

TITLE V APPLICATION REVIEW

Facility Name: Atlas Roofing Corporation

City: Hampton

County: Henry

AIRS #: 04-13-151-00009

Application #: TV- 10774

Date Application Received: July 14, 1998

Date Application Deemed

Administratively Complete: November 2, 1998

Date of Draft Permit:

Permit No: 2952-151-0009-V-01-0

Program	Review Engineers	Review Managers
SSPP/ASU	Mohamed Abdalla	James Current
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ISMP	Bradley Belflower	Larry Webber
TOXICS	Michael Fortune	Heather Abrams

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Title V operating permit. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being proposed pursuant to: (1) Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to Atlas Roofing Corporation 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, then the applicable requirements and their significance, and finally the methods for determining compliance with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revision made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name

Atlas Roofing Corporation.

2. Parent/Holding Company Name

Atlas Roofing Corporation.

3. Previous and/or Other Name(s)

This plant used to be owned by Georgia-Pacific Corporation. It was acquired by Atlas Roofing Corporation in 1994.

4. Facility Location

100 Pine View Drive
Hampton, Georgia 30228

5. Attainment or Non-attainment Area Location

The facility is located in the Atlanta VOC'S & NO_x non-attainment area.

6. Class I Area Impacts

The facility is not located within 100 km of a Class I area.

B. Site Determination

There are no other manufacturing facilities which could possibly be contiguous or adjacent and under comm control.

C. Existing Permits

Table 1 below lists all current permits issued to the facility. Based on a comparative review of Item 19 in Section 1.10 of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office, comments are listed in Table 2 below.

Table 1: List of Current Permits, as Amended

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
2592-075-12183	February 13, 1997	U	
"	July 15, 1997 (Amendment)	U	

Table 2: Comments on Specific Permits

Permit Number	Comments
2592-075-12183	New Air Quality Permit consolidating all previous air quality permits and amendments. It contained conditions meant to have the facility not be considered a major source under Title V of the Clean Air Act.
"	A Permit amendment which authorized adding a "Felt Mill" to the, then, existing "Asphalt Roofing Facility." This resulted in the facility's potential emissions becoming above those of Title-V thresholds. The Company was given one year, from said Amendment date, to submit a Title - V Major Source Permit Application {Under the provisions of (40 CFR Part 70)}.

D. Process Description

1. SIC Code(s)

The Major and Other SIC Code(s), if applicable.

Major - 2952.

Other - 2621.

2. Description of Product(s)

The facility manufactures asphalt roofing.

3. Overall Facility Process Description

This plant consists of two sections: a felt paper manufacturing section and an asphalt roofing manufacturing one..

4. Overall Process Flow Diagram

Please see Application No. TV-10774.

E. Regulatory Status

1. PSD/NSR

This Plant is presently not classified as a major stationary source as defined by federal Prevention of Significant Air Quality Deterioration (PSD) regulation, 40 CFR §52.21.

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?		
		Major Source Status	Major Source requesting SM Status	Non-Major Source Status
PM	yes	yes	no	no
PM ₁₀	yes	yes	no	no
SO ₂	yes	no	no	yes
VOC	yes	yes	no	no
NO _x	yes	yes	no	no
CO	yes	no	no	yes
TRS	yes	no	no	yes
H ₂ S	yes	no	no	yes
Individual HAP	yes	no	no	yes
Total HAPs	yes	no	no	yes

3. MACT Standards

This facility is neither major for HAPs nor subject to any proposed or final MACT Standards, however, it maybe subject to Section 112(g) requirements.

4. Program Applicability

Indicate if the following programs are applicable to the facility (with a “yes” or “no”).

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

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

Fuel oil fired in all fuel burning equipment shall be distillate oil that complies with the specifications for fuel numbers 1 and 2 as defined in ASTM D396 [i. e. The sulfur content shall not exceed 0.5 weight percent].

