Facility Name: **Atlanta Marble Manufacturing, Inc.**
City: Decatur
County: Dekalb
AIRS #: 04-13-089-00317

Application #: TV-22949
Date Application Received: October 18, 2014
Permit No: 3089-089-0317-V-03-0

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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 here in 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 **Atlanta Marble Manufacturing, Inc.** 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:

Atlanta Marble Manufacturing, Inc.

2. Parent/Holding Company Name

Atlanta Marble Manufacturing, Inc.

3. Previous and/or Other Name(s)

None

4. Facility Location

224 Rio Circle
Decatur, GA 30030
DeKalb County

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

The facility is located in the Atlanta non-attainment area for ozone and $PM_{2.5}$.

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
3089-089-0317-V-02-0	June 22, 2010	Title V permit Renewal

D. Process Description

1. SIC Codes(s)

3089 - Plastics Products, Not Elsewhere Classified

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)

The facility manufactures cultured marble countertops, sinks, and fiberglass tubs.

3. Overall Facility Process Description

Open molds are cleaned and waxed in mold preparation area. The molds are then sprayed with a clear gel coat in the gel coat booth #1 (GB01) in order to provide a hard gloss finish to the marble product. Arrestor pads (AP01) control PM emissions from coating processes in the gel coat booths. The molds are allowed to cure in either a heated cure tunnel or an open-air cure.

After the mold has cured and hardened, a matrix of catalyzed casting resin and marble dust are poured into the molds in the marble cast area or the marble pour area (MC01 or MP01, respectively). The full molds are placed on cure racks.

After completing the curing process, marble parts are removed from the molds and moved to the grind and final finish areas where they are trimmed, buffed, and polished.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

The facility is a major source for VOC emissions since the Atlanta non-attainment major source threshold decreased from 50 tons per year to 25 tons per year as non-attainment status moved from serious to severe. The facility has a 49-tpy VOC emission limit from its existing permit for NSR avoidance.

Because the facility is located in the Atlanta non-attainment area and emits greater than 25 tpy of VOC, it will be subject to "reasonably available control technology" (RACT) requirements to control its VOC emissions (Georgia Rule 391-3-1-.02(2)(tt)).

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			✓
$PM_{2.5}$	Yes			✓
SO_2	Yes			✓
VOC	Yes	✓		
NO_x	Yes			✓
CO	Yes			✓
TRS	N/A			✓
H_2S	N/A			✓
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		
Total GHGs	Yes			✓

3. MACT Standards

The facility is subject to the MACT, 40 CFR 63 Subpart WWWW, "Reinforced Plastic Composites Production", since HAP emissions from the facility exceed 10 tpy threshold for a single HAP and 25 tpy threshold for combined 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	Yes
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

Condition 2.1.1 establishes a 49-ton per year plant-wide cap on VOC emissions in order to avoid NSR review. The limit was established when the major source threshold was 50 tpy in Atlanta non-attainment area. The major source threshold was changed to 25 tpy in 2014, so now the facility is considered a PSD major source.

B. Applicable Rules and Regulations

None applicable.

C. Compliance Status

Atlanta Marble has not indicated any noncompliance situations.

D. Operational Flexibility

None applicable.

E. Permit Conditions

Condition 2.1.1 limits VOC from the facility to less than 49 tons during any 12 consecutive months to avoid NSR review.

III. Regulated Equipment Requirements

A. Brief Process Description

Open molds are cleaned and waxed in mold preparation area. The molds are then sprayed with a clear gel coat in the gel coat booth #1 (GB01) in order to provide a hard gloss finish to the marble product. Arrestor pads (AP01) control styrene emissions from coating processes in the gel coat booths. The molds are allowed to cure in either a heated cure tunnel or an open-air cure.

After the mold has cured and hardened, a matrix of catalyzed casting resin and marble dust are poured into the molds in the marble cast area or the marble pour area (MC01 or MP01, respectively). The full molds are placed on cure racks.

