

**STATEMENT OF BASIS
HB&G BUILDING PRODUCTS, INC.
TROY ALABAMA
FACILITY NO. 210-0003**

INTRODUCTION:

On March 13, 2025, the Department received applications from HB&G Building Products, Inc. for a renewal of the Title V Major Source Operating Permit (MSOP) for its fiberglass manufacturing facility in Troy, Alabama. Additional information was requested and received on August 12, 2025 and April 27, 2026. HB&G is an existing facility that manufactures fiber resin polymer columns and polyurethane molded architectural components. The facility has 150 fiberglass column spinning machines with associated equipment and two pultrusion machines. The facility operates 8 hours per day, 5 days a week, and 50 weeks per year.

The initial MSOP was issued on August 9, 2000, and this is the fifth renewal. The current MSOP expired on September 14, 2025, but a renewal application was received on March 13, 2025. ADEM Admin. Cond r. 335-3-16-12(c) states “If a timely and complete application for a permit renewal is submitted, but the Department fails to take final action to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied and any permit shield granted for the permit shall continue in effect during that time”; therefore, the current MSOP was administratively continued.

The facility is located in Pike County, which is in compliance with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against HB&G Building Products, Inc. necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at <https://echo.epa.gov/> (Search using Facility ID AL0000000110900003).

CHANGES:

Source 003: Display Shop Paint Booth has been removed from the permit because it has been removed. Slight administrative changes have been made to the other units from the previous MSOP.

OPERATIONS:

PermaCast Column Production

The PermaCast lines consist of a mixing operation and formulating bulk raw materials (styrene based polyester resin, silica-based filler, marble dust and titanium dioxide). Ingredients are charged to one of five high shear mixers. After the batch is prepared, the slurry is transferred to one of eleven low shear-holding mixers. The slurry is drawn from the holding mixers to the spin cast-molding room as needed. Spin molding batches are prepared for one column spin molder at a time. Depending on the column size, a specific quantity of slurry is prepared with fiberglass strands and a catalyst, which is immediately charged to the spin molder.

Architectural Masterworks Operation

The Architectural Masterworks (AM) spray booths operation consists of four booths that produce caps, bases, capitals, and molding for columns. Rubber molds are coated with a primer, which serves as a release agent, before pouring a urethane foam mixture into the mold.

Pultrusion Operation

The pultrusion operation produces reinforced plastic columns by pulling a continuous reinforcing material that has been impregnated with resin through a die of the desired cross section to shape and cure the resin on one of two pultrusion machines. This unit produces square columns in 8” and 10” widths.

EMISSIONS:

Emissions from the facility are mostly styrene. Styrene is both a volatile organic compound (VOC) and a hazardous air pollutant (HAP). All potential and actual styrene emissions were calculated using emission factor equations from 40 CFR Part 63, Subpart WWWW. Table 1 below shows the facility’s approximate potential and actual emissions for VOCs, HAPs and particulate matter (PM). The potential emissions are based on 8,760 hours of operation per year at the maximum capacity. Actual emissions are based on 2,000 hours of operation per year within emission limitations. HB&G has a requested a VOC emission limit of 245 TPY to avoid being a major source for PSD. The potential HAP emissions are also emitted in such quantities as to exceed Title V major source thresholds.

Table 1: Facility wide

	ACTUAL	POTENTIAL	REQUESTED LIMIT
VOCs	57.65	278.26	245
HAP	47.38	233.28	
Styrene	36.86	187.2	
PM-10	3.37	14.76	

Table 2: Permacast Operation

	ACTUAL	POTENTIAL
VOCs	43	188.34
HAP	43	188.34
Styrene	33	144.54
PM-10	3.05	13.36

Table 3: AM Primer Booths

	ACTUAL	POTENTIAL
VOCs	10.79	47.26
HAP	0.52	2.28
PM-10	0.32	1.4

Table 4: Pultrusion

	ACTUAL	POTENTIAL
VOCs	3.86	42.66
HAP	3.86	42.66
Styrene	3.86	42.66

APPLICABLE REGULATIONS:

Title V

The entire facility is subject to the Title V permitting program since potential emissions of HAPs and VOCs are above the significance thresholds for Title V applicability.

Prevention of Significant Deterioration (PSD)

The operations at HB&G are not listed under ADEM Admin. Code 335-3-14-.04(2)(a); therefore, the applicable threshold for New Source Review (NSR) permitting is 250 tons per year. HB&G has elected to limit VOC emissions to 245 tons per year. This limit was established in the initial MSOP issued on August 9, 2000. The potential emissions of all other regulated NSR pollutants from this facility are below the major source threshold of 250 tons per year; therefore, HB&G is considered a synthetic minor source with respect to PSD.