B. Applicable Rules and Regulations:

! Rules and Regulations Assessment:

Atlas Roofing Corporation (Hampton Plant) is subject to the general provisions of Georgia's "Rules for Air Quality Control," some work practice rules, and those in Part VIII of the enclosed Permit. Also, for all equipment subject to 40 CFR Part 60 "Standards of Performance for New Stationary Sources," the Company is required to comply with all the provisions of Subpart A "General Provisions."

! Emission and Operating Standards:

Not applicable.

C. Compliance Status:

See Section VII.F.

D. Operational Flexibility:

See Section VII.A.

E. Permit Conditions:

Some facility-wide conditions are included in the permit. specifically those pertaining to the general provision of Georgia's "Rules for Air Quality Control," those in Part VIII of the enclosed Permit, and the above-mentioned cap on the sulfur content of all fuel oil fired.

III. Regulated Equipment Requirements

A. Brief Process Description:

Felt Mill Section

The Felt Mill manufactures felt to be used as an ingredient in the asphalt roofing section. Felt paper is manufactured from pulped waste paper, corrugated paper, sawdust, and wood chips. The felt paper is pulped in a hydropulper at ambient air pressure. The felt paper manufacturing process differs from traditional paper making processes in that it doesn't employ the chemicals or high pressure pulping used in typical manufacturing.

Roofing Section

Asphalt roofing is manufactured using both felt and fiberglass as a substrate material. The felt paper is dipped saturated in hot asphalt, a mineral surfacing material is applied, a sand backing is applied, and then the roofing material is allowed to cool before cutting into shingles or rolled into bundles. The fiberglass substrate is coated with hot asphalt before further processing. Ancillary processes include asphalt, limestone filler, sand, and granule unloading, storage, and conveyance.

Coating is transferred to the coater during roofing material processing. The manufacture of roofing products is a continuous process. Mat is covered with hot coating in the coater which is vented to a collection hood. Surfacing materials are applied in the material surfacing area. This area is vented to a process dust collector. The material temperature is reduced in the cooling section which is vented through a collection hood. Sealant asphalt and release tape are applied to some roofing products.

B. Equipment List for the Process:

Please see Section 3.1 of the enclosed Permit.

C. Equipment & Rule Applicability:

! Emission and Operating Caps

Condition No. 3.2.1 limits the hourly process input rate of the Felt Mill, and its associated equipment, to 100 tons. It was placed, mainly, to cap VOC emissions resulting from the felt manufacturing process.

! Applicable Rules and Regulations:

Part of the plant is subject to the New Source Performance Standard (NSPS) 40 CFR Part 60, Subpart UU. *"Asphalt Processing and Asphalt Roofing Manufacture."* Subpart UU is applicable to any asphalt roofing saturator {defined by the NSPS as a saturator and/or coater} if constructed or modified after November 18, 1980. It limits saturator particulate matter emissions to 0.08 lb/ton of asphalt shingle or mineral-surfaced roll roofing produced, or 0.8 lb/ton of saturated felt or smooth-surfaced roll roofing produced and limits saturator exhaust gases to an opacity of less than 20 percent. It, also, doesn't permit visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes. The plant has two saturators (200 & 201) controlled by capture systems ME1 & ME2, respectively. Furthermore, 40 CFR 60 Subpart UU sets limits on emissions from asphalt blowing stills, storage tanks, and mineral handling facilities as cited in Condition No. 3.3.1.

