

AIR PERMIT REVIEW

APPLICANT: Progressive Furniture Inc.	SITE LOCATION: Claremont	COUNTY: Catawba	
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REVIEW ENGINEER: Mike Benson	SIGNATURE:	DATE: 27-Sep-04	
REGIONAL CONTACT: Tammie Watkins	REGIONAL OFFICE: MRO	SIC/NAICS CODE: 2511	
APPLICATION NUMBER: 1800180.04A	EXISTING PERMIT NUMBER: 05810T14	NEW PERMIT NUMBER: 05810T15	

I. Introduction

The U.S. Environmental Protection Agency (EPA) has given interim approval to North Carolina's Title V operating permits program effective on December 15, 1995. Final approval for the Title V program was received October 1, 2001. Title V facilities are required to obtain an operating permit which addresses all applicable regulations under the State Implementation Plan, Federal Implementation Plan, and other provisions of the Clean Air Act (CAA). The Title V Operating Permit will define all of the facility's obligations under the CAA.

This Part II Permit Submission for a Title V Air Permit application Review intends to convey all pertinent emissions data, rules, policies, and engineering assumptions used to construct the Title V operating permit. The primary source of information used to construct the permit is the above referenced air permit application.

II. Background Information

The Title V operating permit replaces an existing Air Quality Construction and Operation Permit No. 05810T14 for Progressive Furniture Inc. which was issued on May 19, 2003 and is currently scheduled to expire on November 30, 2006.

Pursuant to 15A NCAC 2Q .0506 Progressive Furniture Inc. submitted its Part II Submittal for a Title V application to the Division of Air Quality on August 30, 2004. The application was considered complete for processing on August 30, 2004. The permit is required to go to public notice pursuant to 15A NCAC 2Q .0521.

III. Facility Description

Progressive Furniture Inc. is an furniture manufacturing facility. Total HAP emissions are below the 10/25 TPY threshold.

IV. Statement of Compliance

The DAQ has reviewed the compliance status of this facility. The facility was considered to be out of compliance in early 2004 for a minor recordkeeping violation. The facility has been recently inspected on August 3, 2004, and was considered to be in compliance with applicable Air Quality regulations.

V. Summary of Emission Sources and Control Devices for the Part I modification/Part II sumittal.

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances associated with the current application:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-36	dry filter-type spray booth installed on a wood furniture spray painting operation	N/A	N/A

VI. Emission Source-by-Source Evaluation

A. One dry filter-type spray booth (ID No. ES-36).

1. Description

The addition of a dry filter-type spray booth.

2. Applicable Regulatory Requirements

The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

a. 15A NCAC 2D .0512: “Particulates from Wood Products Finishing Plants”.

This regulation states in part that “a person shall not cause, allow, or permit particulate matter caused by the working, sanding or finishing of wood products to be discharged...without providing, as a minimum...properly designed collectors”.

The proposed equipment, a finishing spray booth with integral dry-filter for the capture of particulates. This is considered a properly designed collector. In addition, past inspections have indicated that the facility properly installs and maintains process equipment, collectors, and ductwork.

The proposed equipment is expected to be in compliance with 2D .0512.

b. 15A NCAC 2D .0521: “Control of Visible Emissions”.

The proposed equipment is limited to 20 percent visible opacity emissions. Previous inspections on similar equipment has shown visible opacity emissions to be between 0 and 5 percent. Good engineering judgement indicates that the proposed equipment will be operated at 0-5 percent visible opacity emissions.

Therefore, the proposed equipment is expected to be in compliance with 2D .0521.

- c. 15A NCAC 2D .0530: Prevention of Significant Deterioration (avoidance).

This facility already has in place two separate 250 TPY limits for VOC, as well as another 40 TPY limit for VOC on an existing spray booth. The proposed equipment will have a potential to emit greater than 40 TPY, the threshold level that would trigger a PSD modification. The Permittee has requested that the proposed spray booth, ID No. ES-36, be limited to a maximum of 40 TPY for VOC emissions. Recordkeeping requirements are included in the permit to verify that the proposed spray booth does not exceed 40 TPY on a rolling 12-month average. In accordance with DAQ policy, the reporting requirements were changed from quarterly to semi-annually.

The Permittee has demonstrated compliance with the three PSD avoidance stipulations that are currently included in the permit. The Permittee is expected to remain in compliance with the included PSD avoidance stipulation for the proposed spray booth.

Therefore, the proposed equipment is expected to be in compliance with 2D .0530.

- d. 15A NCAC 2D .0958: "Work Practices for Sources of Volatile Organic Compounds".

