

Statement of Basis Phifer Incorporated
Fayette, Alabama
404-0020

Introduction

On June 12, 2019, Phifer Incorporated submitted a Title V major source permit application for their new broad woven fabric mill (SIC code 2221) in Fayette. This proposed Title V Major Source Operating Permit will be 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. The fabric produced at this facility is used add tensile strength to concrete wallboard.

Yarn coating

Yarn coating lines 41, 42, 43, and 44 (X001)

Fiberglass yarns are coated with a mixture of plastisol and kerosene in flooded dies. Each line has three coaters and three drying ovens. Emissions from the ovens are controlled by a wet scrubber and CECO filters. The only significant pollutants from the yarn coating lines are Volatile Organic Compounds (VOC) and Particulate Matter (PM).

VOC is emitted from the mixing and heat set looms, however, VOC emissions are only limited and tracked for the yarn coating lines because this is where most of the emissions are, and it would be difficult to monitor VOC emissions from the other sources. Phifer has requested that the formula used to calculate VOC emissions at their Tuscaloosa facility be used at this facility. However, the testing used to determine this formula has not been done at the Fayette facility. Phifer calculates VOC emissions at the Fayette facility from material usage. Phifer deducts the VOC content of liquid waste from this process that is collected and disposed of off site. VOC emissions are limited to 39 tons per line in any twelve-month period and will be reported quarterly. PM emissions are limited by opacity and process weight. The permit requires weekly monitoring of opacity and filter pressure differential.

Emergency fire pump (X002)

The emergency diesel fire pump is subject to 40 CFR 60 subpart IIII and the opacity limits of ADEM Code r. 335-3-4-.01.

40 Heat Set Looms

The heat set looms weave the coated yarn and use heat to bond the warp and weft. This makes the fabric dimensionally stable. Some VOC and

PM is emitted from this process. Electrostatic precipitators are used to control these emissions. VOC emissions are not kept for these sources because all VOC applied are considered emitted in the yarn coating ovens. The permit requires daily monitoring of the ESP and weekly monitoring of visible emissions.

Applicable Regulations (yarn coating)

The yarn coating lines are subject to opacity and process weight limits for particulate. By limiting each line to 39 tons of VOC in any twelve-month period, the facility is limited to 234 tons per year of VOC with six yarn coating lines. This makes this facility a minor source for PSD. This facility is only subject to the recordkeeping provisions of 40 CFR 60 subpart VVV because each line is limited to less than 95 megagrams in any 12-month period.

Testing of Emissions (yarn coating)

The application requested that emissions be calculated using the same formula as Phifer's Tuscaloosa facility. The control efficiency formula for the Tuscaloosa facility is based on an August 18, 2000 test of a yarn coating line controlled by electrostatic precipitators. Phifer has not tested any of their yarn coating lines with other control devices. The current permit only allows Phifer to deduct the VOC content of material shipped off site for disposal.

Monitoring of Emissions (Coating Lines)

Phifer is required to monitor visible emissions and filter pressure differential weekly.

Applicable Regulations (emergency fire pump)

The emergency diesel fire pump is subject to 40 CFR 60 subpart IIII, the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and the opacity limits of ADEM Code r. 335-3-4-.03.

Applicable Regulations (looms)

The looms are subject to the opacity limits of ADEM Code r. 335-3-4-.01 and the particulate limits of ADEM Code r. 335-3-4-.04.

Monitoring of Emissions (looms)

The proposed permit requires weekly monitoring of visible emissions and daily monitoring of the ESP operating status.

Tanks

This facility has 12 tanks for mixing and storing the coating ingredients. A small baghouse is used to collect dust when dry ingredients are added.

These units were not permitted because the air emissions were not considered significant.

CAM

Compliance Assurance Monitoring (CAM) is not applicable for this facility because potential air emissions from each source is less than 100 tons per year.

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.

Affected States Notification

Standard practice is to notify of the issuance of this major source operating permit to all states bordering Alabama.

Recommendations

I recommend that the attached permit be issued to Phifer after the required public comment and EPA review period.

Hal Brock
Industrial Chemicals Section
Chemical Branch
Air Division

June 24, 2019