

Facility Name: **Foam Fabricators, Inc.**
 City: Jefferson
 County: Jackson
 AIRS #: 04-13-157-00025

Application #: TV-43420
 Date Application Received: October 20, 2016
 Permit No: 3086-157-0025-V-03-0

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: Foam Fabricators, Inc.

2. Parent/Holding Company Name

Foam Fabricators, Inc.

3. Previous and/or Other Name(s)

None

4. Facility Location

82 Galilee Church Road
Jefferson, Georgia 30549-4174 (Jackson County)

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

The facility is located in an 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
3086-157-0025-V-02-0	5/18/2012	Title V Renewal

D. Process Description

1. SIC Codes(s)

3086

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)

Expandable polystyrene products

3. Overall Facility Process Description

Foam Fabricators, Inc. manufactures expandable polystyrene custom shape products for packaging, material handling and structural component uses. The production process consists mainly of expanding of polystyrene beads with steam, aging of the expanded beads, and molding of the beads into custom shape products with steam. During the process, pentane (blowing agent) embedded in the EPS beads is released into the atmosphere as VOC emissions. Steam is provided by two 8.37 MMBtu/Hr natural gas boilers. A regrinder is utilized to grind up off-specification products. The ground-up materials are then compacted into blocks for off-site recycling. The blower transferring the ground-up materials discharges into one of a number of storage bags inside the production building.

The facility has no VOC emission control in place. Since the regrinder discharges inside the production building, none of the process units has PM emissions. Other emissions of criteria air pollutants include CO, PM, SO₂, NO_x and VOC from the fuel combustion taking place in the two existing natural gas boilers. The amounts of these emissions are small due to the capacity of the boilers and the combustion of clean fuel.

An existing molding machine in Unit ID 3A will be converting to expandable polypropylene from expandable polystyrene. With this material change, the molding machine (Kurtz 1014) has been moved to the Insignificant Activities list as the only emission(s) generated during the molding of expandable polypropylene is steam.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

This facility is potentially a major source under PSD regulations because it has potential emissions of VOC greater than 250 tons per year (it is not one of the 28 named source categories

under PSD regulations), but has requested to take an annual VOC emission limit of less than 250 tons to avoid PSD/NSR regulations.

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	n/a			
Total HAPs	n/a			
Total GHGs	✓			✓

3. MACT Standards

The facility is a true “area/minor” source for HAP emissions. No NESHAP regulations or standards apply to this facility.

The facility is not subject to 40 CFR Part 63 Subpart JJJJJ since the boilers use natural gas only and no fuel oil as backup.

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:**

A facility-wide VOC emission cap of less than 250 tpy allows the facility to operate as a minor source with regard to PSD/NSR regulations.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

The Title V permit renewal application No. 43420 indicates that the facility is in compliance with all the applicable rules or regulations.

D. Permit Conditions

Condition 2.1.1 establishes a facility-wide VOC emission cap of less than 250 tpy.

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
001A	Pre-Expander	391-3-1-.02(2)(b)	2.1.1, 3.4.1, 3.4.2, 4.2.1, 6.2.1 through 6.2.3	None	None
001B	Pre-Expander	391-3-1-.02(2)(e)			
002A	Bag Storage				
003A	Molding Machines with Central Vac				
004A	Molding Machines with Central Vac				
005A	Warehouse-Post Molding				

* 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. Equipment & Rule Applicability

Emission and Operating Caps:

None applicable.

Rules and Regulations Assessment:

Georgia Rule 391-3-1-.02(2)(e), "Particulate Emission from Manufacturing Processes" applies to all process units at this facility that are not covered by a more specific rule or regulation. This Rule establishes PM emission limits for the process units based on their process weight input rates. PM emissions from this facility are substantially below the applicable Georgia Rule (e) limits due to the nature of the production processes involved.

Georgia Rule 391-3-1-.02(2)(b), "Visible Emissions" applies to all the process units at this facility which do not have a more stringent visible emission limit and are subject to some other emission limitation under the state rules. Visible emissions are limited by this Rule to less than 40% opacity. The visible emissions from this facility are substantially below 40% opacity due to the nature of the production processes involved.

C. Permit Conditions

Conditions 3.4.1 and 3.4.2 establish the PM and visible emission standards of Georgia Rules (e) and (b) applicable to the process units at this facility. Due to the nature of the production processes involved, these emissions are substantially below the applicable emission limits under Georgia Rules (e) and (b).

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 establishes a sampling and product analysis requirement for amounts of pentane retained in the final products. This test is repeated every year in July & August which are hottest months and hence would have more warehouse loss.

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

None applicable.

C. Compliance Assurance Monitoring (CAM)

There is no control devices associated with the permitted emission sources, hence CAM is 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

Conditions 6.2.1 through 6.2.3 establish detailed record keeping, compliance determination, and/or reporting requirements for Condition 2.1.1, and thus make the facility-wide VOC emission limit in Condition 2.1.1 practically enforceable.

VII. Specific Requirements

A. Operational Flexibility

Foam Fabricators, Inc. has not requested any operational flexibility.

B. Alternative Requirements

None Applicable.

C. Insignificant Activities

Refer to <http://gatv.georgiaair.org/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

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

None Applicable.

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.