 1, **2014.**

(2) Prepare an **actual emissions analysis** for the **current** annual accounting period that began July 1, **2014** in accordance with the above **Fee Emissions Summary Table.** The **actual emissions analysis** shall include:

- **(a)** the completed **Fee Emissions Summary Table,**
- **(b)** each **AEAR** required by the above **Fee Emissions Summary Table, and**
- **(c)** the records or summary of records, required by Condition MM1*E8* of this permit. These records shall be used to complete the **AEARs** required by the above **Fee Emissions Summary Table.**

(3) Submit the **actual emissions analysis** no later than 90 days after the end of each **annual accounting period**.

The Tennessee Air Pollution Control Division will bill the permittee no later than **April 1** prior to the end of each **annual accounting period**. The annual emission fee is due **July 1** following the end of each **annual accounting period**. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due and the actual emissions analysis shall be submitted to The Technical Secretary at this address.

Tennessee Department of Environment and Conservation
Division of Fiscal Services
Consolidated Fee Section – APC
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 10th Floor
Nashville, Tennessee 37243

TAPCR 1200-03-26-.02 (3) and (9), and 1200-03-09-.02(11)(e)1(vii)

MM1E2. Reporting requirements.

(a) Semiannual reports. The first report since issuance of this permit shall cover the 6-month period from July 1, 2013 to December 31, 2013, and shall be submitted within 60 days **(due date: March 1, 2014)** after the 6 month period ending December 31, 2013. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report.

These semiannual reports shall include:

(1) Any monitoring and recordkeeping required by Conditions MM1**E6, MM1E7, MM1E8 and MM1E9** of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

(2) The visible emission evaluation readings from Condition E3 of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

(3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii)

(b) Annual compliance certification The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(1) The identification of each term or condition of the permit that is the basis of the certification;

(2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;

(3) Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;

(4) The status of compliance with the terms and conditions of the permit for the period covered by the certification, **including whether compliance during the period was continuous or intermittent. The certification shall be** based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

(5) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or

less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first certification since issuance of this permit shall cover the 12-month period from January 1, 2013 to December 31, 2013, and shall be submitted within 60 days (due date: March 1, 2014) after the 12-month period ending December 31, 2013. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification. These certifications shall be submitted to:

These certifications shall be submitted to: TN APCD and EPA

The Tennessee Department of Environment and Conservation
Knoxville Environmental Field Office
Division of Air Pollution Control
3711 Middlebrook Pike
Knoxville, TN 37921

and

Air and EPCRA Enforcement Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, GA 30303

TAPCR 1200-03-09-.02 (11)(e)3.(v)

MACT Reporting Requirements . The first MACT semiannual report since issuance of this permit shall cover the 6-month period from July 1, 2013, to December 31, 2013, and shall be submitted within 60 days (due date: March 1, 2014) after the 6 month period ending December 31, 2013. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report.

The report should be addressed and sent to the following:

The Technical Secretary
Division of Air Pollution Control
East Tennessee Permit Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

As an alternative to submittal of paper copies of the MACT Report by mail or commercial carrier service, the permittee may elect to submit these reports electronically in Adobe Portable Document Format (PDF) to the following e-mail address:

Air.Pollution.Control@tn.gov

The electronically-submitted report must comply with the specified deadlines as required for a paper copy submittal. Also, the electronic report submittal must include a scanned copy of the signature of the responsible official certifying the report. A color copy of the document with blue ink signatures is preferred, but a black-and-white submittal is acceptable. The Air Pollution Control e-mail address will send an automatic reply to verify that the electronic submittal was received. If an automatic reply is not received, you may wish to re-send or confirm that the e-mail submittal was received by contacting the Division of Air Pollution Control at (615) 532-0554.

(d) Retention of Records All records required by any condition in Section E of this permit must be retained for a period of not less than five years. Additionally, these records shall be kept available for inspection by the Technical Secretary or representative.

TAPCR 1200-03-09-.02(11)(e)1.(iii)(II)II

E3. Visible emissions from the sources at this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996, and amended on September 11, 2013, that is enclosed as Attachment 3.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E4. The VOC content of all materials used at this facility may be determined by using material safety data sheets (MSDS) or vendor formulation data which explicitly list the VOC content (or VOC emission rate/emission factor) by weight.

TAPCR 1200-03-09

E5. Purchase orders and invoices for all VOC and HAP containing materials along with material safety data sheets must be maintained and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period not less than five years.

TAPCR 1200-03-09

E6. Recordkeeping: Data Entry Requirements

a) For monthly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than thirty (30) days from the end of the month for which the data is required.
b) For weekly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven (7) days from the end of the week for which the data is required.
c) For daily recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

TAPCR 1200-03-10

MM1E7. Particulate matter emitted from this source shall not exceed the following:

Exhaust Stack	Particulate Matter Emission Rates
Gelcoat Booth #G1	0.5 Pound per Hour
Gelcoat Booth #G2	0.5 Pound per Hour
Gelcoat Booth #G3	0.5 Pound per Hour
Gelcoat Booth #G4	0.5 Pound per Hour
Gelcoat Booth #G5	0.5 Pound per Hour
Gelcoat Booth #G6	0.5 Pound per Hour
Gelcoat Booth #G7	0.5 Pound per Hour
Gelcoat Booth #G8	0.5 Pound per Hour
Gelcoat Booth #G9	0.5 Pound per Hour
Gelcoat Booth #G10	0.5 Pound per Hour

The above emission limitations are established pursuant to Rule 1200-03-07-.01(5) of Tennessee Air Pollution Control Regulations and information contained in the agreement letters dated May 12, 2010, and March 15, 2013, from the permittee.

Compliance Method: The exhaust filter controls for these sources shall be functioning whenever these sources are in operation. The filters controlling the spray booths shall be inspected on a daily basis whenever these booths are in operation and shall be replaced as necessary. A record of the daily inspections and filter replacements for each booth shall be kept available for inspection by the Technical Secretary or his representative for a period of not less than 5 years.

MM1E8. Volatile organic compounds (VOC) emitted from this source shall not exceed 426 tons during any period of twelve (12) consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: VOC emissions calculations from monthly usage records at this source shall assure compliance with this condition. The permittee shall maintain records of these emissions in a form that readily shows compliance with Condition E8. Compliance is assured by maintaining **LOGS #1, #2, and #3** provided in **Attachment #1** or logs in a format which provides equivalent information. **UNIFIED EMISSION FACTORS FOR OPEN MOLDING OF COMPOSITES, revised and approved October 13, 2009,** shall be used to determine the styrene, methyl styrene, and methyl methacrylate VOC emissions in the gelcoat, resins, gunks, and putties used in fiberglass boat manufacturing operations. These factors are provided in **Attachment #2.**

For non-atomized, manual controlled spray, and automated controlled spray applications of gelcoats, the appropriate emission factors for styrene and methyl methacrylate will be calculated using the UNIFIED EMISSION FACTORS FOR OPEN MOLDING OF COMPOSITES **revised and approved October 13, 2009**.

The permittee shall utilize 75% emissions factor for emissions of methyl methacrylate from methyl methacrylate two-part reactive adhesives.

Emissions of MEKP (methyl ethyl ketone peroxide) and DMP (dimethyl phthalate) are negligible; therefore, records of usage rates and associated emissions shall not be required.

Emissions of MDI and other Isocyanate ingredients from foams or other materials are negligible; therefore, records of usage rates and associated emissions shall not be required.

If VOC or HAP-containing materials other than these listed above are used, an emission factor of 100% will be utilized, except where vendor specifies a different emission factor.

Emissions of MDI and other Isocyanate ingredients from foams or other materials are negligible; therefore, records of usage rates and associated emissions shall not be required

MM1E9. This facility shall comply with all applicable requirements of 40 CFR 63 Subpart VVVV-National Emission Standards for Boat Manufacturing and Subpart A-General Provisions, as specified in 40 CFR §63.5773 of Subpart VVVV (Table 8). The applicable requirements include, but are not limited to, the following provisions:

(a) The emission limit for open molding resin and gel coat operations specified by Equation 1 in 40 CFR §63.5698.

(b) **Alternate Compliance Plans:** The permitee shall demonstrate compliance with the emission limit specified by Equation 1 in 40 CFR §63.5698 using one or both of the two options listed below:

i. Maximum achievable control technology (MACT) point value averaging (emissions averaging) option described in 40 CFR §63.5701 (a).

ii Compliant materials option described in 40 CFR §63.5701(b).

