

Facility Name: **Shaw Industries Group, Inc. – Plant 1 & 3**
(these 2 plants are considered one “site” for this Title V Permit)
City: Dalton
County: Whitfield
AIRS #: 04-13-313-00081

Application #: TV-15803
Date Application Received: November 5, 2004
Permit No: 2273-313-0081-V-02-0

Program	Review Engineers	Review Managers
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Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This 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 primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Shaw Industries Group, Inc. – Plant 1 & 3 (considered as one site for this Title V permit)** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This 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: Shaw Industries Group, Inc. – Plant 1 & 3
Carpet printing and latex backing facility
2. Parent/Holding Company Name: Shaw Industries Group, Inc.
3. Previous and/or Other Name(s)

Plant 1: Shaw Industries, Inc. Star Division

Plant 3: Star Finishing Company, Division of Shaw Industries, Inc.

4. Facility Location

Plant 1 located at 501 East Franklin Street

Plant 3 located at 500 East Franklin Street
Dalton, Georgia

5. Attainment, Non-attainment Area Location, or Contributing Area

Plants 1 and 3 are located in an attainment area.

6. Class I Area Impacts

These plants are located within 100 km of the Cohutta Class I area.

B. Site Determination

Plants 1 & 3 are located on adjacent sides of East Harris Street, Whitfield County, Dalton, Georgia. Shaw Industries Group, Inc. has nine plants in Whitfield County, Dalton, Georgia. Seven of them are Title V major sources that all are located within 10 miles from Plant 1. The closest one is Plant 3, which is contiguous to Plant 1, shares steam, and both are under common management. Therefore, these two plants are one Title V site. Shaw Industries Group, Inc. – Plant 1 & 3, are wholly independent operational units within the residential division of Shaw Industries, Inc. There is also a degree of product sharing between the two facilities.

Plant 63 is 5 miles away from Plant 1 and shares the plant manager of Plant 1. There is not any predetermined permanent flow of materials between these two plants. Based on the distance between the two facilities and their independence from one another, they will be treated as separate Title V sites.

Similarly, the other plants are not part of this Title V site. There will be one TV permit for Plants 1 and 3 and one AIRS number will be used. AIRS No. 313-00081 (previously for Plant 1) will be used for the Title V site. AIRS No. 313-00083 (previously for Plant 3) has been retired.

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
2273-313-0081-V-01-0	May 2, 2000	Initial Title V Permit
2273-313-0081-V-01-1	November 12, 2000	Amendment

D. Process Description

1. SIC Codes(s)

2273

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

Carpet manufacturing operations including tufting, dyeing and latex coating.

3. Overall Facility Process Description

Plant 1 has all the typical carpet manufacturing operations present, from tufting continuous dyeing (source code CD01), and SBR latex coating source LC01). The finished products from Plant 1 including backed, undyed greige goods, dyed greige goods and finished carpet.

Plant 3 has no tufting operation, and receives partially finished greige goods from other Shaw Plants, principally Plant 1. Backed, undyed greige goods can be dyed on the two continuous dye ranges (source codes CD02, CD03); a polyurethane backing (source UC01) can be applied to dyed greige goods. Despite an interconnected product and process flow, neither of these facilities is wholly dependent upon the other for input

material. Any interruption in product flow could be replaced from either other Shaw plants or non-Shaw companies.

With the exception of Plant 1’s indirect steam heated dryer on the dye range, all in-line dryers and curing ovens are heated directly by burning natural gas at low fire conditions. Steam for the dryer at Plant 1, and for all three continuous dyeing operations is provided by three large boilers – two at 74 MMBtu installed in the 1960’s and one at 61 MMBtu installed in 1985 (source codes BL01, BL02 and BL03).

4. Overall Process Flow Diagram

Refer to original narrative. No document changes since the original permit.

E. Regulatory Status

1. PSD/NSR

Since this is a PSD major source, PSD avoidance limits require net SO2 emissions be less than the major modification threshold of 40 tons.

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	Yes	✓		
PM ₁₀	Yes	✓		
SO ₂	Yes	✓		
VOC	Yes			✓
NO _x	Yes	✓		
CO	Yes			✓
TRS	No			
H ₂ S	No			
Individual HAP	Yes			✓
Total HAPs	Yes			✓

3. MACT Standards

None applicable. Not a major source site for HAPs.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	No
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

Regulatory Analysis**II. Facility Wide Requirements**

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

- Rules and Regulations Assessment

None applicable.

- Emission and Operating Standards

None applicable.

C. Compliance Status

According to the Title V application, this facility is in compliance with all state and federal requirements. (See Section VII.F.)

D. Operational Flexibility

See Section IV, V and VI.

