

Facility Name: **MAAX US Corp.**

City: Valdosta

County: Lowndes

AIRS #: 04-13-185-00023

Application #: TV-639216

Date SIP Application Received: May 26, 2022

Date Title V Application Received: May 26, 2022

Permit No: 3088-185-0023-V-06-1

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## Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. 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 issued pursuant to: (1) Sections 391-3-1-.03(1) and 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 following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

**I. Facility Description****A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
3088-185-0023-V-06-0	January 11, 2021	Title V renewal

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

MAAX US Corp. (hereinafter “facility”) is a potentially major source in regard to the PSD/NSR regulations due to the fact that potential VOC emissions from the facility exceeded 250 tons per year. VOC emissions from the facility have been capped below 250 tons per year to avoid PSD/NSR, by current Title V Permit No. 3088-185-0023-V-06-0 with Condition No. 2.1.1.

**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 <sub>10</sub>	✓			✓
PM <sub>2.5</sub>	✓			✓
SO <sub>2</sub>				
VOC	✓	✓		
NO <sub>x</sub>				
CO				
TRS				
H <sub>2</sub> S				
Individual HAP	✓	✓		
Total HAPs	✓	✓		
Total GHGs	✓			✓

**II. Proposed Modification**

## A. Description of Modification

MAAX US Corp. proposes to update the ID No. and Description of existing emission units and permit an additional gel coat booth G400.

## B. Emissions Change

**Table 3: Emissions Change Due to Modification**

<b>Pollutant</b>	<b>Is the Pollutant Emitted?</b>	<b>Net Actual Emissions Increase (Decrease) (tpy)</b>	<b>Net Potential Emissions Increase (Decrease) (tpy)</b>
PM	✓	0.27	2.33
PM <sub>10</sub>	✓	0.27	2.33
PM <sub>2.5</sub>	✓	0.27	2.33
SO <sub>2</sub>			
VOC	✓	0	0
NO <sub>x</sub>			
CO			
TRS			
H <sub>2</sub> S			
Individual HAP	✓	14.64	14.64
Total HAPs	✓	14.64	14.64

## C. PSD/NSR Applicability

The facility has been capped volatile organic compounds (VOC) below 250 tons per year to avoid PSD/NSR, by current Title V Permit No. 3088-185-0023-V-06-0 with Condition 2.1.1. The proposed modification will not change the VOC PSD synthetic minor limit, and therefore will not trigger the PSD/NSR review.

**III. Facility Wide Requirements****A. Emission and Operating Caps:**

The VOC PSD synthetic minor limit will remain the same after the proposed modification.

**B. Applicable Rules and Regulations**

Unchanged.

**C. Compliance Status**

The facility is currently operating in compliance with all applicable rules and standards.

**D. Permit Conditions**

Unchanged.

**E. Georgia Toxic Guidelines**

The Georgia Air Toxics Guidelines prescribes the analytical techniques to determine whether Toxic Air Pollutant (TAP) emissions are expected to cause adverse impacts. Regarding the Toxic Impact Assessment (TIA), the primary Gelcoat used in the facility contains Styrene (100-42-5), Petroleum Naphtha (64742-95-6) and unspecified solids. Of these chemicals, only Styrene is a TAP.

MAAX US, Corp. didn't have a TIA for Styrene in the past, a TIA is needed. The facility wide annual potential emissions for Styrene currently are greater than the MER level of 121.67 tons/yr and the modification will increase the annual potential emissions for Styrene too.

MAAX US, Corp. currently has a facility wide potential VOC emissions limit of 249 tpy (Condition 2.1.1). Therefore, 249 tons/yr Styrene emission has been used for TIA since styrene is a VOC.

SCREEN3 was used to evaluate the short-term (1-hour) maximum ground level concentration (MGLC). One of the stacks to function as a representative stack. The other stacks have the same/similar parameters. The stack parameters which were provided by the facility and emission rates are summarized in the following tables:

Emission Point	Stack ID	Modeling Parameters			
		d (m)	v (m/s)	T <sub>s</sub> (K)	H <sub>s</sub> (m)
Gelcoat	01	0.61	18.29	293	12.80

Pollutant	Uncontrolled Emissions (ton/yr)	Uncontrolled Emissions (lb/hr)
Styrene	249	56.85

The modeled 1-hour MGLC of  $1.027E+04 \mu\text{g}/\text{m}^3$  at 50 meters was then converted to the shorter and longer-term MGLC's for comparison. The Screen 3 results are as follows:

Pollutant	Long Term MGLC ( $\mu\text{g}/\text{m}^3$ ) (Annual)	Long Term ( $\mu\text{g}/\text{m}^3$ ) (Annual)	15-min MGLC	15-min AAC
Styrene	8.2E+02	1.00E+03	1.3566E+04	8.520E+04

The Screen 3 results show that impacts of styrene from the facility are below the AAC's for the chemical.

**IV. Regulated Equipment Requirements****A. Brief Process Description**

The facility manufactures fiberglass bath fixtures (bathtubs, showers, and sinks). Molds for fiberglass units are made either at the corporate plants and/or at this facility (Source Code R100). These molds are sprayed with a layer of gel coat in the Gel Coat Station G100, G200, G300, and/or G400; then fiberglass and resin are applied in the Chop Station R100, R200, or R300. After curing, units are trimmed, polished, and have ports installed in a finishing area.

**B. Equipment List for the Process**

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
G100	Gel Coat Station (Line A/B)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart A 40 CFR 63 Subpart WWWW	GP10	Particulate Filter
G300	Gel Coat Station (Line C/D)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart A 40 CFR 63 Subpart WWWW	GP30	Particulate Filter
G200	Gel Coat Station (Line E)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart A 40 CFR 63 Subpart WWWW	GP20	Particulate Filter
<b>G400**</b>	<b>Gel Coat Station (Line F)</b>	<b>391-3-1-.02(2)(b)</b> <b>391-3-1-.02(2)(e)</b> <b>40 CFR 63 Subpart A</b> <b>40 CFR 63 Subpart WWWW</b>	<b>GP40</b>	<b>Particulate Filter</b>
R100	Resin Chop Station 1	391-3-1-.02(2)(b)	RP10	Particulate Filter
R200	Resin Chop Station 2	391-3-1-.02(2)(e)	RP20	Particulate Filter
R300	Resin Chop Station 3	40 CFR 63 Subpart A 40 CFR 63 Subpart WWWW	RP30	Particulate Filter

\* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

\*\* Proposed within current application

**C. Equipment & Rule Applicability****Emission and Operating Caps –**

None

**Applicable Rules and Regulations -**

The new Gel Coat Station (G400) is subject to 391-3-1-.02(2)(b), 391-3-1-.02(2)(e), 40 CFR 63 Subpart A and 40 CFR 63 Subpart WWWW. G400 is subject to all existing conditions of Title V Permit No. 3088-185-0023-V-06-0

D. Permit Conditions

Condition 3.5.1 has been modified to update the ID Nos. and add the new gel coat booth G400 with associated control device GP40.

**VI. Monitoring Requirements (with Associated Record Keeping and Reporting)**

Condition 5.2.2 has been modified to update the ID Nos. and add the control device GP40.



**VII. Other Record Keeping and Reporting Requirements**

Condition 6.1.7c.i. has been modified to update the ID Nos. and add the control device GP40.

**Addendum to Narrative**

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//