The company shall indicate the method by which compliance is demonstrated for each source whether by MACT PointValue described in 40 CFR §63.5701(a) or compliant Materials Option described at 40 CFR §63.5701(b). The compliance method for a source may not be changed more frequently than on a monthly basis.

(c) For those open molding operations and materials complying using the emissions averaging option, the pemitee shall demonstrate compliance by following the steps described in paragraphs (a)(1) through (5) of 40 CFR §63.5704.

(d) For each open molding operation complying using the compliant materials option, the permitee shall demonstrate compliance by performing steps (b)(1) through (4) of 40 CFR §63.5704.

(e) The permitee must prepare an implementation plan meeting the requirements of 40 CFR §63.5707 for all open molding operations meeting the requirements described in 40 CFR §63.5704.

(f) The permitee may demonstrate compliance using emissions averaging option on all twelve (12) months basis, determined at the end of every month calculated with Equation 1 described in 40 CFR §63.5710:

HAP Emissions = $[(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})]$ (Eq. 1)

Where:

HAP Emissions = Organic HAP emissions calculated using MACT model point values for each operation included in the average, kilograms.

PV_R = Weighted-average MACT model point value for production resin used in the past 12 months, kilograms per megagram.

M_R = mass of production resin used in the past 12 months, megagrams.

PV_{PG}= Weighted-average MACT model point value for production gel coat used in the past 12 months, kilograms per megagram.

M_{PG} = mass of pigmented gel coat used in the past 12 months, megagrams.

PV_{CG}= Weighted-average MACT model point value for clear gel coat used in the past 12 months, kilograms per megagram.

M_{CG} = mass of clear gel coat used in the past 12 months, megagrams.

PV_{TR} = Weighted-average MACT model point value for tooling resin used in the past 12 months, kilograms per megagram.

M_{TR} = mass of tooling resin used in the past 12 months, megagrams.

PV_{TG}= Weighted-average MACT model point value for tooling gel coat used in the past 12 months, kilograms per megagrain.

M_{TG} = mass of tooling gel coat used in the past 12 months, megagrains.

(g) At the end of every month, the permitee shall use equation 2 of 40 CFR §63.5710 to compute the weighted-average MACT model point value for each open molding resin and gel coat included in the average:

$$PV_{op} = \frac{\sum_{i=1}^{n}(M_i PV_i)}{\sum_{i=1}^{n}(M_i)}$$

Where:

PVop = weighted-average MACT model point value for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, PV_{TG}) included in the average, kilograms per megagram of material applied.

M_i= mass of resin or get coat i used in the past 12 months in an operation.

PV_i= the MACT model point value for resin or get coat i used in the past 12 months in an operation, Kilograms of HAP per megagram of material applied.

n = number of different open molding resins or gel coats used in the past 12 months in an operation.

(h) If using the compliant materials option, the permitee shall demonstrate compliance for open molding resin and gelcoat by complying with the organic HAP content requirements specified in condition E10 of this permit based on a 12-month moving average calculated at the end of every month following the methods described at 40 CFR §63.5713.

(i) To demonstrate compliance using a filled production resin or a filled tooling resin, the permitee will demonstrate compliance for the filled material on an as applied basis using equation 1 of section §63.5714:

$$PV_F = PV_U \times \frac{(100 - \%\ Filler)}{100}$$

Where:
PV_F = The as-applied MACT model point value for a filled production or tooling resin, kilograms organic HAP per megagram of filled material.
PVu = The MACT model point value for the neat (unfilled) resin, before filler is added, as calculated using the formulas in Table 3 to 40 CFR Part 63 Subpart VVVV.
% Filler = The weight-percent of filler in the as-applied filled resin system.

(j) The materials specified in paragraphs i. through iii. of this subsection are exempt from the open molding emission limit specified in paragraph 2(a) of this permit and 40 CFR §63.5698(d):
i. Production resins (including skin coat resins) that must meet specifications for use in military vessels or must be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other lifesaving applications approved under 46 CFR subchapter Q or the construction of small passenger vessels regulated by 46 CFR subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (nonspray) resin application equipment.
ii. Pigmented, clear, and tooling gelcoats used for part or mold repair and touch up. The total gelcoat materials included in this exemption must not exceed 1 percent by weight of all gelcoat used at the permitted facility on all twelve (12)month rolling-average basis. The permitee shall keep a record of the amount of gelcoats used per month for which this exemption is used and copies of calculations showing that the exempt amount does not exceed 1 percent of all gelcoat used.
iii. Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resins used at the permitted facility on a 12-month moving average basis. The permitee shall keep a record of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used.

(k) The work practice standards for resin and gel coat mixing operations as specified in 40 CFR §63.5731.

(l) The standards for resin and gel coat equipment cleaning operations specified in 40 CFR §63.5734, which includes using a cleaning solvent that contains no more than 5% organic HAP by weight for routine flushing of resin and gelcoat application equipment (e.g. spray guns, flow coaters, brushes, rollers and squeegees). For removing cured resin or gelcoat from application equipment, no organic HAP content limit applies (§63.5734(a)).

(m) The methods for demonstration of compliance with the resin and gel coat application equipment cleaning standards specified in §63.5737.

(n) The carpet and fabric adhesive operation standards specified in 40 CFR §63.5740, including the requirement to use carpet and fabric adhesives that contain no more than 5% organic HAP by weight.

(o) The organic HAP content determination requirements specified in 40 CFR §63.5758.

(p) The notification requirements specified in 40 CFR §63.5761, included at Table 7 to Subpart VVVV.

(q) The "semiannual" report submittal requirements specified in 40 CFR §63.5764.

(r) The recordkeeping requirements specified in 40 CFR §63.5767.

(s) The recordkeeping format specified in 40 CFR §63.5770.

(t) The requirements of the General Provisions of 40 CFR 63 Subpart A, Table 8 to Subpart VVVV.

(u) As specified in 40 CFR §63.5683(d), the hazardous air pollutant requirements of this permit do not apply to antifoulant coatings, assembly adhesives, fiberglass hull and deck coatings, research and development activities, mold seating and release agents, mold stripping and cleaning solvents, and cleaning solvents, and wood coatings as defined in 40 CFR §63.5779.

(v) The resin and gelcoat HAP concentration limitations of this permit and of 40 CFR 63 Subpart VVVV, do not apply to resin application operations that meet the definition of closed molding as specified in 40 CFR §63.5779.

MM1E-10. If using the compliant materials option, this source must comply with the following HAP content limits as specified at Table 2 of Subpart VVVV. The Hazardous Air Pollutant (HAP includes organic HAP determined by methods in §63.5758) content of the material used at this source shall not exceed the following, based on a consecutive 12-month average, specified in 40 CFR §63.5701 (b):

TABLE 2 TO SUBPART VVVV – ALTERNATIVE ORGANIC HAP CONTENT REQUIREMENTS FOR OPEN MOLDING RESIN AND GEL COAT OPERATIONS AS SPECIFIED IN §§63.5701(b), 63.5704(b)(2), AND 63.5713(a), (b), AND (d). YOU MUST COMPLY WITH THE REQUIREMENTS IN THE FOLLOWING TABLE:

FOR THIS OPERATION	APPLICATION METHOD	YOU MUST NOT EXCEED THIS WEIGHTED-AVERAGE ORGANIC HAP CONTENT (WEIGHT PERCENT) REQUIREMENT
1.Production Resin Operations	Atomized (Spray)	**28** Percent (%)
2.Production Resin Operations	Non-atomized (Non-Spray)	**35** Percent (%)
3.Pigmented Gel Coat Operations	Any Method	**33** Percent (%)
4.Clear Gel Coat Operations	Any Method	**48** Percent (%)
5.Tooling Resin Operations	Atomized (Spray)	**30** Percent (%)
6.Tooling Resin Operations	Non-atomized (Non-Spray)	**39** Percent (%)
7.Tooling Gel Coat Operations	Any Method	**40** Percent (%)

Non-atomized refers to manual application, pressure-fed rollers, flow coater guns, and flow chopper guns.