E. Permit Conditions

Previous condition 2.3.1 has been deleted due to new permit template and guidance.

III. Regulated Equipment Requirements

A. Brief Process Description

A brief process description is specified in the narrative for Title V Permit No. 2273-313-0081-V-01-0. Please refer to this narrative.

B. 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
BL01 (Plant 1)	Boiler #1	391-3-1-.02(2)(d)3 391-3-1-.02(2)(d)2(ii) 391-3-1-.02(2)(g)2	3.2.1, 3.4.1, 3.4.4, 3.4.7, 5.2.1, 6.2.2, 6.1.7	None	None
BL02 (Plant 1)	Boiler #2	391-3-1-.02(2)(b)1 391-3-1-.02(2)(d)1(ii) 391-3-1-.02(2)(g)2	3.4.2, 3.4.5, 3.4.7, 5.2.1, 6.2.2, 6.1.7	None	None
BL03 (Plant 1)	Boiler #3	391-3-1-.02(2)(b)1 391-3-1-.02(2)(d)1(ii) 391-3-1-.02(2)(g)2	3.4.2, 3.4.5, 3.4.7, 5.2.1, 6.2.2, 6.1.7	None	None
CD01 (Plant 1)	Rotary dye range	391-3-1-.02(2)(b)1 391-3-1-.02(2)(e)1(ii)	3.4.3, 3.4.5, 3.4.6	None	None
LC01 (Plant 1)	Latex coater oven	391-3-1-.02(2)(b)1 391-3-1-.02(2)(e)1(ii)	3.4.3, 3.4.5, 3.4.6	None	None
CD02 (Plant 3)	Printer dye range #2	391-3-1-.02(2)(b)1 391-3-1-.02(2)(e)1(ii)	3.4.3, 3.4.5, 3.4.6	None	None
CD03 (Plant 3)	Printer dye range #1	391-3-1-.02(2)(b)1 391-3-1-.02(2)(e)1(ii)	3.4.3, 3.4.5, 3.4.6	None	None
UC01 (Plant 3)	Urethane coater oven	391-3-1-.02(2)(b)1 391-3-1-.02(2)(e)1(ii)	3.4.3, 3.4.5, 3.4.6	None	None

C. Equipment & Rule Applicability

Equipment and Rule Applicability specified in Permit No. 2273-313-0081-V-01-0 and Permit Amendment 2273-313-0081-V-01-1 are discussed in the initial Title V permit narrative and the Title V permit amendment for this permit. Please refer to those narratives.

D. Compliance Status

Facility currently operating in compliance with all air quality rules and regulations.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Condition No. 3.4.7 was modified in previous Amendment to decrease the allowable sulfur content from 2.5% to 1.8%.

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 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**1. Individual Equipment**

Testing requirements specified in Permit No. 2273-313-0081-V-01-0 are discussed in the initial Title V permit narrative for this permit. Please refer to this narrative.

V. Monitoring Requirements**A. General Monitoring Requirements**

Condition 5.1.1 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

1. Old condition 5.2.2 is new condition 6.2.2
2. Old condition 5.2.3 is new condition 6.1.7 with the following modifications:
 - i. Sulfur content allowed from Boilers BL01, BL02 and BL03 has been changed from 2.5% to 1.8%.
 - ii. Boiler BL01 has been limited to 200,000 gallons of fuel consumption per year.
3. Old condition 5.3.1 is new condition 6.1.4.
4. Old condition 5.3.2 is new condition 6.1.5.
5. Old condition 5.3.3 is new condition 6.1.6.
6. Old condition 5.3.4 is new condition 6.1.7.d.i.
7. Old condition 5.3.5 is new condition 6.2.1.
8. Old condition 5.3.6 is new condition 6.1.7.d.ii.

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

Record keeping and reporting requirements specified in Permit Nos. 2273-313-0081-V-01-0 and 2273-313-0081-V-01-1 are discussed in the initial Title V permit narrative and the narrative for the amendment to the initial Title permit. Please refer to those narratives.

VII. Specific Requirements

A. Operational Flexibility

- Not applicable

B. Alternative Requirements

- Not applicable

C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

D. Temporary Sources

- Not applicable

E. Short-Term Activities

- Not applicable

F. Compliance Schedule/Progress Reports

- Not applicable

G. Emissions Trading

- Not applicable

H. Acid Rain Requirements

- Not applicable

I. Stratospheric Ozone Protection Requirements

- Not applicable

J. Pollution Prevention

- Not applicable

K. Specific Conditions

- Not 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.

Addendum to Narrative

The 30-day public review started on August 4, 2006 and ended on September 5, 2006. No comments were received.