After completing the curing process, marble parts are removed from the molds and moved to the grind and final finish areas where they are trimmed, buffed, and polished.

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**
GB01	Gel Coat Spray Booth #1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 40 CFR 63 Subpart WWWW	2.1.1, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 5.2.1, 6.1.7, 6.2.1 through 6.2.15	AP01	Gel Coat Filter Bank #1
MC01	Cultured Marble Autocasting Area #1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 40 CFR 63 Subpart WWWW	2.1.1, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1 through 6.2.15	N/A	N/A
MP01	Manual Cultured Marble Casting Area #1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 40 CFR 63 Subpart WWWW	2.1.1, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1 through 6.2.15	N/A	N/A
RT01	Main Resin Tank (60,000 lb)	391-3-1-.02(2)(vv)	2.1.1, 3.4.4, 6.1.7, 6.2.1, 6.2.2, 6.2.3	N/A	N/A

* 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.

C. Equipment & Rule Applicability

Emission and Operating Caps:

None applicable.

Rules and Regulations Assessment:

With potential to emit more than 50 tpy of VOC, more than 10 tpy of any single HAP, and more than 25 tpy of combined HAP, Atlanta Marble Mfg.'s operations using VOC and HAP-containing materials are subject to Title V and Georgia Air Quality Rule 391-3-1-.02(2)(tt) requirements. The facility is a major source with respect to non-attainment NSR regulations since VOC emissions are over 25 tpy.

40 CFR 63 Subpart WWWW, "Reinforced Plastic Composites Production", applies to open molding operations at Atlanta Marble Mfg using HAP-containing materials. The NESHAP requires regulated sources to meet a total HAP emissions limit based on a point value system weighted and determined by the facility's method of operation and application methods. Sources are also subject to work practice standards that include utilizing cleaning solutions that do not contain HAPs and ensuring all HAP-containing storage vessels remain covered. If total HAP emissions for an existing source from centrifugal casting or continuous lamination/casting operations exceed 100 tons per year, then the facility must install pollution abatement technology in order to realize a 95% decrease in emissions. Atlanta Marble Mfg. is an existing source that does not operate any centrifugal or continuous lamination/casting operations; therefore, the facility is not subject to that control requirement as specified in 40 CFR 63.5799 (not required to calculate emissions to determine if 95% control is applicable because the facility does not operate a centrifugal or continuous lamination/casting operation).

Ga. Rule (b), "Visible Emissions", applies to all sources of visible emissions. Visible emissions are limited by this rule to less than 40 percent opacity, actual visible emissions from all operations are expected to be much less than the allowable. It's incorporated into permit as Condition 3.4.1.

Ga. Rule (e), "Particulate Emission from Manufacturing Processes", applies to all particulate-generating processes that are not covered by a more specific rule or regulation. Particulate emissions are limited by the equation E = 4.1(P0.67) incorporated into the permit as Condition 3.4.2.

Ga. Rule (tt), "VOC Emissions from Major Sources", applies to counties in the nonattainment area (included DeKalb County) that have the potential VOC emissions, not subject to another VOC rule, in amounts equal to or greater than 25 tpy. The facility is required to use "reasonably available control technology" (RACT) in controlling VOC emissions. RACT means the utilization and/or implementation of water-based or low solvent coatings, VOC control equipment such as incineration, carbon absorbtion, refrigeration, or other like means as determined by the Director to represent reasonably available control technology for the source category in question. The facility's VOC emissions are composed mainly of styrene, both a HAP and a VOC. As a result, the facility is also subject to the 40 CFR 63 Subpart WWWW (Reinforced Plastic Composites NESHAP). The Division is adopting the standards of NESHAP Subpart WWWW as RACT per Ga. Rule (tt) because the majority of facility emissions are comprised of both HAP and VOC. However, Ga. Rule (tt) applies to all VOC. Thus, the RACT provision based upon the standards of the NESHAP will apply to all VOC at this facility as well. It's incorporated into the permit as Condition 3.4.3.