Compliance Method: The permittee shall calculate the weighted-average, for the various resins and getcoats, HAP contents used each month to meet the corresponding aggregate limit. The corresponding weighted average contents are computed monthly on a moving twelve consecutive month average basis. The following log and equation shall be used to determine compliance for each of the above categories of material:

$$\text{Weighted Average HAP Content (\%)} = \frac{\sum (M_i HAP_i)}{\sum_{i=1}^{n} (M_i)}$$

Where:

M_i = mass of open molding resin or gel coat "i" used in the past 12 months in an operation, pounds.

HAP_i = Organic HAP content, by weight percent, of open molding resin or gel coat "i" used in the past 12 months in an operation. Use the methods in § 63.5758 to determine organic HAP content.

n = number of different open molding resins or gel coats used in the past 12 months in an operation.

Compliance is maintained as long as the weighted-average organic HAP content does not exceed the applicable organic HAP content limit specified in Table 2 to this subpart.

MM1E-11. In addition to conditions MM1E1, MM1E2. E3, E4, E5, and MM1E6 through MME10 the permittee shall comply with all the terms and conditions of the Title V permit #563414 for this source.

END OF SIGNIFICANT MODIFICATION # 1 TO THE TITLE V PERMIT #563414

Attachment #1

VOC LOGS #1, #2, & #3

LOG #1 - MONTHLY LOG FOR VOC EMISSIONS FROM RESIN AND GELCOAT APPLICATIONS – SOURCE 53-0098-01

MATERIAL NAME & METHOD OF APPLICATION	NEAT MATERIAL USAGE RATE * Lb or TONS /MONTH	% STYRENE (HAP 1) BY WEIGHT	STYRENE (HAP 1) EMISSION FACTOR **	STYRENE (HAP 1) EMITTED TONS PER MONTH	Methyl Methacrylate (MMA) (HAP 2) % BY WEIGHT	Methyl Methacrylate (HAP 2) EMISSION FACTOR**	Methyl Methacrylate (MMA) HAP 2 EMITTED TONS PER MONTH	TOTAL HAPS EMITTED TONS PER MONTH	TOTAL VOC EMITTED TONS PER MONTH
TOTAL									

* Neat material usage rate is defined as the amount of material used excluding fillers and glass.

** Based on Unified Emission Factors for Open Molding of Composites, dated October 13, 2009.

- **A set of example calculations must be presented for each month of reporting period.**
- **If Vapor Suppressed Resin (VSR) is used at this facility, the VSR reduction factor will be determined by testing each resin suppressed formulation according to the procedure detailed in the CFA Vapor Suppressed Effectiveness Test.**
- **This log shall be expanded if additional HAPs other than specified in the table are emitted.**
- **Method of Application shall be designated as one of categories found in Unified Emission Factors in Attachment #2.**

Note: VOC and HAP emissions from Resin and Gelcoat Applications (example: log #1) and All Other Applications (example log #2) shall be combined to provide Facility-Wide Total Emissions (example: log #3). Calculations of monthly and twelve (12) - consecutive month emissions must be completed within 30 days of the end of period for which the emissions are calculated.

LOG #2 - MONTHLY LOG OF VOC & HAP EMISSIONS OTHER THAN GELCOAT AND RESIN APPLICATIONS FOR SOURCES 53-0098-01

MATERIAL NAME	GAL Per MONTH	VOC CONTENT LBS VOC per GAL or wt%	VOC EMITTED TONS per MONTH	HAP1 CONTENT LBS per GAL or wt%	HAP1 EMITTED TONS per MONTH	HAP2 CONTENT LBS per GAL or wt%	HAP2 EMITTED TONS per MONTH	HAP3 CONTENT LBS per GAL or wt%	HAP3 EMITTED TONS per MONTH	HAP4 CONTENT LBS per GAL or wt%	HAP4 EMITTED TONS per MONTH	TOTAL HAPs EMITTED TONS per MONTH
TOTAL												

LOG #3 – FACILITY-WIDE 12-MONTH LOG FOR SOURCE 53-0098-01 – VOC & HAP emissions from logs #1 & #2 are added on this table

MONTH/ YEAR	VOC EMISSIONS TONS per MONTH	(*) VOC EMISSIONS TONS per 12 MONTHS	HAP-1 EMISSIONS TONS per MONTH	(*) HAP-1 EMISSIONS TONS per 12 MONTHS	HAP-2 EMISSIONS TONS per MONTH	(*) HAP-2 EMISSIONS TONS per 12 MONTHS	HAP-3 EMISSIONS TONS per MONTH	(*) HAP-3 EMISSIONS TONS per 12 MONTHS	HAP-4 EMISSIONS TONS per MONTH	(*) HAP-4 EMISSIONS TONS per 12 MONTHS	TOTAL HAP EMISSIONS TONS per MONTH	(*) TOTAL HAP EMISSIONS TONS per 12 MONTHS
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

Attachment #2

UNIFIED EMISSION FACTORS FOR OPEN MOLDING OF COMPOSITES

EF Table 1: Unified Emission Factors for Open Molding of Composites

Revised and Approved: 10/13/2009

Emission Rate in Pounds of Styrene Emitted per Ton of Resin or Gelcoat Processed

Styrene content in resin/gelcoat, % [1]	<33 [2]	33	34	36	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	>50 [2]
Manual	0.126 x %styrene x 2000	83	89	94	100	106	112	117	123	129	134	140	146	152	157	163	169	174	180	((0.286 x %styrene) - 0.0529) x 2000
Manual w/ Vapor Suppressed Resin VSR [3]	Manual emission factor [listed above] x (1 - (0.60 x specific VSR reduction factor for each resin/suppressant formulation))																			
Mechanical Atomized	0.189 x %styrene x 2000	111	120	140	154	168	183	197	211	225	240	254	268	283	297	311	325	340	354	((0.714 x %styrene) - 0.18) x 2000
Mechanical Atomized with VSR [3]	Mechanical Atomized emission factor [listed above] x (1 - (0.45 x specific VSR reduction factor for each resin/suppressant formulation))																			
Mechanical Atomized Controlled Spray [4]	0.139 x %styrene x 2000	88	97	108	119	130	141	152	163	174	185	196	207	218	229	240	251	262	273	0.77 x ((0.714 x %styrene) - 0.18) x 2000
Mechanical Controlled Spray with VSR	Mechanical Atomized Controlled Spray emission factor [listed above] x (1 - (0.45 x specific VSR reduction factor for each resin/suppressant formulation))																			
Mechanical Non-Atomized	0.107 x %styrene x 2000	71	74	77	80	83	86	89	93	96	99	102	105	108	111	115	118	121	124	((0.157 x %styrene) - 0.0163) x 2000
Mechanical Non-Atomized with VSR [3]	Mechanical Non-Atomized emission factor [listed above] x (1 - (0.45 x specific VSR reduction factor for each resin/suppressant formulation))																			
Mechanical Non-Atomized application of resins that contain Methyl Styrene monomer [11]	Mechanical Non-Atomized Styrene monomer emission Factor (listed above) x .55																			
Mechanical Non-Atomized Filled DCPD resins (11)	0.144 x % styrene x 2000	95	98	101	104	108	111	114	117	120	124	127	130	133	136	140	143	146	149	((0.1603 x % styrene)-0.9635) x 2000
Filament application	0.184 x %styrene x 2000	122	127	133	138	144	149	155	160	166	171	177	182	188	193	199	204	210	215	((0.2746 x %styrene) - 0.0288) x 2000
Filament application with VSR [5]	0.139 x %styrene x 2000	79	82	86	90	93	97	100	104	108	111	115	118	122	125	129	133	136	140	0.65 x ((0.2746 x %styrene) - 0.0288) x 2000
Gelcoat Application	0.445 x %styrene x 2000	294	316	336	356	377	398	418	439	460	481	501	522	543	564	584	605	626	646	((1.03646 x %styrene) - 0.195) x 2000
Gelcoat Controlled Spray Application [4]	0.325 x %styrene x 2000	215	230	245	260	275	290	305	321	336	351	366	381	396	411	427	442	457	472	0.73 x ((1.03646 x %styrene) - 0.195) x 2000
Gelcoat Non-Atomized Application [6]	SEE Note 9 below	196	205	214	223	232	241	250	259	268	278	287	296	305	314	323	332	341	350	((0.4366 x %styrene) - 0.0365) x 2000
Lesser Atomized Gelcoat Application [10]	for < 30 : 0.323 x % styrene x 2000	229	241	252	264	276	287	299	311	322	334	346	357	369	381	392	404	416	428	((0.3842 x % styrene)-0.97825) x 2000
Covered-Cure after Roll-Out	Non-VSR process emission factor [listed above] x (0.80 for Manual <or> 0.55 for Mechanical)																			
Covered-Cure without Roll-Out	Non-VSR process emission factor [listed above] x (0.50 for Manual <or> 0.35 for Mechanical)																			

Emission Rate in Pounds of Methyl Methacrylate Emitted per Ton of Gelcoat Processed

MMA content in gelcoat, % [6]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	≥20
Gel coat application [7]	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	0.75 x %MMA x 2000

Notes

1 Including styrene monomer content as supplied, plus any extra styrene monomer added by the molder, but before addition of other additives such as powders, fillers, glass,...etc.

