

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Raleigh Regional Office
County: Wilson
NC Facility ID: 9800188
Inspector's Name: Will Wike
Date of Last Inspection: 12/15/2004
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)	
Applicant (Facility's Name): Kencraft Manufacturing Inc Facility Address: Kencraft Manufacturing Inc 4155 Dixie Inn Road Wilson, NC 27893 SIC: 3732 / Boat Building And Repairing NAICS: 336612 / Boat Building Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:	
Contact Data			Application Data	
Facility Contact	Authorized Contact	Technical Contact	Application Number: 9800188.05A Date Received: 03/04/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 08158/T03 Existing Permit Issue Date: 01/08/2001 Existing Permit Expiration Date: 12/31/2005	
Ken Vick President (252) 291-0271 4155 Dixie Inn Road Wilson NC, 27893	Ken Vick President (252) 291-0271 4155 Dixie Inn Road Wilson NC, 27893	Ken Vick President (252) 291-0271 4155 Dixie Inn Road Wilson NC, 27893		
Review Engineer: Wallace Pitts Review Engineer's Signature: _____ Date: _____		Comments / Recommendations: Issue 08158/T04 Permit Issue Date: Permit Expiration Date:		

I. Purpose of Application

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The initial Title V permit **0815T03** was issued on January 8, 2001, and is currently scheduled to expire on December 31, 2005. The complete renewal application was received on March 4, 2005, or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

II. Facility Description

Kencraft Manufacturing (Kencraft) manufactures 17 to 24 foot boats. Approximately, 150 boats are manufactured per year. There are four distinct processes involved in boat manufacturing: 1) lay up and spray, 2) sanding and fitting, 3) rigging and assembly, and 4) cleanup and shipping. Only the lay up and spray operation generates air emissions due to the styrene emissions from the lay up and spray operation and therefore require air permitting. The process moved from the old building to the new building as a result of an OSHA inspection in 1996.

Boat molds are used to form the hull of the boat. The inside of the hull is made out of resin and fiberglass, and the outside is made of gel coat. The process begins with coating the molds with a Teflon wax. The molds are then spray coated with a gel coat. Next, chopper guns cut polyester fibers to one-inch lengths and mix it with styrene-based resin and the mixture is sprayed to form fiberglass. The resin can also be applied manually. A catalyst is incorporated into the resin/ fiberglass mix (1.5% by weight) to hasten the curing process. Next, accessories are added to the hulls. Ventilation fans remove the styrene and VOC emissions from the work areas.

The following table identifies all emission sources and associated control devices for which the Title V Operating Permit is being issued.

Emission Source	Emission Source Description	Control Device	Control Device Description
Building No. 1 (ID No. ES-1, 15,000 sq. ft. of production area) (MACT Subpart VVVV)	Laminating, gel coating, and assembly	CD-1 and CD-2	Two fiberglass mesh filters (6.3 sq. ft. of surface area each) at the inlet ports of the exhaust system fans.

III. History/Background/Application Chronology

January 8, 2001 – Initial title V permit 08158T03 issued.

March 5, 2005 –Title V permit renewal application received.

May 17, 2005 –Permittee submits Air Toxic Pollutant Dispersion Modeling Analysis.

July 8, 2005 –Draft permit sent to consultant for review.

July 19, 2005 –Draft permit sent to Supervisor/Project manager for review.

July 25, 2005 –Draft permit sent to RRO for review.

July 27, 2005 –RRO offers minor correction and says permit ok for issuance.

July 28, 2005 –Draft permit sent to applicant for review.

August 5, 2005 –Applicant responds with no comments.

August 9, 2005 –E mail sent to applicant requesting OK to change the General Condition P Annual Compliance Certification date from January 31 to March 1.

August 11, 2005 –Applicant requesting OK’s changing the General Condition P Annual Compliance Certification date from January 31 to March 1.

August 11, 2005 –Draft permit sent to DAQ Admin for public notice.

IV. Permit Modification/Changes

The following table describes the modifications to the current permit as part of the renewal process.

Old Page	New Page	Part	Section	Change
Attachment	~	~	~	Added insignificant activity
Cover	Cover	--	--	Updated permit number, dates, etc.
3	3	I	1	Added reference to MACT Subpart VVVV to source table

4	4	I	2.1 A.1.c, d	Updated conditions
5	4	I	2.1 A.1 e-f	Updated conditions
5	~	I	Old 2.1 A.2	Deleted this condition; it is superceded by 2D .0958 which is now federally enforceable.
6	5	I	2.1 A.2.a	Updated conditions (2.1 A.2 is old 2.1 A.3)
6	5	I	2.1 A.2 c-f	Updated conditions
6	5	I	2.1 A.3	Replaced old 2.1 A.4 Control of Odorous emissions [2D .0522] with 2D .1806).
7	6	I	2.2 A	Added 2.2 A all emission sources. This section will have the PSD avoidance condition, 2D .0958 and TAPs.
7	6	I	2.2 A.1 b-d	Updated conditions
6-7	6-7	I	2.2 A.2	Moved 2.1 A.5 to this section to 2.2 A.2 and Updated conditions
~	7-8	I	2.2 A.3	Added 2Q .0711 requirement
~	8	I	2.2 A.4	Added 2D .1100 requirement
~	8-18	I	2.2 B.5	Added requirements for MACT Subpart VVVV
8-16	9-26	I	3	Updated General Conditions

