

Facility Name: **Composite Research, Inc.**
City: Blackshear
County: Pierce
AIRS #: 04-13-229-00007

Application #: TV-206103
Date Application Received: December 11, 2017
Permit No: 3732-229-0007-V-06-0

Program	Review Engineers	Review Managers
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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification**

1. Facility Name: Composite Research, Inc.
2. Parent/Holding Company Name: Composite Research, Inc.
3. Previous and/or Other Name(s): Sundance Boats, Inc.
4. Facility Location

6131 Sundance Road
Blackshear, GA 31516 (Pierce County)
5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is located in an ozone attainment area.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
3732-229-0007-V-05-0	6/28/2013	Title V Permit Renewal
3732-229-0007-V-05-1	9/15/2016	Name Change
3732-229-0007-V-05-2	1/12/ 2018	Replaced air pollution capture devices in lamination with water bath overspray capture systems.

D. Process Description

1. SIC Codes(s)

3732 Fiberglass boat manufacturing

2. Description of Product(s)

The facility manufactures skiffs and personal fishing boats ranging from 15 feet to 25 feet in length.

3. Overall Facility Process Description

Building of Open Molds for Boat Manufacture

Open molds are built using a form and the spray of a gel coat and a resin and fiberglass mix. The finished mold is used to create fiberglass boat parts. Particulate filters will be used to collect dust particulates from the mold build and repair shop.

Manufacture of Fiberglass Boats

The molds (hulls) are cleaned and waxed, and a layer of gel coat is sprayed on the molds and is allowed to cure. A thin layer of resin (skin coat) is then applied over the first layer of gel coat. The skin coat aids in the adhesion of the gel coat to the resin. The boat hulls enter the lamination process. Layers of unfilled resin, chopped fiberglass strands, and glass mat are applied to the bottom and the sides of the boat. Usually several layers of resin/fiberglass make up the laminate for the hull. The molded piece is then removed from the mold and trimmed. Urethane foam will be injected in the hull to provide flotation. The boat deck and hulls are then assembled, and any motors and/or necessary wiring are installed. The emissions from the resin and gel coat operations will be styrene (VOC/HAP). There will be very minor amounts of particulate emissions from the trimming booth. The facility operates water baths to collect the dust particulates and improve air quality. The process involves aiming a high volume of contaminated air by means of downdraft vent hoods into a vat filled with water so that the wetted particulates sink to the bottom of the vat and the deflected clean air is exhausted out and away from the water bath. When the depth of the silt in the vat reaches one foot, the vat is cleaned, re-filled with water, and the process repeats.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is considered a minor source with respect to PSD. The facility has a 100 tpy limit on VOC emissions. The PSD major source threshold is 250 tpy for this facility's source category, therefore, the facility is a PSD minor source. The facility is also a PSD minor source for all other criteria pollutants.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM ₁₀	✓			✓
PM _{2.5}	✓			✓
SO ₂	✓			✓
VOC	✓		✓	
NO _x	✓			✓
CO	✓			✓
TRS	N/A			
H ₂ S	N/A			
Individual HAP	✓	✓		
Total HAPs	✓	✓		
Total GHPs	✓	✓		

3. MACT Standards

Composite Research, Inc. is subject to National Emission Standard for Hazardous Air Pollutants for Boat Manufacturing (40 CFR 63 Subpart VVVV) because the facility emits greater than 10 tpy of styrene (HAP). The NESHAP requires that the affected sources meet a HAP emissions limit based on the amount and types of resin or gel coat used and determined by the facility's method of operation and application. Sources regulated under this NESHAP are also subject to work practice standards that include utilizing cleaning solutions and adhesives that contain no more than 5% HAPs by weight and ensuring all HAP-containing storage vessels remain covered. The standards set forth in the promulgated MACT will be used in lieu of the Section 112(g) determination that is in the current permit.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	n
Program Code 8 – Part 61 NESHAP	n
Program Code 9 - NSPS	n
Program Code M – Part 63 NESHAP	y
Program Code V – Title V	y

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

The facility wide VOC emissions are limited to 100 tpy. This limitation is in place so that the facility is considered a minor source with respect to PSD. The PSD major source threshold is 250 tpy for this facility's source category therefore the facility is a PSD minor source.

B. Applicable Rules and Regulations

None applicable.

C. Compliance Status

The facility has not indicated that it is operating out of compliance with any of the rules or regulations.