2 Formulas for materials with styrene content < 33% are based on the emission rate at 33% (constant emission factor expressed as percent of available styrene), and for styrene content > 50% on the emission rate based on the extrapolated factor equations; these are not based on test data but are believed to be conservative estimates. The value for "% styrene" in the formulas should be input as a fraction. For example, use the input value 0.30 for a resin with 30% styrene content by wt.

3 The VSR reduction factor is determined by testing each resin/suppressant formulation according to the procedures detailed in the *CPA Vapor Suppressant Effectiveness Test*.

4 SEE the *CPA Controlled Spray Handbook* for a detailed description of the controlled spray procedures.

5 The effect of vapor suppressants on emissions from filament winding operations is based on the *Dow Filament Winding Emissions Study*.

6 Including MMA monomer content as supplied, plus any extra MMA monomer added by the molder, but before addition of other additives such as powders, fillers, glass,...etc.

7 Based on gelcoat data from *NMMA Emission Study*.

8 SEE the July 17, 2001 EECS report *Emission Factors for Non-Atomized Application of Gel Coats used in the Open Molding of Composites* for a detailed description of the non-atomized gelcoat testing.

9 Use the equation ((0.4366 x %styrene) - 0.0365) x 2000 for gelcoats with styrene contents between 19% and 32% by wt.; use the equation 0.193 x %styrene x 2000 for gelcoats with less than 19% styrene content by wt.

10 Refer to Section 3.0, Instructions and Examples for the Emission Factor table, 3.2 Calculation of the methyl styrene factor

11 Use this factor for the non-atomized application of DCPD or DCPD-blend resin, when filled to 30% or more by weight

12

Table from 30% TO 32% styrene content :	30	31	32
	194	206	217

Attachment #3

Opacity Matrix Decision Tree for Visible Emission Evaluation by EPA Method 9, dated June 18, 1996 and Amended September 11, 2013

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Notes:

PM = Periodic Monitoring required by 1200-3-9-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards in paragraph 1200-3-5-.01. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants
Particulates, VOC, CO, SO_2, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declares non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards:
EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996
Amended September 11, 2013

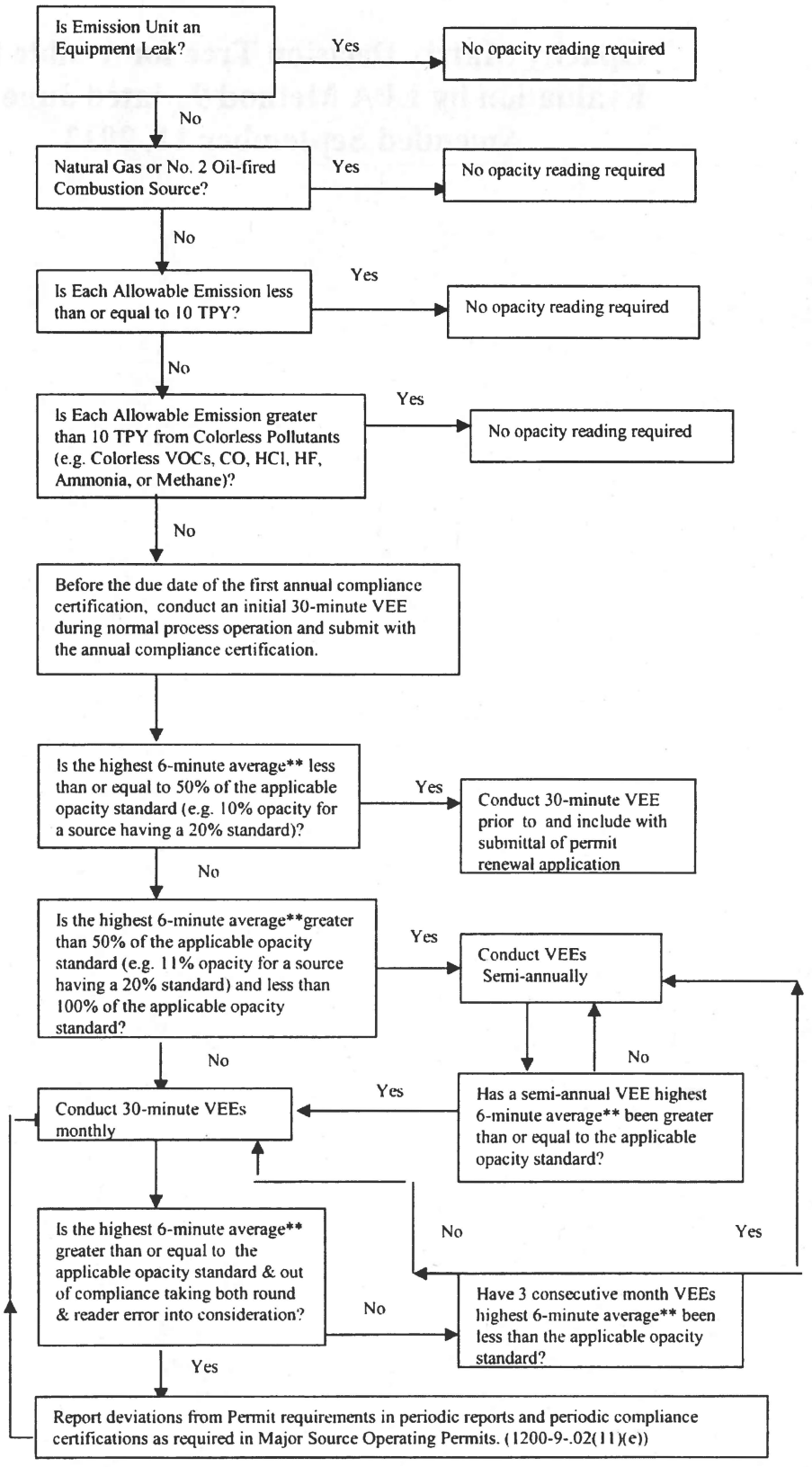

EXHIBIT 2

ADDENDUM #1 TO
TITLE V PERMIT STATEMENT OF THE BASIS

Facility Name: Malibu Boats, LLC
City: Loudon
County: Loudon

Date Application Received: February 19, 2010
Date Application Deemed Complete: February 19, 2010
Date Significant Modification Application Received: March 15, 2013
Date Significant Modification Application Deemed Complete: March 15, 2013

Emission Source Reference No.: 53-0098
Permit No.: 563414

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-3-9-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to **Malibu Boats, LLC** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms
PSD - Prevention of Significant Deterioration
NESHAP - National Emission Standards for Hazardous Air Pollutants
NSPS - New Source Performance Standards
MACT - Maximum Achievable Control Technology
NSR - New Source Review

I. Identification Information

A. Source Description

List and describe emission source(s):

53-0098 Fiberglass Boat Manufacturing

53-0098-01: Gelcoat, Lamination, Adhesive Spraying and Grinding Operations with Exhaust Filter Control

B. Facility Classification

1. Attainment or Non-Attainment Area Location

Area is designated as non attainment area for NO_X and $PM_{2.5}$ pollutants.

2. Company is located in a Class II area.

C. Regulatory Status

1. PSD/NSR

This facility is a major source under PSD.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status? Major or Non-Major Status (Major/Minor)
PM	**Yes**	**Non- Major**
PM_{10}	**Yes**	**Non- Major**
SO_2	**No**	**Not Applicable**
VOC	**Yes**	**Major**
NO_X	**No**	**Not Applicable**
CO	**No**	**Not Applicable**
Individual HAP	**Yes**	**Major**
Total HAPs	**Yes**	**Major**

D. Program Applicability

Are the following programs applicable to the facility?
PSD Yes
NESHAP Yes
NSPS no

II. Compliance Information

A. Compliance Status
Is the facility currently in compliance with all applicable requirements? Yes

Are there any applicable requirements that will become effective during the permit term? Yes
This facility is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing MACT Rule 40 CFR §63.5773 of Subpart VVVV. All applicable requirements are included in the permit.