The facility is also subject to the Georgia State Rules: 391-3-1-.02(2)(b) *"Visible Emissions"* which limits opacities from direct sources of emissions to 40%, 391-3-1-.02(2)(n) *"Fugitive Dust"* which limits opacity to 20%, and Rule 391-3-1-.02(2)(e) *"Particulate Emissions from Manufacturing Processes."* Also, some equipment is subject to 391-3-1-.02(2)(ccc), *"VOC Emissions from Bulk Mixing Tanks"* and Rule 391-3-1-.02(2)(vv), *"Volatile Organic Liquid Handling."* Furthermore, equipment burning fuel is subject to Georgia Rules 391-3-1-.02(2)(d) *"Fuel-burning Equipment"* and 391-3-1-.02(2)(b) *"Visible Emissions."*

Due to the fact that the chemicals used, in the felt manufacturing process, are different from those defined under NSPS Subpart BB, the provisions of the latter do not apply to the Felt Mill. Moreover, Subpart BE regulates equipment such as Brown Stock Washer, Multi-Effect Evaporator, Condensate Stripper(s) Systems, in addition to Lime Kilns and Smelt Dissolving Tanks. The subject Felt Mill doesn't utilize any the aforementioned equipment. Emissions are, mostly, from non-point sources and no VOC controls are employed. Condition No. 5.3.5 is meant to insure compliance with the Felt Mill hourly process input rate limit and the fuel oil consumption limitation stipulated in Conditions No. 3.2.1 & 3.2.2

The two 32.66 Million BTU/hr Boilers (Source codes B01 & B02) are subject to 40 CFR Part 60 Subpart Dc *"Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units."* 7 Boilers aren't covered by specific particulate matter (PM) standards under Subpart Dc since neither of the two units combust coal or mixtures of coal with other fuels. Nonetheless, they're covered by Subpart Dc limit of fuel oil sulfur content and State Rules 391-3-1-.02(2)(d)2.(ii) and 391-3-1-.02(2)(d)3 for fuel-burning equipment.

Storage tanks with capacities less than 10,567 gallons are exempt from 40 CFR 60 Subpart Kb *"Standards of performance for Volatile Organic Liquids Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984."* Per the construction dates given in Application TV-10774, the Flux Asphalt Storage (105F) and Fuel Oil Tank No. 2 (T02) are subject to Subpart Kb. However, storage vessels with a capacity less than 39,890 gallons storing a liquid with a maximum true vapor pressure less than 2.176 psia are exempt from the provisions of Subpart Kb except paragraphs (a) and (b) of §60.116b, which reads as, *"the owner shall keep readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessel."*

Condition No. 3.2.2 stipulates a facility wide restriction limiting fuel oil fired, in all fuel burning sources, that which meets the specifications for fuel oils number 1 and 2 as defined by the American Society for Testing Materials. This, implicitly, imposes a less than 0.5% limit on the sulphur content of fuel oil (A constraint stricter than that of Georgia Rule 391-3-1-.02(2)(g)). Originally, the Company applied for synthetic minor status to avoid being classified, per 40 CFR Part 70 Sections 70.2 & 70.3, as a major Title V source. Thus, Permit **No. 2592-075-12183** contained several conditions which were meant to have the facility not be considered a major source under Title V of the Clean Air Act. On July 15, 1997 permission was granted to construct and operate the Felt Mill and the facility became subject Title V permitting. Nonetheless, Application No. TV-10774 requested keeping the million gal/yr limit on the consumption of fuel oil. Also, per existing permit Condition 11, a 22.4 lb/hr limit was placed on the carbon monoxide emissions from the plant's Blowing Stills to ensure that annual emissions stay below 100 tons per year. The company performed testing, in response to Condition 42, and the result showed average carbon monoxide emissions of 4.46 tons/hr. Accordingly, this Condition will not be carried over to the Title V permit.

To avoid issues related to Georgia Air Quality Control Rule 391-3-1-.02(2)(tt) "*VOC Emissions from Major Sources,*" Atlas Roofing Corporation, formerly, opted for capping its actual VOC emissions to less than 25 tons during any 12 consecutive months period. The Company later requested, in Section 3.30 of Title V Application No. 10774, a condition to increase its voluntary VOC and NOx emissions limits to 50 tons/yr and acknowledged that the facility will become a major source for both pollutants. However, Condition No. 2.1.1 doesn't grant this request because the company needs to demonstrate compliance with Rule (tt) prior to raising its VOC limit to 50 tons/yr. Condition No. 5.3.7 requires submitting semiannual reports to verify compliance with Conditions No. 2.1.1 & 3.2.2.