V. Regulatory Review

The facility is subject to the following regulations:

40 CFR 52 Subpart II, North Carolina Implementation Plan
 15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes
 15A NCAC 2D .0521, Control of Visible Emissions
 15A NCAC 2D .0958, Work Practices for Sources of Volatile Organic Compounds
 15A NCAC 2D .1104 Control of Toxic Air Pollutants. (NEW)
 15A NCAC 2D .1111, Maximum Achievable Control Technology (40 CFR63 Subpart VVVV) (NEW)
 15A NCAC 2D .1806: Control and Prohibition of Odorous Emissions
 15A NCAC 2Q. 0317: Avoidance Conditions (PSD Avoidance 15A NCAC 2D .0530)
 15A NCAC 2Q .0711: Toxic Air Pollutant Emissions Limitation Requirement (NEW)

New requirements for 2Q .0711, 2D .1104, and 2D .1111 were added. They are discussed in section VI.

VI. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM

NSPS

The facility is not currently subject to any NSPS requirements. The renewal of this permit does not require NSPS analysis.

NESHAP/MACT

MACT Subpart VVVV - Compliant airless (internal mix) spray guns are used for the gel coating. These guns limit the degree of atomization, and therefore air emissions, of the materials leaving the gun. The facility provided their MACT Subpart VVVV initial notification on October 14, 2004. The facility was required to be in compliance with the applicable MACT requirements for existing facilities by August 23, 2004.

Specific MACT compliance conditions were added to the Permit.

PSD

This facility has a PSD avoidance condition for VOC emissions. The renewal of this permit does not require PSD analysis.

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements, because it does not store any of the regulated substances in quantities above the thresholds in the Rule.

CAM

The facility does not use an active control devices do comply with an applicable standard, so it is exempt from CAM as per 40 CFR 64.2(a)(2).

Odor

The initial Title V permit contained a specific condition for odor (15A NCAC 2D .0522). This rule has been repealed and is superceded by 15A NCAC 2D .1806.

VOC

Specific condition 2.1 A.2 of the initial Title V permit contained a photochemically reactive VOC emission limitation limit of 40 pounds per day. This emission limitation was added through 15A NCAC 2D .0518. The initial Title V permit also contained a specific condition (2.1 A.5 15A NCAC 2D .0958). Subsequent to the issuance of initial Title V permit, 2D .0518 was repealed (the 40 pound per day limit was found in 2D .0518) and 2D .0958 was made federally enforceable. Since the permittee does not use a control device to control VOC emissions, 15A NCAC 2D .0958(e) is not applicable. Therefore specific condition 2.1 A.2 found in the initial Title V permit was deleted. The requirement to meet 2D .0958 was moved to Section 2.

VII. Facility Wide Air Toxics

The facility is subject to the toxics regulations. The following Toxic Air Pollutants are emitted from the Facility:

Pollutant (CAS Number)	Facility Potential Uncontrolled Emissions					
	lb/year		lb/day		lb/hr	
	Rate	% of TPERS	Rate	% of TPERS	Rate	% of TPERS
Methyl Ethyl Ketone (78-93-3)	374	N/A	4.1	5.26	0.2	0.89
Styrene (100-42-5)	61,643	N/A	675.5	N/A	28.1	1040.74
Toluene (108-88-3)	733	N/A	8	8.16	0.3	2.08
Xylene mixed isomers (1330-20-7)	56	N/A	0.6	1.05	0.03	0.18

The facility submitted an Air Toxics modeling analysis for styrene: all other air toxics emissions were well below the TPERS. At the permitted emission rate of 28.1 pounds per hour, the modeled ambient styrene concentration was 3,667 micrograms/cubic meter. This concentration is **34.6%** of the styrene AAL of 10,600 micrograms/cubic meter

Specific conditions were added to the permit to address Toxic Air pollutants. Since the modeled styrene concentration was significantly below the AAL, no recordkeeping or reporting requirements are contained in the permit.

VIII. Statement of Compliance

The facility received a NOV dated April 6, 2005 for submitting an incomplete 2004 annual compliance certification. The facility received a NOV dated June 10, 2004 for submitting an incomplete 2003 annual compliance certification. The facility also received a NOV dated August 23, 2004 for late submittal of their emissions inventory for calendar year 2002. The facility has received no other NOVs from DAQ in the previous five years.

IX. Facility Emissions Review

There is no change in emissions for this renewal.

X. Stipulation Review

RRO did **(did not)** not request any permit condition changes/corrections.

XI. Public Notice / EPA and Affected State Review

Pursuant to 2Q .0521, a notice of the draft Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. There are no other affected States for this facility.

Comments Received on DRAFT Permit – Comments during public notice period were received.

XII. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

RCO **recommends??** issuance of the permit.