B. **Other Requirements:**

a. **Emissions Trading** The facility is not involved in an emission trading program.

b. **Acid Rain Requirements** This facility is not subject to any requirements in Title IV of the Clean Air Act.

c. **MACT** This facility is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing. 40 CFR §63.5773 of Subpart VVVV.

III. Public Participation Procedure

THE FOLLOWING AGENCIES WERE NOTIFIED OF THE TITLE V DRAFT PERMIT FOR THIS COMPANY:

1. EPA, Region IV
2. The NC Dept. of Environment and Natural Resources
3. Georgia Department of Natural resources
4. Eastern Band of Cherokee, Environmental & Natural Resources Office
5. Knox County Department of Air Quality Management
6. Chattanooga / Hamilton County, Air Pollution Control Bureau

ADDENDUM

To the 53-0098 Statement of Basis

Permitting Activities Since Permit Issuance (Previous Permit 555348)

May 10, 2005, Minor Modification #1:

The applicant submitted application for addition of a lamination booth on May 10, 2005.

The Division issued minor modification #1 on July 7, 2005.

There was an increase of 2.2 TPY of TSP from this modification There was no increase in VOC emissions.

June 26, 2006, Administrative Amendment #1:

The applicant submitted a letter for the ownership change from Malibu Boats West, Inc., to Malibu Boats, LLC.

The administrative amendment #1 was issued on September 13, 2006.

April 10, 2010, Significant Modification #1 (identified on permit as major modification):

The applicant submitted application for Significant Modification #1 to their Title V Permit on April 10, 2010.

The requested of this significant modification was to add three new gelcoat booths, and to increase material usage based on projected increase in production. VOC emissions increased from 160.0 TPY to 196.0 TPY. There was no increase in TSP emissions.

The Division issued construction permit #963588P on August 20, 2010.

The Division issued Title V Permit renewal #563414 and the construction permit# 963588P for the significant modification# 1 under parallel process on August 20, 2010.

Permitting Activities Since Permit Issuance of 563414.

May 11, 2011 Minor Modification #1: Malibu Boats, LLC submitted application dated April 29, 2011 for the following modification:

The requested modification is to relocate repair service to a different building within the facility. TSP emission would increase by 0.5 TPY.

October 17, 2011, Administrative Amendment #1: Malibu Boats, LLC submitted a letter for the following amendment:

The requested amendment was to change responsible official.

The administrative amendment #1 was issued on March 12, 2012.

December 20, 2011, Minor Modification #2: Malibu Boats, LLC submitted application dated December 19, 2011 for the following modification:

The requested modification is to add two gelcoat booths. There would be no increase in VOC emissions. There would be an increase from TSP emissions by 4.4 TPY (from 13.1 TPY, to 17.5 TPY).

March 15, 2013, Significant Modification #1 to Title V Permit 563414: Malibu Boats, LLC submitted application for the significant modification #1.

The purpose of this significant modification is to add two new gelcoat booths, and to increase material usage based on projected increase in production. Exhaust filter would be used for pollution control equipment. There would be physical construction to achieve this modification. There would be an increase in emissions from the facility. VOC emissions would be increased from 196.0, TPY to 426.0 TPY. TSP emissions would be increased from 17.5 TPY to 22.0 TPY.

Fiberglass boat manufacturing is <u>not</u> one of the industries that have a100 tons per year threshold that would trigger major source status under Prevention of Significant Deterioration (PSD) rules.

Regulatory Status of the facility is as follows:

Any facility emits less than 250 TPY of any regulated pollutant (VOC and TSP for this facility), is considered a Minor Source facility.

This facility is a Minor Source under NSR/PSD before the proposed modification:

Status of the Facility before the proposed modification			
Pollutant	Is the pollutant emitted?	Emission Emitted TPY	If emitted, what is the facility's status? Major or Non-Major Status
PM	**Yes**	**17.5**	**Non- Major**
PM_{10}	**Yes**		**Non- Major**
SO_2	**No**		**Not Applicable**
VOC	**Yes**	**196.0**	**Non- Major**
NO_X	**No**		**Not Applicable**
CO	**No**		**Not Applicable**

Any facility emits more than 250 TPY of any regulated pollutant is considered a Major Source facility. Any increase of the regulated pollutants above the significant level (VOC for this facility) would trigger a PSD review.

Status of the Facility After the proposed modification			
Pollutant	Is the pollutant emitted?	Emission Emit TPY	If emitted, what is the facility's status? Major or Non-Major Status
PM	**Yes**	**22.0**	**Non- Major**
PM_{10}	**Yes**		**Non- Major**
SO_2	**No**		**Not Applicable**
VOC	**Yes**	**426.0**	**Major**
NO_X	**No**		**Not Applicable**
CO	**No**		**Not Applicable**

Conclusion of this Modification:

Given the regulations, a minor source may undergo a modification that does not exceed 100/250 tons per year of any regulated pollutants. If the modification results in the source then being classified as a major source, then future projects are evaluated against significant thresholds. As applied to this project, the modification is only for an increase of 230 TPY of VOC from this currently a minor source facility. After this modification, the facility will become a major source for VOC, and any future projects will have to go through a major source modification for PSD determination.

EXHIBIT 3

RESPONSE TO COMMENTS

General Information

Facility Name:	**Malibu Boats, LLC**
Emission Source Reference No.	**53-0098**
Permit No.:	**563414**
Date Application Received:	**March 15, 2013**
Date Application Deemed Complete:	**March 15, 2013**
Date of Public Notice:	**June 3, 2013**
Date of Public Hearing:	**September 19, 2013**

For Public Hearing (If Applicable)

Hearing Officer:	**Malcolm Butler**
Division of Air Pollution Control Representatives:	1. Linda Bilbrey (Recording Secretary), 2. Moe Baghernejad (Permit Specialist), 3. Martie Carpenter (Knoxville Field office Manager), 4. Marc Corrigan (Environmental Specialist)
Other Divisions:	**N/A**
Public:	**Approximately 20**

Comment Summary

At the public hearing, there were nine verbal comments recorded. Of those nine, four submitted written comments in addition to those given verbally. The comment period ended with the conclusion of the hearing conducted on September 19, 2013. However, prior to the meeting there were two written comments received. These comments are part of the summary and permit record, as well.

Although specific comments were not transcribed verbatim, the comments are summarized in the table below. The recorded tape is part of the permit record for reference, if needed. The response to each comment is provided in the table below, as well. Related questions are answered where appropriate. The overall concern expressed by the comments is to protect public health and the area adjacent to the Malibu Boats facility, which contains parks and the Public School.

The Division is not obligated to respond to comments, only to consider comments in evaluating a permit issuance. However, the Division as a matter of policy makes available a comment/response summary. The summary, in turn, becomes a part of the permit record and is included with the proposed permit that goes to EPA for the Administrator's review. The summary is sent to those that expressed interest at the hearing, via email addresses provided at the hearing.

As a result of the comments received, there are no changes to the permit required.

