

STATEMENT OF BASIS

Toray Fluorofibers America, Inc.
Decatur, Alabama
Morgan County
712-0086

This proposed renewal of the Title V Major Source Operating Permit is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Toray Fluorofibers America, Inc. (TFA) operates a fluorocarbon fiber manufacturing facility that is located off Highway 20 in Decatur, Alabama. The plant is a minor source of regulated air pollutants. However, TFA shares a site with Toray Composite Materials America, Inc. (CMA), a major source under Title V for the pollutant Nitrogen Oxides (NO_x). TFA and CMA share common ownership under Toray Holdings (USA), Inc., but are managed by two completely different organizations. For the purpose of Title V and PSD applicability, they are considered one facility. The facilities have opted to hold separate Title V permits. TFA and CMA have separate environmental staff, and neither can certify compliance for the other.

The sources of air pollutants at this facility are the Wet Suppression System (Duct Spray and Scrubber) that controls emissions from the Fluorocarbon Fiber Manufacturing Process and the Catalyst Treatment System that controls emissions from the Bleaching Process.

TFA has classified emissions as volatile organic compounds (VOCs). TFA states that there may be formation of secondary organic PM emissions due to cellulose degradation. However, this is very complex and depends on a variety of factors such as types of reactions, the constant change in equilibrium between the gaseous and PM phases, concentration of the precursors, and environmental conditions including temperature and relative humidity. Therefore, due to the complexity of the secondary PM formation processes, TFA would continue to classify the emissions as VOCs.

The facility is manned 8,760 hours per year. The following describes the processes and the proposed periodic monitoring for each significant source.

Emission Unit(s): Fluorocarbon Fiber Manufacturing

Standards

Visible Emissions: (ADEM Admin. Code R. 335-3-4-.01)

Particulate Matter: (ADEM Admin. Code R 335-3-4-.04(1))

Expected Emissions

VOC: Negligible.

Particulate Matter: Negligible.

Periodic Monitoring

Particulate Matter/Opacity: There are negligible particulate matter emissions present in this process. Therefore, no periodic monitoring for particulate matter is required and no periodic monitoring for opacity is required.

VOC: There are no VOC numerical limits. These emissions vent to the Wet Suppression System. This process shall operate only when the scrubber is operating. Otherwise, this process shall cease operations. This system shall maintain a removal efficiency of 80% for VOC emissions. The differential pressure range of between 0.1 and 15 inches of water and the scrubber water flow rate range of between 10 and 25 gallons per minute will be monitored for the VOC emissions.

Emission Unit(s): Bleaching Process

Standards

Visible Emissions: (ADEM Admin. Code R. 335-3-4-.01)

Particulate Matter: (ADEM Admin. Code R 335-3-4-.04(1))

Expected Emissions

VOC: Negligible.

Particulate Matter: Negligible.

Periodic Monitoring

Particulate Matter/Opacity: There are negligible particulate matter emissions present in this process. Therefore, no periodic monitoring for particulate matter is required. Daily documented visual observation while the unit is operating shall constitute periodic monitoring for opacity.

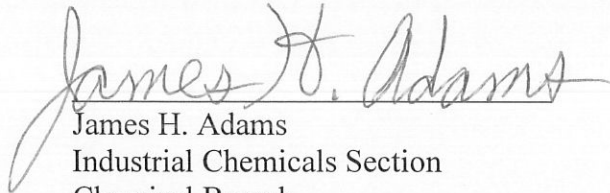
VOC: There are no VOC numerical limits. These emissions vent to the catalyst treatment system. No periodic monitoring is required.

Permitting Fees:

Title V major sources are subject to operating permit fees which charge the facility a yearly amount based on the actual emission rate of pollutants for the previous year.

Recommendation:

Based on the monitoring described above, Toray should be able to demonstrate compliance for the through monitoring and record keeping. I recommend that the attached permit be issued to Toray Fluorofibers America, Inc.



James H. Adams
Industrial Chemicals Section
Chemical Branch
Air Division

July 9, 2020

Date