D. Permit Conditions

Condition 2.1.1 will limit VOC emissions from the entire facility to less than 100 tpy. This emission limitation will ensure that the facility remains a minor source with respect to PSD applicability.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
GE01	Gel Coat Spray Booth	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart VVVV	2.1.1, 3.3.1 through 3.3.5, 3.4.1, 3.4.2, 3.5.1, 5.2.1, 6.1.7, 6.2.1 through 6.2.20	GB01	Gel Bath #1
				GB02	Gel Bath #2
				GB03	Gel Bath #3
CU01	Mold Build and Repair Shop	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart VVVV	2.1.1, 3.3.1 through 3.3.5, 3.4.1, 3.4.2, 3.5.1, 5.2.1, 6.1.7, 6.2.1 through 6.2.20	TF01 TF02 TF03 TF04 TF05	Filtered Exhaust Fans
CB01	Lamination Spray Resin Operation	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart VVVV	2.1.1, 3.3.1 through 3.3.5, 3.4.1, 3.4.2, 3.5.1, 5.2.1, 6.1.7, 6.2.1 through 6.2.20	LB01	Lamination Bath #1
				LB02	Lamination Bath #2
				LB03	Lamination Bath #3
				LB04	Lamination Bath #4
				LB05	Lamination Bath #5
				LB06	Lamination Bath #6
				LB07	Lamination Bath #7
MC01	Mold Cleaning Operations	391-3-1-.02(2)(b) 40 CFR 63 Subpart VVVV	2.1.1, 3.3.1, 3.3.6, 3.3.7, 3.4.1, 5.2.2, 6.1.7, 6.2.1 through 6.2.19	None	None
CL01	Equipment Cleaning Operations	391-3-1-.02(2)(b) 40 CFR 63 Subpart VVVV	2.1.1, 3.3.1, 3.3.6, 3.3.7, 3.4.1, 5.2.2, 6.1.7, 6.2.1 through 6.2.19	None	None
GR01	Fiberglass Grinding Booth No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 3.5.1, 5.2.3, 5.2.4, 6.1.7, and 6.2.19	TB01 TB02	Trim/grind water bath units
GR02	Fiberglass Grinding Booth No. 2 (small parts grinding)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 3.5.1, 5.2.3, 5.2.4, 6.1.7, and 6.2.19	TB03	Trim/grind water bath units

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

B. Rules and Regulations Assessment:

Equipment at the facility is subject to the following Georgia Rules:

391-3-1-.02(2)(b) Visible Emissions: Limits opacity of an air contaminant source to less than 40 %. The equipment will not exceed this standard. The Emission Units listed in the above table are subject to Georgia Rule 391-3-1-.02(2)(b) because it applies to all sources that are subject to at least one other emission limitation and not subject to any other, more stringent, opacity standard.

391-3-1-.02(2)(e) Particulate Emissions from Manufacturing Processes: Limits emissions of particulate matter from the Emission Units listed in Table 4 based upon $E = 4.1(P)0.67$, E = emission rate in pounds per hour, P = process input weight rate in tons per hour. The controlled potential particulate matter emissions are incredibly minimal if the filter systems and the grinding booth are properly maintained. The Emission Units listed in the above table are subject to Georgia Rule 391-3-1-.02(2)(e) because these emission units are considered new equipment, constructed after July 2, 1968. The emission units above will have very minor particulate emissions.

Equipment at the facility is subject to 40 CFR 63 Subpart VVVV - "Boat Manufacturing" NESHAP because the facility is a major source for hazardous air pollutants. The NESHAP requires that the affected sources meet a HAP emissions limit based on the amount and types of resin or gel coat used and determined by the facility's method of operation and application. Sources regulated under this NESHAP are also subject to work practice standards that include utilizing cleaning solutions and adhesives that contain no more than 5% HAPs by weight and ensuring all HAP-containing storage vessels remain covered.

C. Permit Conditions

Conditions 3.3.1 through 3.3.8 are MACT requirements for 40 CFR 63 Subpart VVVV.

Condition No. 3.4.1 subjects the Emission Units to Georgia Rule 391-3-1-.02(2)(b).

Condition No. 3.4.2 subjects the Emission Units to Georgia Rule 391-3-1-.02(2)(e).

Condition No. 3.5.1 requires the facility to replace the filters for the fabric filter systems on a regular basis. Section b. and c. were combined with Condition 3.5.2 because the emission sources use a water bath overspray capture system.