Name	Comment	Response
John Rogers Sharon Addison	1. How does TDEC rationalize the proposed permit metrics?	We base our proposed permit conditions primarily on our applicable regulatory guidance in addition to any applicable required ambient modeling or monitoring analyses that need to demonstrate compliance with our TN and national ambient air standards for those regulated pollutants. In the case here for VOC, which is a precursor pollutant to ozone, there is no requirement for a modeling demonstration for this pollutant and Loudon county is currently in attainment of all criteria pollutants including ozone. Therefore, the only applicable requirement for VOC emissions is what is stipulated in our TNAPCR 1200-03-07-.07(2) for gaseous emissions, which is the basis for the permit condition for this pollutant.
	2. Allocation of VOC Emission Allowable Limits. Why VOC emission from two new spray booths are 230 TPY, and VOC emission from 8 existing spray booths are 196.	The assessment on the increase in the number of booths is correct. However, the additional VOC allowable emissions are not coming entirely from the two new booths, but from existing sources of the operation. This construction permit application is for a modification of the entire source.
	3. What specific MACT controls have been required of Malibu?	Any controls available to boat manufacturers in the MACT standard. There are no requirements to add on a control device for VOC emissions. However, each spray booth has an exhaust filter as control to capture Particulate Matter (TSP) emissions.
	4. Based on the material at the Loudon County Library. Compliance will be determined in one of two ways, either: a. MACT, or b. Compliant Materials Option Question: Which one is it -- a. or b.?	Compliance with emissions limits for hazardous air pollutants (HAP) in the MACT (Maximum Achievable Control Technology) rule, which is the National Emission Standard for Hazardous Air Pollutants (NESHAP) for boat manufacturing, found at 40 CFR 63 Subpart VVVV, can be demonstrated either by • The MACT point value averaging (emissions averaging) option described in 40 CFR §63.5701 (a) [known as Point Value Averaging] Or by • The compliant materials option described in 40 CFR §63.5701(b) Both of these options insure that the HAP emissions from gelcoats and resins are, on average, no greater than the amounts allowed by the compliant materials option alone. The point value averaging option is the one used by Malibu exclusively, to date. The rule and permit allow the facility to switch to the compliant materials option; however switching options is allowed no more frequently than monthly, and the facility must specify which option is used in a given month.
	5. EPA lists "Glass Fiber Processing Plants as a PSD source category with a 100 TPY major source threshold. What is the rational for exclusion of Fiberglass Boat Manufacturing in EPA Glass Fiber Processing Plants?	Fiberglass boat manufacturing is not one of the industries that have a 100 ton per year threshold that would trigger major source status under Prevention of Significant Deterioration (PSD) rules. Glass fiber processing plants produce the glass fiber materials through the high-temperature conversion of various raw materials (predominantly borosilicates) into a homogeneous melt, followed by the fabrication of this melt into glass fibers. Section 11.13.1 in AP-42, Volume 1, 5th Edition, Compilation of Air Pollutant Emission Factors, provides a detailed

		description of the glass fiber manufacturing process under the section titled "Glass Fiber Manufacturing". In contrast, fiberglass boat manufacturing utilizes the glass fiber product produced by the glass fiber industry. The fibers are used in boat manufacturing to reinforce the resin material of the boat parts, primarily hulls and decks. Boat manufacturing is an end-user of glass fibers. A detailed description of the processes used in boat manufacturing can be found in Section 4.4.1 of AP-42 under the section titled "Polyester Resin Plastic Products Fabrication".
Carolyn Lavers	1. Is EPA's SIP more stringent or TDEC's SIP?	TDEC follows EPA's SIP for fiberglass boat manufacturing process.
Pat Hunter Rob Orkney	1. Public hearing notice was not up dated on TDEC's Web site.	Public hearing notice was posted on TDEC web site August 13, 2013.
	2. TDEC should consider the public heath before issuing a permit. She thinks Styrene emissions cause eye irritations that she has.	Tennessee's air quality standards and its rules and regulations are developed while considering the general public's health and welfare. Studies done by the Environmental Protection Agency, and Material Data Sheets (MSDS) or vendor formulation data used by the company do not support this concern.
	3. This facility was out of compliance and received a Notice of Violation in 2012.	This facility has been in compliance and never received a Notice of Violation in year 2012 and beyond. The Division has several levels of protection to detect compliance issues with any facility as follows: a) There are annual inspections for facilities that obtain a title V operating permit (one is required for this applicant). During the inspection, records and related data are carefully reviewed for permit compliance. b) The Division has a compliance validation section which overviews testing and testing procedures to ensure an applicant meet all the testing requirements and procedures. c) The applicant is required to submit semi-annual reports for various sources located at the facility. These reports of monitoring data and related records provide assurance that the applicant complies with the emission standards of the permit and operates control devices accordingly. d) The applicant is required to submit annual certifications that the facility is in compliance with all permit conditions. The certifications are also sent to EPA for their overview.
Mary Nitkowski Ronald Moore	1. TDEC should use an aggregate of all manufacturing in the area for output of pollutants.	A. National Ambient Air Quality Standards (NAAQS) and increment consumption evaluations under the federal and state regulations would be required if the facility is a major source and an increase in emissions of any regulated pollutant triggered a Prevention of Significant Deterioration (PSD) review. However, the Malibu Boats manufacturing application is for a Title V significant modification that is not triggering a PSD review. Furthermore, there are currently neither EPA- approved NAAQS, increment levels, nor a modeling procedure or a methodology in addressing source-specific VOC emissions.

		B. Nonattainment Area (NAA) requirements under the federal Clean Air Act (CAA). Here, we are required to track and reduce an air pollutant's emissions in or adversely impacting a designated NAA or county in order to bring back the area into attainment. Primary VOC and NOx emissions are considered secondary precursors to ozone formation, the criteria pollutant. Loudon County is currently in attainment of all criteria pollutants including ozone. The Knoxville marginal 2008 ozone NAA comprises of only Knox, Blount and Anderson (partial) counties. This NAA is considered NOx-limited. That is we get more ozone reductions in controlling NOx emissions than VOCs. Additionally, as shown in the handouts given in the public hearing meeting that reducing VOC emissions could increase ozone formation.
	2. What is different in the manufacturing, storage, or cleanup process within the 2 new booths that such a vast increase would be required?	The increase in allowable VOC emissions will apply to the whole permitted emission source, not only the two new booths.
	3. Would Malibu Boats close the doors on expansions of other boat manufacturers in the area?	No, The Division applies due diligence when applying rules and regulations during the development of permits for all applicants in the area. There is a peer review process to ensure that the rules and regulations have been applied fairly and evenly for all boat manufacturing in the area.
	4. Is Malibu asking for a sham permit to box out their competition?	This is a legitimate permit under state and federal rules.
	5. If Malibu were granted the increase of 230 TPY, as requested, would this increase put Loudon County into the EPA non-attainment area?	This action is unlikely to impact ozone generation, based on a major study, which revealed that ozone is caused by NOx precursors with a minimal affect from VOC. It is very unlikely that this increase put Loudon County in non-attainment area as it is explained above.
	6. This comment regards EPA docket number EPA–HQ–OECA–2013–0339	This is a published announcement by EPA, one of several industry NESHAP-related announcements, that EPA will submit an "information collection request". This docket, in particular, relates to the boat building NESHAP, and does not indicate changes to the industry. There are several industries that will be subject to information collection requests.
Ronald Moore	1. PSD- MACT compliance does not affect PSD Application	This facility is not a major source under NSPS. Therefore this increase in their VOC emission does not Trigger a PSD review.
	2. PSD Issue 1 – Potential to emit, Sham permits, and debottlenecking at 250 TPY.	The allowable VOC limit and the increase sought comply with TDEC policy and EPA's SIP. This permit does not circumvent PSD permitting rules.
	3. PSD Issue 2 – Fiber glass "processing" plant at 100 TPY.	Only plants producing glass fiber are considered fiber glass processing plants. Malibu makes fiberglass reinforced products, but does not produce glass fibers.

Gene Lavers	1. Question about the effect of fiber in health if it airborne from this facility.	Malibu makes fiberglass reinforced products. This process does not emit any fiber. Most of the emissions from fiberglass boat manufacturing are Volatile Organic Compounds (VOC). However, TSP emissions are emitted from gelcoating process. There are several exhaust filters to capture particulate emissions.
Rob Orkney	1. Is there any other technology that Malibu Boats LLC, may use in order to minimize the effect of emissions?	The Division is required by its rules and regulations to issue permits for applicants that meet all the requirements in an application. The applicant meets the regulatory requirements to obtain a significant modification to their major source title V operating permit. The source can choose from compliance options available in the MACT to minimize VOC and HAP emissions.

RESPONSE TO COMMENTS

General Information

Facility Name:	**Malibu Boats, LLC**
Emission Source Reference No.	**53-0098**
Permit No.:	**563414**
Date Application Received:	**March 15, 2013**
Date Application Deemed Complete:	**March 15, 2013**
Date of Public Notice:	**June 3, 2013**
Date of Public Hearing:	**September 19, 2013**

For Public Hearing (If Applicable)

Hearing Officer:	**Malcolm Butler**
Division of Air Pollution Control Representatives:	1. Linda Bilbrey (Recording Secretary), 2. Moe Baghernejad (Permit Specialist), 3. Martie Carpenter (Knoxville Field office Manager), 4. Marc Corrigan (Environmental Specialist)
Other Divisions:	**N/A**
Public:	**Approximately 20**

Comment Summary

At the public hearing, there were nine verbal comments recorded. Of those nine, four submitted written comments in addition to those given verbally. The comment period ended with the conclusion of the hearing conducted on September 19, 2013. However, prior to the meeting there were two written comments received. These comments are part of the summary and permit record, as well.