Ga. Rule (vv), "Volatile Organic Liquid Handling and Storage", applies to storage tanks with capacities greater than 4,000 gallons. Rule (vv) limits the transfer of VOL other than gasoline from a delivery vessel to a storage tank unless the tank has submerged fill lines. These requirements are detailed in Condition 3.4.4.

D. Compliance Status

There are no known compliance issues for specific regulated equipment at the facility.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Condition 3.3.1 establishes 40 CFR 63 Subpart WWWW, Reinforced Plastic Composites.

Condition 3.3.2 specifies operations that are excluded from the 40 CFR 63 Subpart WWWW requirements.

Condition 3.3.3 describes the applicable HAP emission limits (or HAP content limits) as specified by Reinforced Plastic Composites NESHAP for specific facility operations (open molding).

Condition 3.3.4 describes the applicable work practice standards of the Reinforced Plastic Composites NESHAP.

Condition 3.4.1 establishes Ga. Rule (b).

Condition 3.4.2 establishes Ga. Rule (e).

Condition 3.4.3 establishes the RACT ("reasonably available control technology") as required by Ga. Rule (tt) and describes VOC emission limits (or VOC content limits) for specific facility operations (open molding).

Condition 3.4.4 establishes Ga. Rule (vv).

Condition 3.5.1 details the arrestor pad change-out procedures for Emission Unit Group GB01.

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

1. Individual Equipment

None applicable.

2. Equipment Groups (all subject to the same test requirements):

None applicable.

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. Individual Equipment:

Condition 5.2.1 requires that the pressure drop on emission unit GB01 be recorded once per day of operation. The facility monitors this parameter in order to determine when filters and/or pads require replacement (as required by Conditions 3.5.1). The filter or pad manufacturer's specifications establish the pressure drop range that, when exceeded, filter or pad replacement must be done.

No monitoring is required for opacity or particulate matter for Emission Units MC01 and MP01 listed in Conditions 3.4.1 and 3.4.2. The facility uses only natural gas and propane for its combustion process, typically producing insignificant opacity and particulate emissions. The organic VOC and HAP used likewise have insignificant levels of opacity and particulate matter emissions.

2. Equipment Groups (all subject to the same monitoring requirements):

None applicable.

C. Compliance Assurance Monitoring (CAM)

CAM, 40 CFR Part 64 is not applicable for the facility since there are no control equipment defined in CAM at this facility.

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.

Template Conditions 6.1.3 and 6.1.4 were updated in September 2011 to allow ~60 days to submit periodic reports. Alternative reporting deadlines are allowed per 40 CFR 70.6, 40 CFR 60.19(f) and 40 CFR 63.10(a).

B. Specific Record Keeping and Reporting Requirements

Condition 6.2.1 requires the maintenance of records of any materials used throughout the facility containing VOC or HAP.

Conditions 6.2.2 and 6.2.3 describe the emission calculations, notifications and reporting the facility must do to demonstrate compliance with the plant-wide VOC emission limit specified in Condition 2.1.1 (i.e., 49 tons per 12 consecutive months). The Permittee is to perform VOC emission calculations on a monthly basis, maintain records of these calculations, and notify the Division if VOC emissions exceed 4.08 tons during any calendar month. From these monthly records, the Permittee is to calculate a 12-month rolling total of VOC emissions for each calendar month. These totals are to be included in the Permittee's semi-annual excess emissions, exceedances, and /or excursions report.

Conditions 6.2.4 through 6.2.13 describe the emission calculations, notifications and reporting the facility must do to demonstrate compliance with compliance with the HAP emission limits of 40 CFR 63 Subpart WWWW, Reinforced Plastic Composites.

Conditions 6.2.14 and 6.2.15 describe the emission calculations, notifications and reporting the facility must do to demonstrate compliance with the VOC emission limits of Ga. Rule (tt)’s RACT requirements (specified in Condition 3.4.3).

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

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.