INFORMATION RELATIVE TO
THE DRAFT TITLE V OPERATING PERMIT
December 10, 2024

GENERAL FACILITY INFORMATION

Facility Name: Lighthouse Marble Works, Inc.
Facility Address: 8212 Woolmarket Road
Biloxi, MS 39532
County: Harrison
SIC Code(s): 3281 (Cut Stone and Stone Products)
NAICS Code(s): 327991 (Cut Stone and Stone Product Manufacturing)

APPLICATION SUMMARY

Permit No.: 1020-00163

Permit Action: Renewal with no facility modifications

Permit Folder: PER20230001

Application Receipt Date: June 27, 2023

Application Deemed Complete: August 12, 2023

CBI Submitted?: No

NSPS (Part 60): N/A

NESHAP (Part 61): N/A

NESHAP (Part 63): Subpart WWWW

112(r) / RMP: N/A

Other: N/A

FACILITY DESCRIPTION

Lighthouse Marble Works Inc. is a cultured marble products manufacturing facility located in Biloxi (Harrison County), Mississippi. The facility applies gel coat and catalyst via atomized application to open molds in the gel coat spray booth. The gel coat is cured in a drying oven and then resin and various pigments and marble dust are poured into the molds and allowed to cure. The cured marble is removed from the mold; the mold is cleaned; and a mold release agent is applied to the mold prior to the next application of gel coat. The cultured marble is then sawed, grinded, and sanded to produce a finished product (e.g., a sink, vanity, or tub). The gel coat booth is equipped with filters to capture overspray, and the grinding and sanding booths are controlled by baghouses.

The following table summarizes the emission points addressed in the Title V Operating Permit (TVOP).

Emission Point	Description
AA-001	Gel Coat Spray Operation (Ref. EP-1) – Gel coat is sprayed onto open molds using a hand-held spray gun in a spray booth equipped with filters to remove overspray.
AA-002	Main Gel Coat Cure Oven (Ref. EP-2) – Sprayed gel coat molds pass through a 0.2 MMBtu/hr, natural gas-fired cure oven.

Emission Point	Description
AA-003	Marble and Solid Surface Grinding Operations (Ref. MM BH) – Cured solid surface products are sent through a belt sander and controlled by a baghouse that vents inside the building.
AA-005	Grinding, Sawing, and Finishing Operations (Ref. SS BH) – Solidified marble finishing operations include but are not limited to, grinding, sawing, and sanding, with emissions controlled by a baghouse that vents inside the building.
AA-006	Fugitive Emissions from the Main Manufacturing Building – including, but not limited to, main resin mechanical application, mold release, and mold cleaning.
AA-007	Fugitive Emissions from the manual application of Fiberglass Resin

TITLE V SOURCE APPLICABILITY

The facility's potential-to-emit (PTE) does not exceed the Title V major source threshold of 100 tons per year (tpy) for any criteria air pollutant. However, the facility's potential-to-emit hazardous air pollutants (HAPs) exceeds the Title V major source threshold of 10 tpy for the individual HAP, styrene. Therefore, the facility must maintain a TVOP.

Facility-Wide Potential-to-Emit Summary[1]

Pollutant	PTE Emissions (tons/yr)
Particulate Matter (TSP)	2.03
PM_{10}	2.03
$PM_{2.5}$	2.03
Sulfur Dioxide (SO_2)	0.0005
Nitrogen Oxides (NO_x)	0.086
Carbon Monoxide (CO)	0.072
Volatile Organic Compounds (VOC)	27.18
Total Reduced Sulfur (TRS)	0
Lead	0
CFC/HCFC	0
Total HAP	19.74

[1] The PTE emissions reflect any emission limits or enforceable restrictions included in the proposed permit.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY

The facility is not one of the 28 categorical facilities listed in 40 CFR 52.21(b)(1)(i)(a); therefore, the PSD threshold for a major source is 250 tpy. The facility has the potential to emit less than 250 tpy of each of the regulated NSR pollutants; therefore, it is an existing minor source under the PSD program. No modifications are being proposed as part of this permitting action that would require a PSD evaluation.