Although specific comments were not transcribed verbatim, the comments are summarized in the table below. The recorded tape is part of the permit record for reference, if needed. The response to each comment is provided in the table below, as well. Related questions are answered where appropriate. The overall concern expressed by the comments is to protect public health and the area adjacent to the Malibu Boats facility, which contains parks and the Public School.

The Division is not obligated to respond to comments, only to consider comments in evaluating a permit issuance. However, the Division as a matter of policy makes available a comment/response summary. The summary, in turn, becomes a part of the permit record and is included with the proposed permit that goes to EPA for the Administrator's review. The summary is sent to those that expressed interest at the hearing, via email addresses provided at the hearing.

As a result of the comments received, there are no changes to the permit required.

Name	Comment	Response
John Rogers Sharon Addison	1. How does TDEC rationalize the proposed permit metrics?	We base our proposed permit conditions primarily on our applicable regulatory guidance in addition to any applicable required ambient modeling or monitoring analyses that need to demonstrate compliance with our TN and national ambient air standards for those regulated pollutants. In the case here for VOC, which is a precursor pollutant to ozone, there is no requirement for a modeling demonstration for this pollutant and Loudon county is currently in attainment of all criteria pollutants including ozone. Therefore, the only applicable requirement for VOC emissions is what is stipulated in our TNAPCR 1200-03-07-.07(2) for gaseous emissions, which is the basis for the permit condition for this pollutant.
	2. Allocation of VOC Emission Allowable Limits. Why VOC emission from two new spray booths are 230 TPY, and VOC emission from 8 existing spray booths are 196.	The assessment on the increase in the number of booths is correct. However, the additional VOC allowable emissions are not coming entirely from the two new booths, but from existing sources of the operation. This construction permit application is for a modification of the entire source.
	3. What specific MACT controls have been required of Malibu?	Any controls available to boat manufacturers in the MACT standard. There are no requirements to add on a control device for VOC emissions. However, each spray booth has an exhaust filter as control to capture Particulate Matter (TSP) emissions.
	4. Based on the material at the Loudon County Library. Compliance will be determined in one of two ways. either: a. MACT, or b. Compliant Materials Option Question: Which one is it -- a. or b.?	Compliance with emissions limits for hazardous air pollutants (HAP) in the MACT (Maximum Achievable Control Technology) rule, which is the National Emission Standard for Hazardous Air Pollutants (NESHAP) for boat manufacturing, found at 40 CFR 63 Subpart VVVV, can be demonstrated either by • The MACT point value averaging (emissions averaging) option described in 40 CFR §63.5701 (a) [known as Point Value Averaging] Or by • The compliant materials option described in 40 CFR §63.5701(b) Both of these options insure that the HAP emissions from gelcoats and resins are, on average, no greater than the amounts allowed by the compliant materials option alone. The point value averaging option is the one used by Malibu exclusively, to date. The rule and permit allow the facility to switch to the compliant materials option; however switching options is allowed no more frequently than monthly, and the facility must specify which option is used in a given month.
	5. EPA lists "Glass Fiber Processing Plants as a PSD source category with a 100 TPY major source threshold. What is the rational for exclusion of Fiberglass Boat Manufacturing in EPA Glass Fiber Processing Plants?	Fiberglass boat manufacturing is not one of the industries that have a 100 ton per year threshold that would trigger major source status under Prevention of Significant Deterioration (PSD) rules. Glass fiber processing plants produce the glass fiber materials through the high-temperature conversion of various raw materials (predominantly borosilicates) into a homogeneous melt, followed by the fabrication of this melt into glass fibers. Section 11.13.1 in AP-42, Volume 1, 5th Edition, Compilation of Air Pollutant Emission Factors, provides a detailed

		description of the glass fiber manufacturing process under the section titled "Glass Fiber Manufacturing". In contrast, fiberglass boat manufacturing utilizes the glass fiber product produced by the glass fiber industry. The fibers are used in boat manufacturing to reinforce the resin material of the boat parts, primarily hulls and decks. Boat manufacturing is an end-user of glass fibers. A detailed description of the processes used in boat manufacturing can be found in Section 4.4.1 of AP-42 under the section titled "Polyester Resin Plastic Products Fabrication".
Carolyn Lavers	1. Is EPA's SIP more stringent or TDEC's SIP?	TDEC follows EPA's SIP for fiberglass boat manufacturing process.
Pat Hunter Rob Orkney	1. Public hearing notice was not up dated on TDEC's Web site.	Public hearing notice was posted on TDEC web site August 13, 2013.
	2. TDEC should consider the public heath before issuing a permit. She thinks Styrene emissions cause eye irritations that she has.	Tennessee's air quality standards and its rules and regulations are developed while considering the general public's health and welfare. Studies done by the Environmental Protection Agency, and Material Data Sheets (MSDS) or vendor formulation data used by the company do not support this concern.
	3. This facility was out of compliance and received a Notice of Violation in 2012.	This facility has been in compliance and never received a Notice of Violation in year 2012 and beyond. The Division has several levels of protection to detect compliance issues with any facility as follows: a) There are annual inspections for facilities that obtain a title V operating permit (one is required for this applicant). During the inspection, records and related data are carefully reviewed for permit compliance. b) The Division has a compliance validation section which overviews testing and testing procedures to ensure an applicant meet all the testing requirements and procedures. c) The applicant is required to submit semi-annual reports for various sources located at the facility. These reports of monitoring data and related records provide assurance that the applicant complies with the emission standards of the permit and operates control devices accordingly. d) The applicant is required to submit annual certifications that the facility is in compliance with all permit conditions. The certifications are also sent to EPA for their overview.
Mary Nitkowski Ronald Moore	1. TDEC should use an aggregate of all manufacturing in the area for output of pollutants.	A. National Ambient Air Quality Standards (NAAQS) and increment consumption evaluations under the federal and state regulations would be required if the facility is a major source and an increase in emissions of any regulated pollutant triggered a Prevention of Significant Deterioration (PSD) review. However, the Malibu Boats manufacturing application is for a Title V significant modification that is not triggering a PSD review. Furthermore, there are currently neither EPA- approved NAAQS, increment levels, nor a modeling procedure or a methodology in addressing source-specific VOC emissions.

		B. Nonattainment Area (NAA) requirements under the federal Clean Air Act (CAA). Here, we are required to track and reduce an air pollutant's emissions in or adversely impacting a designated NAA or county in order to bring back the area into attainment. Primary VOC and NOx emissions are considered secondary precursors to ozone formation, the criteria pollutant. Loudon County is currently in attainment of all criteria pollutants including ozone. The Knoxville marginal 2008 ozone NAA comprises of only Knox, Blount and Anderson (partial) counties. This NAA is considered NOx-limited. That is we get more ozone reductions in controlling NOx emissions than VOCs. Additionally, as shown in the handouts given in the public hearing meeting that reducing VOC emissions could increase ozone formation.
	2. What is different in the manufacturing, storage, or cleanup process within the 2 new booths that such a vast increase would be required?	The increase in allowable VOC emissions will apply to the whole permitted emission source, not only the two new booths.
	3. Would Malibu Boats close the doors on expansions of other boat manufacturers in the area?	No, The Division applies due diligence when applying rules and regulations during the development of permits for all applicants in the area. There is a peer review process to ensure that the rules and regulations have been applied fairly and evenly for all boat manufacturing in the area.
	4. Is Malibu asking for a sham permit to box out their competition?	This is a legitimate permit under state and federal rules.
	5. If Malibu were granted the increase of 230 TPY, as requested, would this increase put Loudon County into the EPA non-attainment area?	This action is unlikely to impact ozone generation, based on a major study, which revealed that ozone is caused by NOx precursors with a minimal affect from VOC. It is very unlikely that this increase put Loudon County in non-attainment area as it is explained above.
	6. This comment regards EPA docket number EPA–HQ–OECA–2013–0339	This is a published announcement by EPA, one of several industry NESHAP-related announcements, that EPA will submit an "information collection request". This docket, in particular, relates to the boat building NESHAP, and does not indicate changes to the industry. There are several industries that will be subject to information collection requests.
Ronald Moore	1. PSD- MACT compliance does not affect PSD Application	This facility is not a major source under NSPS. Therefore this increase in their VOC emission does not Trigger a PSD review.
	2. PSD Issue 1 – Potential to emit, Sham permits, and debottlenecking at 250 TPY.	The allowable VOC limit and the increase sought comply with TDEC policy and EPA's SIP. This permit does not circumvent PSD permitting rules.
	3. PSD Issue 2 – Fiber glass "processing" plant at 100 TPY.	Only plants producing glass fiber are considered fiber glass processing plants. Malibu makes fiberglass reinforced products, but does not produce glass fibers.

