

NARRATIVE

TO: Wendy Troemel

FROM: Caleb Weed

DATE: August 25, 2026

Facility Name: **Geotek - GA**
AIRS No.: 223-00033
Location: Dallas, GA (Paulding County)
Application #: 30167
Date of Application: May 7, 2026

Background Information

Geotek-GA, located at 296 Industrial Blvd N Dallas, GA 30132 in Paulding County, is a synthetic minor (SM) facility manufacturing fiber-reinforced plastic (FRP) drain trenches. The facility was previously owned and operated without a permit since 1998 by “Eric’s sons,” who manufactured their DuraTrench brand of composite products there until their acquisition by Geotek in November 2025. The facility has not been granted any air permit prior to the submittal of this application.

The facility manufactures FRP parts by spraying a mixture of resin and chopped fiber into open molds. The facility has two manual chop-spray booths and one automated robotic spray booth which are used to spray the FRP. Emissions from these booths are controlled by mat filters. The facility used two natural gas-fired infrared heaters for curing parts. There is also present a laser cutter which is used to manufacture metal components for drain trench grates and other structural components. The facility submitted process flow diagrams in their application packet.

Mentioned in the process description but not included in the permit application equipment list are two abrasive blasting units, woodworking equipment, and “several” CNC machines. These were excluded from the permit because they emit only PM, vent indoors, and do not have dedicated stacks; thus, the building is considered to provide 100% control of emissions from these units. The facility also utilizes a powder coat line, which is exempt from permitting under 391-3-1-.03(6)(i)3(h)(10).

Purpose of Application

Geotek-GA submitted Application #30167 on May 7, 2026 to formalize synthetic minor status by limiting actual emissions of styrene (the only HAP reported to be emitted by this facility) to less than 10 tons per year.

No public advisory is required for this application because it is for operation of existing equipment without modifications resulting in emissions increases.

Updated Equipment List**Emissions Units**

Emission Units			Associated Control Devices	
ID	Description	Installation Date	ID	Description
EU1	Spray Booth #1	2021	CE1	Fiber mat filter
EU2	Spray Booth #2	2021	CE2	Fiber mat filter
EU3	Spray Booth #3	2025	CE3	Fiber mat filter
EU4	Laser Cutter	2022	CE4	Cartridge filter dust collector
EU5	Powdercoat Oven	2021	--	--
EU6	Booth #3 Curing Heater	2025	--	--

Fuel Burning Equipment

Source Code	Input Heat Capacity (MMBtu/hr)	Description	Installation Date	Construction Date
EU5	1.20	Infra-Red Technologies GasCat (Natural gas infrared heater for powdercoat line, low-NOx burner)	9/20/2021	9/1/2021
EU6	0.96	Custom (Natural gas infrared heater component of automated spray line, low-NOx burner)	1/15/2025	1/15/2025

Emissions Summary

The facility provides detailed emissions calculations and stack data in the appendices of the application packet. There is a remarkably high range between reported potential and actual emissions. This is mostly due to the large difference in the design value flow rate (1656 lb/hr) used to calculate potential emissions and the actual flow rate (64 lb/hr) used to calculate actual emissions of the spray booths. This difference, combined with lower operating hours of around 2625 hours per year, accounts for this discrepancy.

Facility-Wide Emissions
(in tons per year)

Pollutant	Potential	Actual
PM/PM ₁₀ /PM _{2.5}	2686	2.7
NO _x	4.2	0.34
SO ₂	0.003	0.001
CO	0.4	0.07
VOC	1021	4.7
Max. Individual HAP (styrene)	978	4.5

Regulatory Applicability

Georgia Rules for Air Quality

391-3-1-.02(2)(b) “Visible Emissions” and 391-3-1-.02 (2)(e) “Particulate Emission from Manufacturing Process”

The PM and visible emissions from this facility are subject to applicable PM and opacity limits under these rules. The facility is expected to comply with these limits due to the nature of the production processes involved and the use of fiber mat filtration and cartridge filter dust collectors on applicable emissions units. The permit does not include a daily visible emissions check condition because it was determined in consultation with the facility that the rooftop stacks are not easily visible from a safe location and would require climbing onto the roof to perform standard Method 9 readings. Instead, maintenance and monitoring requirements for the fiber mat and cartridge filters are included to make sure this equipment is operational and controlling emissions as intended. These maintenance and monitoring requirements were determined to be easier for facility staff to incorporate into their daily operations safely. The two combustion units that vent to the rooftop stacks are very small, burn natural gas, and are highly unlikely to violate the opacity requirements.

391-3-1-.02(2)(d) “Fuel-Burning Equipment”

The fuel-burning equipment at this facility is subject to this rule limiting PM from equipment with a design heat input capacity of less than 10 million BTU/hour to less than 0.5 pounds PM per million BTU heat input. The equipment uses only natural gas as fuel and therefore the facility is expected to comply with this PM limit.