D. Compliance Status:

See Section VII.F.

E. Operational Flexibility:

See Section VII.A.

F. Permit Conditions:

None other than the limits mandated by the federal New Source Performance Standards and Georgia Air Quality Control Rules (Please see Sections 3.2 and 3.3 of the permit).

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

This permit specifies that a performance test may be required to determine compliance with the emission limits in Part 3.0, and the test methods to be used to determine compliance are listed. A general condition to require notification of any test and for the submission of a test plan is included.

B. Specific Testing Requirements

The initial performance tests required by 40 CFR 60.8 and the current Air Quality Permit have been completed for all existing equipment. Additional performance testing is not required by any applicable regulation, therefore this permit does not contain any conditions to require specific testing for any source.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)

A. General Monitoring Requirements

This permit specifies that any monitoring systems installed should be in continuous operation and that downtime due to maintenance should be minimized.

B. Specific Monitoring Requirements

Emissions from the blow stills are controlled by an Afterburner (FA), and particulate matter emissions from the saturators are controlled by Mist Eliminators (ME1 and ME2). Subpart UU requires that the Afterburner combustion zone temperature and the Mist Eliminator inlet temperatures be continuously monitored and that the average temperatures be determined during the particulate matter performance test. Records are required to be kept, but reporting is not required. These temperatures will be used in this permit to ensure that the particulate matter limits are not exceeded. In the Afterburner, higher combustion zone temperatures indicate more particulate matter destruction. In the Mist Eliminators, lower inlet temperatures indicate more condensation of the asphalt oils and, therefore, more removal of particulate matter. Any three hour average combustion zone temperature or Mist Eliminator inlet temperature outside the established levels must be reported. The Afterburner is also subject to a carbon monoxide limit. Since higher combustion zone temperature indicates more complete combustion, higher temperatures also indicate lower carbon monoxide emission levels. The current permit requires that the pressure drop across the filter and pre-filter on the Mist Eliminators be monitored and recorded once each day. This permit retains this requirement but does not require any reporting of pressure drops.

For the emission units controlled by baghouses and the for the Fume Eliminator (FE) controlling emissions from asphalt storage tanks, the Permittee is required to conduct a check of visible emissions once per operating day. If visible emissions are present, the Permittee must determine if corrective action is necessary and reporting is required if the problems are not corrected within 24 hours. For the baghouses, the Permittee is also required to develop and implement a Preventive Maintenance Program. The Preventive Maintenance Program requires weekly monitoring of pressure drop and maintenance checks. The combination of visible emissions checks and the Preventive Maintenance Program provides a reasonable assurance that the particulate matter and opacity limits are not exceeded.

The permit requires all uncontrolled sources except boilers, tanks, and process heaters be checked daily for obvious mechanical failure and the presence of visible emissions. The permit includes a requirements to take corrective action and keep records. If problems are revealed during the daily check, they must be reported if not corrected within 24 hours.

Georgia rules 391-3-1-.02(2)(ccc), "*VOC Emissions from Bulk Mixing Tanks*" and Rule 391-3-1-.02(2)(vv), "*Volatile Organic Liquid Handling*." are, primarily, design related work practice rules. Accordingly, verification that the Permittee is abiding by them can be administered by EPD's inspectors through site inspections.

All fuel burning sources at the facility burn natural gas and No. 2 fuel oil. The facility has an annual cap the quantity of fuel oil consumed. This permit requires that each shipment of fuel oil be certified to be distillate oil (ASTM D396 numbers 1 or 2). This certification provides assurance that the sulfur limit in Condition 3.2.2 is not exceeded. For particulate matter and opacity, likelihood of violating Rules (b) and (d) from the combustion of No. 2 fuel oil is also minimal. The preamble to Subpart Dc states for boilers, "Because violations of the [20 percent] opacity standards are not expected to occur at distillate oil-fired units, these units are being exempted from the opacity monitoring requirements of the final standards." No monitoring for Rules (b) and (d) are therefore required. No monitoring of natural gas is included since natural gas in Georgia contains insignificant sulfur and is a very clean burning fuel.