FACILITY MODIFICATIONS AND/OR PERMIT CHANGES

The facility submitted a timely application for renewal of their TVOP which expired on February 29, 2024. The facility is not requesting any modifications to their existing operations. The only changes made to the permit are for clarity or to address revisions to 40 CFR Part 63, Subpart WWWW promulgated in 2020. With this action, two fugitive emission sources (Emission Points AA-006 and AA-007) were added to better address appliable requirements of Subpart WWWW.

COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY

40 CFR Part 64 specifies the requirements for CAM. The general applicability of this rule can be found in 40 CFR 64.2 and requires a Title V source to comply with the CAM requirements if all three of the following criteria are met for a pollutant-specific emission unit (PSEU):

1. The unit is subject to an emission limitation or standard for a regulated air pollutant other than exemptions under 40 CFR 64.2(b)(1);
2. The unit uses a control device to comply with the standard; and
3. The unit has pre-control emissions exceeding Title V major source threshold.

CAM **does not apply** to this facility since no pre-controlled emissions of PM exceed 100 tpy.

CAM Applicability Table for Sources with Control Devices

Emission Point ID	Control Device (not including inherent controls)	Applicable Limit/ Standard	Is standard exempt? (Yes/No)	Pre-Control > 100 tpy (Yes/No)	CAM Applies? (Yes/No)	Type of CAM PSEU (Large/Other)
AA-001	PM Filters	PM process weight	No	No	No	N/A
AA-003	Baghouse	PM process weight	No	No	No	N/A
AA-005	Baghouse	PM process weight	No	No	No	N/A

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) APPLICABILITY

The facility is a major source of HAPs; therefore, only those subparts applicable to major sources, rather than area sources, were evaluated.

40 CFR 63, Subpart WWWW – *NESHAP for Reinforced Plastic Composites Production*: Subpart WWWW applies to reinforced plastic composites production facilities located at major

sources of HAP emissions. Reinforced plastic composites production is limited to operations in which reinforced and/or nonreinforced plastic composites or plastic molding compounds are manufactured using thermoset resins and/or gel coats that contain styrene to produce plastic composites. Reinforced plastic composites production also includes cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites. The facility **is subject** to Subpart WWWW and is considered an existing source (constructed in 1999) that emits less than 100 tpy of HAP; therefore, organic HAP standards in Table 3 and work practice standards in Table 4 of Subpart WWWW apply.

Subpart WWWW was revised in 2020 (85 FR 15960, March 20, 2020) to address the residual risk and technology review; startup, shutdown, and malfunction provisions; and electronic reporting to EPA. The residual risk and technology review resulted in no changes to Subpart WWWW. EPA eliminated the startup, shutdown, and malfunction exemption and required compliance with the emission limits of Subpart WWWW at all times. Lastly, EPA requires affected facilities submit certain reports to EPA via their Electronic Reporting Tool.

40 CFR 63, Subpart DDDDD – *NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*: Subpart DDDDD applies to industrial, commercial, or institutional boilers or process heaters located at major HAP sources. The facility does not operate any boilers. The cure oven heats the molds directly rather than indirectly; therefore, the oven does not meet the definition of a process heater. Thus, Subpart DDDDD **does not apply** to the facility.

NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

Based on the processes and equipment detailed in the application, no New Source Performance Standards in 40 CFR Part 60 apply to this facility.

SPECIFIC APPLICABLE REQUIREMENTS

Emission Point No.	Pollutant	Draft Permit Emission Limits	Monitoring Requirements
AA-001 AA-002 AA-006 AA-007	Organic HAP	522 lb organic HAP/ton gel coat	The requirements of 40 CFR 63, Subpart WWWW apply, which include monitoring actual resin and gel coat use and HAP content to demonstrate compliance with the limits via emission factors used in Table 1 of Subpart WWWW.
AA-006		88 lb organic HAP/ ton resin	
AA-007		87 lb organic HAP/ ton resin	
AA-003 AA-005	PM (filterable)	Operate baghouses at all times	Conduct weekly observations of visible emissions from the baghouses and weekly inspections and any required maintenance. (Note that these baghouses vent inside the manufacturing building.)
Facility-wide	PM (filterable)	$E=4.1*p^{0.67}$	Because sources of PM are controlled and vent inside the building, there are negligible emissions of PM.