

Facility Name: **Shaw Industries, Inc., Plant 20**  
 City: Dalton  
 County: Whitfield  
 AIRS #: 04-13-313-00079

Application #: TV-13873  
 Date SIP Application Received: July 1, 2002  
 Date Title V Application Received: July 1, 2002  
 Date of Draft Permit:  
 Permit No: 2273-313-0079-V-01-1

Program	Review Engineers	Review Managers
<b>SSPP</b>	Dan Abrams	James Capp
<b>SSCP</b>	N/a	N/a
<b>ISMP</b>	N/a	N/a
<b>Toxics</b>	N/a	N/a

## Introduction

This narrative is being provided to assist the reader in understanding the content of the attached SIP permit to construct and/or draft/proposed operating permit amendment. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit amendment is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit amendment is to identify state and federal air requirements applicable to the modification/construction to be performed at Shaw Industries, Inc., Plant 20 and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit amendment and is presented in the same general order as the permit amendment. It initially describes the facility receiving the permit amendment, 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 amendment 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. Existing Permits**

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
2273-313-0079-V-01-0	May 31, 2000	X	

Table 2: Comments on Specific Permits

Permit Number	Comments
2273-313-0079-V-01-0	Initial Title V Permit

**B. Regulatory Status****1. PSD/NSR**

This facility is a major source under PSD because it has potential to emit (PTE) of PSD regulated pollutants greater than 250 tpy (it is not one of the 28 named source categories under PSD).

**2. Title V Major Source Status by Pollutant**

Table 3: 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 <sub>10</sub>	✓			✓
SO <sub>2</sub>	✓	✓		
VOC	✓			✓
NO <sub>x</sub>	✓	✓		
CO	✓			✓
TRS				
H <sub>2</sub> S				
Individual HAP	✓			✓
Total HAPs	✓			✓

**II. Proposed Modification**

## A. Description of Modification

Shaw Industries, Inc. agreed to Consent Order No. EPD-AQC-1877 for prior PSD violations at other Shaw Plants. In this Consent Order, Shaw agreed to lower the allowable sulfur content of the fuel oil burned in their boilers at several of Shaw's plants from 2.5% to 1.8%, including Plant 20.

## B. Emissions Change

Table 4: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
Particulate Matter	Yes	0	0
PM <sub>10</sub>	Yes	0	0
SO <sub>2</sub>	Yes	(115)	(135)
VOC	Yes	0	0
NO <sub>x</sub>	Yes	0	0
CO	Yes	0	0
TRS	No	0	0
H <sub>2</sub> S	No	0	0
Individual HAP	Yes	0	0
Total HAPs	Yes	0	0

## C. PSD/NSR Applicability

This modification will not cause a PSD review to occur.

#### IV. Regulated Equipment Requirements

##### A. Brief Process Description

Shaw Plant 20 is a typical carpet-manufacturing site, with tufting, continuous dyeing (source code CD01), atmospheric batch (Beck) dyeing (sources BK01-08), pressure Beck dyeing, and SBR latex coating (source codes LC01-02). The final product from Plant 20 is finished, broadloom residential carpet. With the exception of the Beck dryers (Source codes DR01-02), which are indirect steam heated dryers to dry Beck dyed carpet, all in-line dryers and curing ovens are heated directly by burning natural gas at low fire conditions. Steam for all process equipment including the Beck dryers, Beck dyeing and continuous dyeing operations is provided by three large boilers: a 42 MMBtu/hr installed in 1963 (source code BL01), a 84 MMBtu/hr installed in 1968 (source code BL02), and a 98 MMBtu/hr installed in 1987 (source code BL03).

##### 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	Boiler #1	GA Rule 391-3-1-.02(2)(d)1(ii) GA Rule 391-3-1-.02(2)(b)1 GA Rule 391-3-1-.02(2)(g)2	3.4.7	N/a	N/a
BL02	Boiler #2	GA Rule 391-3-1-.02(2)(d)1(ii) GA Rule 391-3-1-.02(2)(b)1 GA Rule 391-3-1-.02(2)(g)2	3.4.7	N/a	N/a
BL03	Boiler #3	GA Rule 391-3-1-.02(2)(d)3 GA Rule 391-3-1-.02(2)(d)2(ii) GA Rule 391-3-1-.02(2)(g)2	3.4.7	N/a	N/a

##### C. Equipment & Rule Applicability

###### **Emission and Operating Caps –**

Not applicable

###### **Applicable Rules and Regulations -**

Not applicable

##### D. Compliance Status

Not Applicable

##### E. Operational Flexibility

Not Applicable

## F. Permit Condition

Condition 3.4.7 was modified to reflect the lower sulfur content of 1.8%, by weight.

Condition 5.2.6.b.iii was modified to reflect the change in the reportable exceedances for the change in the sulfur content allowable.

Condition 5.3.1 was changed to correct the typographical error contained in the original permit.

**Addendum to Narrative**

There were no comments received from the Company or from EPA. Therefore, no changes were made to the permit or narrative.