C. Recordkeeping and Reporting Requirements:

Records, including identification of any deviations from 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. The Permittee is also required to keep and report the certifications that fuel oil received is distillate oil with a verification that only distillate oil is burned and records on the facility's consumption of fuel oil and natural gas.

VI. Other Record Keeping and Reporting Requirements

General Recordkeeping 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 related information to deviations from applicable requirements.

Specific Recordkeeping and Reporting Requirements:

Tanks T02 & 105F are subject to 40 CFR 60 Subpart Kb. Records of the tank dimensions and capacities are required to be kept. The true vapor pressure of the fuel oil is less than 3.5 kPa, therefore, no other records are required.

VII. Specific Requirements

A. Operational Flexibility

The applicant did not request any alternative operating scenarios in Title V Application No. 10774. The permit does contain general operational flexibility conditions, however.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into this Title V Permit.

C. Insignificant Activities

Refer to Attachment B.

D. Temporary Sources

Atlas Roofing Corporation (Hampton Plant) has not requested a permit to operate any temporary sources.

E. Short-Term Activities

The Company did not report any short-term activities.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

This facility is not involved in any emission trading programs.

H. Acid Rain Requirements

Not applicable.

I. Prevention of Accidental Releases

Not applicable.

J. Stratospheric Ozone Protection Requirements

Not applicable.

K. Pollution Prevention

There are no pollution prevention provisions incorporated in this Title V permit.

L. Specific Conditions

None.

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.

TITLE V APPLICATION REVIEW

Closing Block: We have reviewed and recommend issuance of draft Permit No. 2952-151-0009-V-01-0

Program	Review Engineers	Dates	Review Managers	Dates
SSPP/ASU				
SSCP/ASU				
ISMP				
TOXICS				

Stationary Source Permitting Program Manager

Date

Georgia Department of Natural Resources

Environmental Protection Division, Air Protection Branch

4244 International Parkway, Suite 120, Atlanta, Georgia 30354

404/363-7000; Fax: 404/363-7100

Lonice C. Barrett, Commissioner

Harold F. Reheis, Director

September 19, 2000

MEMORANDUM

TO: James Current

FROM: Mohamed Abdalla

SUBJECT: Atlas Roofing Corporation
Hampton, Georgia (Henry County)
Addendum to Title V Narrative (TV-10774)

The 30-day public comment period for the draft Title V permit for Atlas Roofing Corporation roofing plant located in Hampton, Georgia (Henry County) on July 20, 2000. No comments were received from Atlas Roofing Corporation or Region 4 of the United States Environmental Protection Agency (EPA). Nonetheless, the following "better wording" changes have been reflected in the enclosed final permit:

1. Rule (vv), "*Volatile Organic Liquid Handling and Storage*," prelude for applicability is being subject to other VOC requirements contained in other subsections of the State of Georgia "*Rules for Air Quality Control*." Although this facility had the potential to fall under VOC Rule (tt) RACT, "Reasonably Available Control Technology," the Company opted for taking the voluntary limit, cited in permit condition 2.1.1, to avoid being subject to Rule (tt). Accordingly, all reference to Rule (vv) have been taken out of Table 3.1. However, and since the likelihood of triggering Rule (vv) still exists, reference Rule (vv) is still being kept in the condition 2.3.2.
2. The phrase "*control devices controlling emission from units added or replaced in accordance with the provisions of Condition 7.1.2*" has been added to condition 5.2.5 to extend its applicability to sources which qualify for addition or modifications under operational flexibly.