New Source Performance Standards (NSPS)

There are no NSPS, as listed in 40 CFR Part 60, that apply to the facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology (MACT)

HB&G is subject to the NESHAP, as listed in 40 CFR 63, Subpart WWWW, Reinforced Plastic Composite (RPC) MACT. The facility is considered an existing facility under the conditions of §63.5795 because fiberglass operations at the site began prior to August 2, 2001. Under 40 CFR 63.5805(a)(2) of the Fiberglass MACT, because HB&G is an existing facility with actual emissions of organic HAPs from centrifugal casting operations of less than 100 tons per year, it is required to meet the applicable emissions limits as listed in Table 3 of this subpart.

Unit 001: 150 Fiberglass Column Spinning Molders

Resin is applied to spin molders with the molds open and the molds are vented during spinning. As a result, the spin molders are subject to the centrifugal casting limit of 25 lb of styrene per ton of resin according to Table 3 of the RPC MACT. Should actual emissions from centrifugal casting reach 100 tons per year or more, the facility would be required to reduce the total organic HAP emissions from centrifugal casting by at least 95 percent by weight or begin meeting one of the emission limits listed in Table 5 of the RPC MACT. There are no work practice standards in Table 4 of the subpart for this operation. The operation is subject to applicable recordkeeping and reporting requirements of this subpart.

For the centrifugal casting operation, HB&G is required to use one of the compliance options listed in 40 CFR 63.5810 (a) through (d) to meet the emission limits in Table 3. Under 40 CFR 63.5810, HB&G is allowed to switch between compliance options and is required to complete the emissions calculations within 30 days following the end of each month. HB&G is currently using the compliance option found in 40 CFR 63.5810 (b).

Unit 002: AM Primer Booths

The AM Primer Booths are not subject to the requirements of the RPC MACT. There are also no other MACTs which apply to the operation.

Unit 004: 2 Pultrusion Machines

The facility's pultrusion operations are also subject to the RPC MACT. Under Subpart WWWW, HB&G is required to reduce organic HAP emissions from pultrusion by at least

60 weight percent because all parts manufactured have a cross section area of less than 60 square inches and less than 1,000 reinforcements. HB&G is required to use one of the compliance options listed in 40 CFR 63.5830 (a) through (e) to meet the emission reduction requirements in Table 3. HB&G will use the compliance option found in 40 CFR 63.5830(b) in which the 60 weight percent reduction is achieved by enclosing resin tanks. 63.5830(b) does not require testing, but includes requirements for how the enclosures shall be designed and maintained to achieve the 60 weight percent reduction in emissions. HB&G's pultrusion operation do not use a radio frequency pre-heat and there is no direct die injection. The operation is also subject to work practice standards listed in Table 4 of the subpart, as well as applicable recordkeeping and reporting requirements of this subpart.

Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring (CAM) is not applicable because HB&G is subject to MACT standards that were promulgated after November 15, 1990. According to 40 CFR 64.2(b)(1)(i) on exemptions from CAM, emission limitations or standards proposed after November 15, 1990 pursuant to section 111 or 112 of the Clean Air Act are exempt from CAM requirements, and there are no other source specific standards applicable to this facility.

MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS:

Given the extremely large compliance margins with the synthetic minor for PSD limitations (~57 tpy of actual emissions vs. a limit of 245 tpy) and the large compliance margin with the MACT threshold for add-on controls (~43 tpy of vs. a threshold of 100 tpy of actual emissions from centrifugal casting), the Department finds that requiring source testing at this facility is unnecessary at this time.

According to NESHAP 40 CFR 63, Subpart WWWW (63.5796), the facility "may also use the organic HAP emissions factors calculated using the equations in Table 1 to this subpart, combined with resin and gel coat use data, to calculate [its] organic HAP emissions." HB&G is required to keep records of the type and quantity of each VOC and HAP containing material used each calendar month, the quantity of VOCs and HAPs emitted each calendar month, and the rolling 12-month total of VOCs and HAPs emitted from fiber glass operations. These records will be evaluated by the Department during the annual inspection. The facility is required to submit a quarterly report detailing emission totals (Section 5, Proviso 2 of units 001-004), a deviation report on a semi-annual basis (Section 5, Proviso 3 of units 001-004), and an Annual Compliance Certification (ACC) (General Proviso 12.).

FUGITIVE DUST:

The fugitive dust potential was evaluated and is not expected to be of concern at this facility. The plant property is grassed, and travel areas are covered by asphalt, concrete, or gravel surfaces. No stockpiles of dust producing materials are planned. Therefore, it has been determined by the Department that a dust plan is not required at this time.

ODORS:

This facility uses products containing styrene, which is a pollutant with a strong odor. Should obnoxious odors arise from plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Department that these measures are technically and economically feasible.

RECOMMENDATION:

I recommend that after a public comment period and EPA review, Major Source Operating Permit 210-0003 be issued to HB&G Building Products, Inc. for the operations of their fiber glass operations and associated equipment.

John Robert Gill
Engineering Services Branch
Air Division

April 29, 2026

Date

JRG/jrg