Condition No. 3.5.2 ensures the Permittee operates the water bath overspray capture systems when appropriate. Section b. and c. of Condition 3.5.1 were combined because the emission sources use a water bath overspray capture system that needs to be cleaned when the vat reaches a depth of 1 foot.

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Condition 4.2.1 was removed from this renewal because the working range of the water discharge pressure at each of the well water pumps was established to be between 45 psi to 60 psi. The range established previously by this Condition is now part of the Monitoring Condition 5.2.6.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Condition 5.2.1 requires the facility to perform an inspection at least once per calendar month to ensure that the storage and mixing vessels per Condition No. 3.3.5 are covered during all periods of operation (except for filling and un-filling). This condition will demonstrate compliance with Condition No. 3.3.5.

Condition 5.2.2 requires the facility to perform an inspection at least once per calendar month to ensure all containers storing HAP-containing solvents used for removing cured resin and gel coat have covers with no visible gaps. This condition will demonstrate compliance with Condition No. 3.3.7

Condition 5.2.3 pertains to the Permittee recording when the water bath cleaning occurred.

Condition 5.2.4 ensures the Permittee take daily readings of the silt depth in the water baths.

Condition 5.2.5 requires the Permittee to install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the well water pumps supplying the water bath overspray capture systems.

Condition 5.2.6 pertains to monitoring the water discharge pressure which supply each overspray capture systems.

C. Compliance Assurance Monitoring (CAM)

Not Applicable.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

The facility will be subject to 40 CFR 63 Subpart VVVV, "Boat Manufacturing" NESHAP because the facility is a major source for hazardous air pollutants.

Condition 6.2.1 permits to the Permittee maintaining monthly usage records of all VOC-containing materials for the entire facility.

Condition 6.2.2 pertains to the Permittee maintaining total monthly VOC emissions records.

Condition 6.2.3 requires the Permittee to calculate the 12-month rolling total of VOC emissions.

Condition 6.2.4 pertains to the Permittee maintaining the records for all of the materials exempted from the open molding emission limit.

Condition 6.2.5 ensures the Permittee demonstrates compliance for the open molding operation.

Condition 6.2.6 ensures the Permittee demonstrates compliance using the emissions averaging option for the open molding operation.

Condition 6.2.7 ensures the Permittee demonstrates compliance using the compliant materials option for the open molding operation.

Condition 6.2.8 requires the Permittee to prepare an Implementation Plan for all open molding operations.

Condition 6.2.9 requires the Permittee to demonstrate compliance with the HAP emission limit.

Condition 6.2.10 ensures the Permittee demonstrates compliance when filled resins are used.

Condition 6.2.11 ensures the Permittee demonstrates compliance by using cleaning solvents that contain less than 5 % organic HAP by weight.

Condition 6.2.12 ensures the Permittee demonstrates compliance by determining and recording the organic HAP content of the carpet and fabric adhesives.

Condition 6.2.13 requires the Permittee to keep certain records for 5 years from the date of the record.

Condition 6.2.14 states the methods for keeping and maintaining records on-site.

Condition 6.2.15 requires certain notifications pertaining to the HAP content limit be sent to the Division by the appropriate dates.

Condition 6.2.16 ensures the Permittee send in the compliance reports to the Division by certain dates.

Condition 6.2.17 requires the Permittee to rely on the manufacturer's MSDS sheets to determine the HAP content of resins and gel coats to comply with 40 CFR 63, Subpart VVVV.

Condition 6.2.18 ensures the containers used for resin and gel coat mixing at the facility are inspected once a month.

Condition 6.2.19 ensures the containers used for HAP containing solvents at the facility are inspected and in working order.

Condition 6.2.20 requires the Permittee to maintain a suitable log for the date of the replacement of the filter media for the filter exhaust systems.

VII. Specific Requirements**A. Operational Flexibility**

None Applicable.

B. Alternative Requirements

None Applicable.

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

None Applicable.

E. Short-Term Activities

None Applicable.

F. Compliance Schedule/Progress Reports

None Applicable.

G. Emissions Trading

None Applicable.

H. Acid Rain Requirements

None Applicable.

I. Stratospheric Ozone Protection Requirements

The facility did not indicate any applicable Title VI requirements.

J. Pollution Prevention

None Applicable.

K. Specific Conditions

None Applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//