Gene Lavers	1. Question about the effect of fiber in health if it airborne from this facility.	Malibu makes fiberglass reinforced products. This process does not emit any fiber. Most of the emissions from fiberglass boat manufacturing are Volatile Organic Compounds (VOC). However, TSP emissions are emitted from gelcoating process. There are several exhaust filters to capture particulate emissions.
Rob Orkney	1. Is there any other technology that Malibu Boats LLC, may use in order to minimize the effect of emissions?	The Division is required by its rules and regulations to issue permits for applicants that meet all the requirements in an application. The applicant meets the regulatory requirements to obtain a significant modification to their major source title V operating permit. The source can choose from compliance options available in the MACT to minimize VOC and HAP emissions.

EXHIBIT 4

March 15, 2013

Mr. Moe Baghernejad
Division of Air Pollution Control
9th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243-1531

RE: Significant Modification of Source 53-0098-01
Malibu Boats, LLC
Increase VOC and PM Allowable Limits

Dear Mr. Baghernejad:

Malibu Boats, LLC wishes to increase the permitted allowable volatile organic compounds (VOC) and particulate matter (PM) limits. Malibu Boats, LLC is aggressively increasing market share in both our Malibu brand and Axis brand. Based on current market demand, projected market recovery, and projected market share, Malibu foresees the need to increase permitted VOC and PM limits, in order to accommodate anticipated boat production levels. Malibu can provide confidential analyses of market share projections, based on current and recent past data, as well as data supporting the increased emissions on the basis of boat numbers and associated emissions per boat, if requested.

Modification Description

Malibu is applying for an additional 230 tons per year (tpy) of VOC emissions. Construction of two new gel booths is anticipated, with an associated increase in PM emissions of 4.38 tpy.

No new processes will be added for this project.

Regulatory Analysis

Malibu Boats is located in Loudon County, a non-attainment area for PM 2.5. It is a Title V source with existing permit limits of 196 tpy VOC and 17.5 tpy PM. These limits do NOT constitute PSD avoidance limits.

Since the requested increase in PM emissions is below the Significant Emissions Increase Rate, and the facility is located in a PM 2.5 non-attainment area, it may be subject to Best Available Control Technology (BACT) for the boat manufacturing process. No PM 2.5 will be generated by the process, as demonstrated in the included

March 15, 2013

continuous Monitoring??

Compliance Assurance Monitoring (CAM) analysis, which shows that no units at the facility will be subject to CAM. The minimum particle size for gelcoat application is calculated to be 21 μ. However, Malibu will use exhaust filter controls for gel booths whenever these sources are in operation. If BACT is identified as a construction permit requirement, Malibu proposes exhaust filters as BACT for PM.

Malibu is subject to the MACT requirements for boat manufacturing. MACT standards are based on emissions levels already achieved by the best-performing similar facilities. Although MACT standards are directed at hazardous air pollutant (HAP) emissions, the vast majority of VOC emissions from boat manufacturing facilities are HAP. Thus, the HAP reduction requirements of the boat MACT are effective VOC reduction requirements, and are more stringent than existing applicable VOC regulations.
Thank you for your consideration of this application.

Responsible Official Certification

I, the undersigned, am a responsible official of the Title V source for which this document is being submitted. This document consists of 15 pages, including this two-page letter with responsible official certification. I hereby certify that, to the best of my knowledge, and based on information and belief formed after reasonable inquiry, the statements and information contained in this letter and application are truthful, accurate, and complete.

Sincerely,

Ritchie Anderson

Ritchie L. Anderson
Vice-President of Operations
Malibu Boats, LLC

cc: Donna Tallent – Malibu Boats, LLC
Parham Cain – EnviroLOGIC Solutions, LLC

EXHIBIT 5

WEEKEND, SEPTEMBER 22-23, 2013

Public grills state on air permit

BY JEREMY STYRON
JEREMY.STYRON@NEWS-HERALD.NET

Members of the public met with state officials Thursday night at Loudon County Courthouse Annex to voice concerns regarding an air permit modification Malibu Boats submitted to the Tennessee Department of Environment and Conservation.

Malibu, a fiberglass boat manufacturing operation with a plant in Loudon, is seeking to add two gelcoat booths to the facility, which would increase material usage and air emissions.

Moe Baghernejad, an environmental specialist with TDEC's air pollution control division, said Malibu Boats produces 196 tons per year of volatile organic compounds and emits 17.5 tons per year of particulate matter. The company was requesting to increase its VOC output by 230 tons per year for the two new bays.

Baghernejad said the company is in compliance with environmental regulations and had no previous violations.

Ritchie Anderson, chief operating officer with Malibu, said the company employees 340 people, many of whom live in Loudon County, noting that the business is involved in numerous charitable causes and events in the community.

"I want everybody to understand we are very concerned with Loudon County and the community, and we see this as an opportunity for us to bring more jobs to Loudon County," Anderson said.

Four years ago, Malibu launched a new brand, Axis Wake, which necessitated branching into a "another category" of production, Anderson said.

"Some of the areas that we're going to step into, the configuration of those products are much different than what we do now," Anderson said. "There's a lot more fiberglass, small parts to be built. Some of the product is much larger, so it entails some changes to our facility to be able to do that."

Anderson said the company was committed to being in compliance with environmental regulations, but did not provide further details about the nature of the expansion. He said the company would respond to questions raised at the public hearing and submit them to the state.

Mary Nitkowski of Loudon told state officials that she hopes the state considers permit approvals such as Malibu's based on the "aggregate" pollution levels of a community versus output at individual facilities.

"It's important to the next person that comes in for an expansion permit or for the next manufacturing company that comes to you and asks for a permit," Nitkowski said. "If you don't look at the aggregate, we're going to be in trouble here."

Nitkowski questioned why Malibu Boats needed such a significant increase in VOC levels for adding two new bays.

"They've more than doubled," she said. "I'd like to know what is the difference in the manufacturing, the storage and also very important with fiberglass gel, the cleanup process, with those two booths," Nitkowski said. "What's different that they need to double their TYP (sic)? (I) can't seem to find that answer either."

Ronald Moore, president of Breathe Clean Air Action Team, said TDEC should conduct a toxic emissions computer model for Malibu Boats and the report should be made public before a modified permit is issued. He said the 230 VOC tons per year requested in the modified permit was in addition to the 196 VOC currently allowed.

"Their application says quote, 'No new procedures will be added,'" Moore said. "On these facts, one of two things must be true: Either the proposal is a paragon example of debottlenecking ... or else it's an equally classic example of a quote, 'sham permit.'"

Sharon Addison of Loudon presented Malibu data showing that as of 2011, the facility had eight gelcoat booths, which produced a total of 196 tons per year for an average of 24.50 TPY per booth. She said the planned expansion would increase the total pollutants to 426 tons per year for an average of 42.6 tons per booth since 2004.

"We want two more booths, and by the way, it's going to be 115 tons per year per booth or 230 for the two of them, which tells me their process instead of getting cleaner is getting dirtier because they started out at 53 tons per booth, and now they want 115," Addison said. "What happened there? This inconsistency here really bothers me, and it bothers me because the amount is so great."

During a follow-up interview, Anderson responded to the perception that new production for the Axis product line was going to take place solely in the two new gelcoat bays.

"If you look in our facility, actually where most of the VOCs are emitted, it's not out of those booths," Anderson said. "Those booths are just your actual gelcoat booths, so you've got all your lamination going on out here in the main part of your building, so you're actual styrene and your processes out there are what's generating emissions, so it's not really all just about that booth."

Baghernejad said the state would have responses to the questions posted on TDEC's website within a week, and the permit process would take a few weeks.