STATEMENT OF BASIS
American Fiberglass Products, Inc.
Double Springs, Winston County
Facility No. 713-0016

INTRODUCTION:

On April 10, 2025, American Fiberglass Products, Inc. submitted a Major Source Operating Permit (MSOP) renewal application for the manufacture of fiberglass tubs and showers (SIC #3079). The facility is located in Double Springs, Alabama in Winston County.

American Fiberglass manufactures showers and tubs using fiberglass reinforced plastics. The facility is a major source with respect to Title V for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

The facility originally began operations in 1989. The initial Title V MSOP was issued on September 1, 2000, and this is the fifth renewal. The current MSOP expires on October 13, 2025. The renewal application was due no later than April 12, 2025 and was received April 10, 2025.

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

There are no current or ongoing enforcement actions against American Fiberglass 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 AL000000011300016).

CHANGES:

There are no changes from the previous MSOP.

OPERATION:

American Fiberglass operates a single shift 5 days a week. This facility consists of two fiberglass lines that manufacture shower and tub units for residential and mobile homes. Both lines use a conveyor line where the shower/tub unit molds are manufactured, waxed and sprayed with gelcoat, resin and fiberglass. The gelcoat is a clear resin mix that is sprayed onto the bare waxed mold surface, forming the outer finished surface of the shower/tub unit. The shower/tub unit finish is actually completed before the unit is made. The gelcoat is applied with special air-powered or airless spray guns that mix the gelcoat resin and methyl ethyl ketone peroxide (MEKP), a catalyst, together in an external atomized mist. After the gelcoat has been applied, the units are then sprayed with a resin and fiberglass for strength. Spray lay-up is an automated fiberglass lamination technique that uses a special spray gun device called a chopper gun. A chopper gun applies the glass

fiber reinforcement and resin simultaneously, without the manual steps required in hand lay-up. A rotating knife on the gun chops a continuous bundle of glass fibers, called roving, into approximately one-inch pieces that are thrown out onto the mold surface. At the same time, two streams of both resin and MEKP catalyst are mixed together in an external spray. This catalyzed resin spray coats the chopped glass fibers and mold surface. Once the proper thickness of wet glass fibers has been deposited, a rolling process identical to the hand lay-up rolling is used to compact and smooth the laminate. Clean up is required following most gelcoat and spray lay-up operations.

EMISSIONS:
Styrene is the major HAP for American Fiberglass, and it is also a VOC. HAP emissions are calculated using emission factors from Table 1 of 40 CFR Part 63, Subpart WWWW. The emission factors are then applied to the amount of gelcoat or resin material used by the facility. Based on the information submitted, American Fiberglass's VOC and HAP uncontrolled potential and actual emissions are shown below. The potential emissions were calculated based on 8,760 operating hours per year. VOC emissions are subject to a synthetic limit of 245 tons per year. This limit was established in the facility's Air Permit, issued on December 21, 1995 and incorporated into the Title V permit on September 1, 2000. The actual emissions are the 12 month rolling total emissions through December 2024. When the facility calculates actual emissions, an appropriate emission factor is determined based on the styrene content of the specific resin or gelcoat used in production. The potential emissions were estimated based on operating at maximum capacity 24 hours per day, 7 days per week.

	Potential Emissoins (tpy)	Actual Emissions 2024 (tpy)
Styrene	641.41	146.88
HAPs	641.41	146.88
VOCs	641.41	146.88

This facility is a major source of HAP emissions with respect to Title V since it actually emits more than ten tons of a single HAP and more than twenty-five tons of any combination of HAP. American Fiberglass also has the potential to emit greater than 100 tpy of VOCs. No other criteria air pollutants are emitted in sufficient quantities, actually or potentially, to exceed the Title V major source thresholds.

APPLICABLE REGULATIONS:
New Source Performance Standards (NSPS)
There are no NSPS, as listed in 40 CFR Part 60, that apply to American Fiberglass.

Maximum Achievable Control Technology (MACT)
American Fiberglass is subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP): Reinforced Plastic Composites (RPC) Production, as listed under 40 CFR Part 63, Subpart WWWW (RPC MACT). The facility is considered an existing facility under the conditions of §63.5795 because fiberglass manufacturing operations existed at the site prior to August 2, 2001. Because the facility is an existing facility and

does not have any centrifugal casting or continuous lamination/casting operations, it is not required to calculate or report emissions according to §63.5799 and is not subject to the requirement to install any add-on controls should emissions meet or exceed 100 tons per year. Under §63.5805 (b) of the RPC MACT, American Fiberglass is required to meet the applicable emissions limits for organic HAP listed in Table 3 of the subpart and work practice standards listed in Table 4 of the subpart. The fiberglass operation at American Fiberglass is an open molding process therefore it 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, American Fiberglass is allowed to switch between compliance options and is required to complete the emissions calculations within 30 days following the end of each month. The work practice standards for this facility are for a cleaning operation and a HAP-containing materials storage operation. The facility is also subject to the applicable recordkeeping and reporting requirements of this subpart.
American Fiberglass is required to meet the applicable emissions limits of 354 lb of styrene per ton or resin and 267 lb of styrene per ton of gelcoat as listed in Table 3 of Subpart WWWW.

Prevention of Significant Deterioration (PSD)
The operations at American Fiberglass Products are not listed under ADEM Admin. Code 335-3-14-.04(2)(a), thus the applicable threshold for New Source Review (NSR) permitting is 250 tons per year. Since VOC emissions are being limited to 245 tons per year and the potential emissions of all other regulated NSR pollutants from this facility are below the major source threshold of 250 tons per year, American Fiberglass is considered a synthetic minor source with respect to PSD. The emission limit is found in Section 2, Proviso 1. for each unit of the permit.
Compliance Assurant Monitoring (CAM)
CAM is not applicable because American Fiberglass 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:
According to NESHAP 40 CFR Part 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." Additionally, American Fiberglass is required to include demonstration of compliance with the 40 CFR Part 63, Subpart WWWW monitoring requirements. The fiberglass operation at American Fiberglass is an open molding operation; therefore, it is required to use one of the compliance options listed in 40 CFR Part 63.5810 (a) through (d) to meet the emission limits in Table 3. Under 40 CFR Part 63.5810, American Fiberglass is allowed to switch between compliance options and is required to complete the emissions calculations within 30 days following the end of each month. American Fiberglass is currently using the compliance option found in 40 CFR 63.5810 (b). A report of emissions of VOCs and HAPs is required to be submitted to the Department on a quarterly basis as required by Section 5, Proviso 2 of both units.

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 that 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.

RECORDKEEPING AND REPORTING:
American Fiberglass 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 both units), a deviation report on a semi-annual basis (Section 5, Proviso 3 of both units), and an Annual Compliance Certification (ACC) (General Proviso 12.).

RECOMMENDATION:
I recommend that after a public comment period and EPA review, Major Source Operating Permit 713-0016 be issued to American Fiberglass Products, Inc. for the fiberglass tub and shower manufacturing facility.

John Robert Gill
Chemical Branch
Air Division

September 11, 2025
Date

JRG/jrg