391-3-1-.02(2)(n) “Fugitive Dust”

The facility shall take all reasonable steps to prevent fugitive dust from becoming airborne. The facility already has fabric filters installed to enclose and vent dusty materials and is expected to comply with proper utilization and maintenance of relevant control equipment.

391-3-1-.02(2)(tt) “VOC Emissions from Major Sources”

Since the facility is located in Paulding County, VOC emissions from this facility are subject to this rule limiting facility-wide VOC emissions to less than 25 tons for any consecutive twelve-month period.

391-3-1-.02(2)(yyy) “VOC Emissions from Use of Miscellaneous Industrial Adhesives”

This facility is not subject to this rule, as the manufacturing process utilizes resin/chopped fiber cast in molds to create monolithic parts. The facility does not mention in their application any industrial adhesive application processes to bond individual components.

391-3-1-.02(6)(b)1 “General Monitoring and Reporting Requirements”

The facility shall maintain monthly usage records of all HAP containing materials used at the entire facility and use those records to calculate total individual and combined monthly HAP emissions from the entire facility. The facility shall calculate the 12-month rolling total of HAP emissions from the entire facility for each calendar month and shall notify the Division in writing if the combined 12-month rolling total of HAP emissions equals or exceeds 10 tons.

40 CFR Part 70 (Title V, VOCs)

Part 70 (Title V) is not applicable to the Geotek facility due to the 25 tpy VOC emission limit contained in Condition 2.6. The threshold for applicability of Title V in Paulding County is 100 tpy. However, the Permit will not include any monthly and 12 month rolling total calculations as the actual estimated VOC emissions are very low.

40 CFR Part 63 (WWWW): NESHAP, Reinforced Plastic Composites Production

Although the facility manufactures plastic composites products, it is a synthetic minor source of HAP emissions and is not subject to this rule as long as it maintains HAP (in this case, styrene) emissions of less than 10 tpy for any single HAP and less than 25 tpy of all HAPs collectively as an area source. These limitations are reflected in the facility’s air permit.

Permit Conditions

Conditions 1.1 through 1.5 are standard conditions containing general permitting requirements for the operation of the facility.

Condition 2.1 sets visible emissions limits based on opacity under Georgia Rule 391-3-1-.02(2)(b).

Condition 2.2 sets the appropriate limit on PM emissions from fuel-burning equipment (less than 10 MMBTU/hr for this facility) under Georgia Rule 391-3-1-.02(2)(d).

Condition 2.3 sets PM limits from all sources at the facility under Georgia Rule 391-3-1-.02(2)(e).

Condition 2.4 requires the facility to take all reasonable precautions to control fugitive dust under Georgia Rule 391-3-1-.02(2)(n).

Condition 2.5 requires the facility to control HAP emissions to less than 10 tons during any consecutive twelve-month period for any single HAP or to less than 25 tons for all HAPs collectively.

Condition 2.6 requires the facility to control VOC emissions to less than 25 tons during any consecutive twelve-month period.

Condition 3.1 requires the facility to comply with fugitive emission reduction measures and limits.

Condition 4.1 requires the facility to maintain an inventory of replacement filters and dust collector cartridges.

Condition 4.2 required the facility to perform and keep records of routine maintenance on all air pollution control devices.

Condition 5.1 creates a requirement to measure differential pressure across each control device.

Condition 5.2 creates preventative maintenance requirements for control devices.

Condition 6.1 is a standard condition with requirements for performance testing at the request of the Division.

Conditions 7.1, 7.2, and 7.3 dictate recordkeeping and notification requirements for HAP emissions.

Conditions 8.1 and 8.2 are standard conditions stipulating the right of the Division to amend the permit in the future should addition control of emissions be required and requiring the Permittee to pay annual permit fees to the Division.

Toxic Impact Assessment

The facility emits 4.5 tons per year of styrene. Styrene is regulated as a hazardous air pollutant (HAP) under Georgia Rules for Air Quality Control. Georgia EPD released an updated list of HAPs, toxic air pollutants (TAPs), and allowable ambient concentrations (AACs) in September 2026. For each regulated pollutant, an associated minimum emissions rate (MER) is also published. If a regulated pollutant has a facility-wide emissions rate less than the MER, then the facility is in compliance with the AAC for that pollutant. For styrene, the MER is 121.5 tons per year. Facility-wide emissions for styrene are less than the MER, so the facility is in compliance with the styrene AAC and no further analysis is required.

Summary & Recommendations

I recommend issuance of Permit No. 3089-223-0033-S-01-0 to Geotek-GA for the operation of their facility for the manufacture of FRP parts. The facility will be classified as a synthetic minor source for HAP and VOC and the appropriate operating, testing, recordkeeping, and reporting requirements are included in this Permit. The facility has indicated it can comply with all requirements stipulated by the Permit.