This rule applies to facilities that use VOCs as solvents, carriers, material processing media, or industrial chemical reactants. A number of existing processes at the facility are already subject to this regulation, and the appropriate stipulations have already been included in the existing permit. These stipulations include measures to reduce fugative VOC emissions, monitoring and recordkeeping requirements, and reporting requirements. The facility has demonstrated no difficulty complying with this regulation in the past, and is not expected to experience difficulty complying for the proposed spray booth.

Therefore, the proposed equipment is expected to be in compliance with 2D .0958.

- e. 15A NCAC 2Q .0711: "Emission Rates Requiring a Permit".

This modification will give a net increase in methyl ethyl ketone and toluene, both NC Toxic Air Pollutants. The 2Q .0711 exemption rate for modelling is 78 lb/day & 22.4 lb/hr for MEK and 98 lb/day & 14.4 lb/hr for toluene. These are facility-wide limits to avoid air dispersion modelling. The expected facility-wide emission rates after the proposed modification are 13 lb/day & 1.5 lb/hr for MEK and 25 lb/day & 2.8 lb/hr for toluene. A stipulation for 2Q .0711 is already included in the existing permit, and includes the specific limits for MEK and toluene as specified by the regulation. The Permittee is required to maintain records showing that they have not exceeded these limits. Previous compliance inspections have demonstrated that the facility is in compliance with 2Q .0711, and will be expected to remain in compliance after the proposed equipment is operational.

VII. Other Applicable Requirements:

A. MACT

The facility is subject not subject to MACT. The facility has agreed to cap HAP emissions below the 10/25 TPY threshold level. Without these stipulations included in the permit the facility would be subject to both 40 CFR 63, Subpart JJ and Subpart DDDDD.

B. PSD/NAA

The facility currently has four PSD avoidance conditions. Catawba County has been triggered for PM₁₀. This modification does increase the amount of PM₁₀. However, the increased PM₁₀ emissions are expected to be 0.0332 lb/hr, which is below the de minimus level for PSD increment tracking.

Catawba County has an EAC and thus do not have to comply with NAA requirements at this time.

C. NSPS

The facility is not subject to NSPS.

D. TOXICS

The facility is subject to 15A NCAC 2Q .0711, "Emission Rates Requiring a Permit".

E. ACCIDENTAL CHEMICAL RELEASE

Section 112(r) does not apply.

VIII. Permit Shield (including non-applicable requirements)

In accordance with 2Q .0512 the permit will contain a provision stating that compliance with the terms, conditions, and limitations of the Title V permit shall be deemed in compliance with applicable requirements specifically identified in the permit, as of the date of permit issuance. If the permit does not expressly state that a permit shield exists then it shall be presumed not to provide such a shield.

IX. General Conditions

The "General Conditions" section of the Title V Operating Permits lists additional applicable rule requirements that the permittee must adhere to, as with any other permit condition. These requirements in general are common to all Title V facilities. The general conditions include provisions such as annual fee payment, permit renewal and expiration, transfer of ownership or operation, property rights, submission of documents, inspections and entry procedures, reopen for cause, and severability.

X. Insignificant Activities

The facility operates a Research and Development spray booth (ID No. ES-37) that is exempted under 15A NCAC 2Q .0503(8).

XI. Public Notice

Pursuant to 15A NCAC 2Q .0521, a second notice of the draft Title V Operating Permit will be placed in a newspaper of general circulation in the area where the facility is located. The notice provides for a 30 day comment period, with an opportunity for a public hearing. Copies of the public notice will be sent to persons on the Title V mailing list, EPA, and South Carolina.

XII. Miscellaneous

It was determined that the currently permitted natural gas/No. 2 fuel oil-fired boiler has a 10.461 million BTU per hour maximum heat input (previously thought to be 8.369 MBtu/hour). This was corrected on the permit. This did not change the allowable particulate emission rate as defined in 15A NCAC 2D .0503. The boiler was manufactured in 1986 and is not subject to NSPS Subpart Dc.

In accordance with DAQ policy and a request from the Mooresville Regional Office, the stipulation for monitoring the currently permitted fourteen spray booths (Section 2.1.D.2.c) for visible emissions was

removed from the permit, and now references the monitoring/reporting/recordkeeping requirements contained in the 2D .0512 stipulation. This is based on little, if any, visible emissions expected as well as a long compliance history for these sources.

The permit expiration date was corrected to be December 31, 2006. The wrong expiration date was used on the initial Title V permit, issued January 19, 1002.

XIII. Recommendations

This Part II Submittal for Progressive Furniture Inc. has been reviewed by the DAQ to determine compliance with all procedures and requirements under 15A NCAC 2Q .0500 and 40 CFR Part 70. The DAQ has made a determination that the facility is in compliance as specified in the permit with all applicable requirements. Therefore, the DAQ proposes to issue the Part II Submittal Title V permit once the 30-day public notice and 45-day EPA review periods have been completed.

Recommend issuance of Initial Title V Permit No. 05810T15.