Statement of Basis Rehau Automotive, LLC. 702-0021

Introduction

On February 18, 2025, Rehau Automotive LLC, (Rehau), applied for renewal of Major Source Operating Permit (MSOP) No. 702-0021. This proposed Title V MSOP renewal has been developed in accordance with the provisions of ADEM Administrative Code R. 335-3-16. Rehau 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 (the Department) in accordance with the terms and conditions of the permit.

This will be the fifth renewal of Rehau's Title V MSOP. The original Title V was issued on September 4, 2000. The current MSOP expires on September 4, 2025. This renewal application was received on February 18, 2025.

Air Permits for Unit Nos. 001, 002 and 003 were originally issued on September 22, 1994. Air Permits for Unit Nos. 010 and 011 were originally issued on July 21, 1995. An Air permit for Unit No. 004 was originally issued on July 24, 1995. An Air Permit for Unit No. 012 was originally issued on September 6, 1996. A permitting action on June 9, 1998, added a newly constructed thermal oxidizer to Unit No. 002. These seven Air Permits were incorporated into the initial Title V Permit on September 5, 2000.

A permitting action on July 27, 2001, changed the designations of Unit Nos. 003 and 004 to Unit Nos. 010 and 011, respectively. An Air Permit for Unit 005 was originally issued on October 4, 2002. The Title V renewal on September 5, 2005, incorporated these changes and the air permit for Unit 005, and removed Unit No. 002. The Title V renewal on September 5, 2010, removed Unit Nos. 001 and 004. There were no additions nor removals of units for the September 5, 2015, Title V renewal. The Title V renewal on September 5, 2020, removed Unit No. 012.

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

There are no current or ongoing enforcement actions against Rehau necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history of the facility can be found at https://echo.epa.gov/ (search using facility ID AL0000000104300021).

This facility conducts the manufacture and surface coating of automotive parts (SIC #3089). Based on the current Title V permit application, this facility is a

major source for Title V standards for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) and is a synthetic minor source with respect to the Prevention of Significant Deterioration (PSD).

Since Rehau's last Title V application, Air Permit 009 for the Polonium Line No. 4 Coating of Polymer Automotive Parts has been issued for this newly constructed line.

Previously, Rehau Automotive, LLC was known as Rehau Automotive and Construction, LLC. In 2024, this business split up into two entities, Rehau Automotive, LLC and Rehau Construction, LLC. This permit issuance will incorporate the name change of the facility from Rehau Automotive and Construction, LLC to Rehau Automotive, LLC.

Since their last Title V application, Unit 005 (Pipe Marking) has been removed. Unit 005 is still at the facility. However, with the Rehau Automotive and Construction, LLC split-up, Unit 005 now belongs to Rehau Construction, LLC.

Rehau does not have any generators that need to be incorporated into this renewal.

The following is a list of all this facility's individual emission units that will be part of this facility's Title V MSOP:

Permit Unit No.	Description of Unit
003	COATING OF POLYMER AUTOMOTIVE PARTS LINE WITH NATURAL GAS FIRED THERMAL OXIDIZER WITH PROPANE BACKUP
009	POLONIUM LINE NO.4 COATING OF POLYMER AUTOMOTIVE PARTS
010	20.9 MMBTU/HR NATURAL GAS FIRED BOILER WITH PROPANE BACKUP
011	10.5 MMBTU/HR NATURAL GAS FIRED BOILER WITH PROPANE BACKUP

Operations

Plastic parts, such as bumpers and fascias, are injected molded using large presses. As the plastic parts are surface coated, they pass through several heat tunnels that are heated with steam from Rehau's natural gas fired boilers.

Workpieces are conveyed through the coating process by means of an overhead monorail system. A coat of adhesion promoter is normally applied first.

Sometimes, the part is flame treated to promote adhesion. After the adhesion step, one or more coats of primer (color basecoat) are added. Finally, one or more topcoats (clearcoats) are applied. Water-based coatings are used on some products. Three heat tunnels follow the application of adhesion promoter, primer, and topcoat.

Coating Operations

Applicable Regulations

The regulated air contaminants emitted into the atmosphere by the surface coating of the automotive parts include VOCs, which come from the organic solvents in the paint, paint thinners, and cleanup solvents. The operations are also a source of HAPs as listed in Appendix G of the ADEM air regulations. They also use adhesives that contain minor amounts of VOCs and HAPs. The entire facility is subject to a 245 tons per year synthetic minor PSD limit for VOCs.

Emissions of VOCs exceed the threshold of 100 tons per year. Therefore, Rehau is considered a major source for Title V.

The HAP emissions from the coating operation are also emitted in such quantities as to exceed the Title III and Title V major source thresholds. The HAP emission thresholds for a major source are 10 tons for a single HAP and 25 tons for a combination of any HAPs.

The Coating of Polymer Automotive Parts Line with a Natural Gas Fired Thermal Oxidizer with Propane Backup (Unit 003) and the Polonium Line No.4 Coating of Polymer Automotive Parts with Natural Gas Fired Thermal Oxidizer (Unit 009) are subject to the Plastic Parts and Products National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation (Subpart PPPP). In order to comply with this regulation, regenerative thermal oxidizers (RTOs) and certain coatings are used. The RTOs are also used to comply with their synthetic minor PSD limit.

Rehau has two touchup booths for small repairs. Emissions of VOCs from these booths are expected to continue to be below the trivial and insignificant (T & I) threshold; therefore, they will not be permitted.

Rehau has two paint burn-off ovens with afterburners. These units are unpermitted, and they have not been used in recent years. Rehau is now using an offsite vendor utilizing molten salt to clean many of the paint skids instead of utilizing the ovens. Emissions of VOCs from these units are expected to continue to be below the T & I threshold; therefore, they will not be permitted.

Testing of Emissions

Periodic testing of VOC emissions using EPA Method 18, 25 or 25A and 24 shall be conducted at intervals not to exceed five years following the date of the initial compliance testing.

Monitoring of Emissions

Rehau will maintain records of monthly coating usage and coating analysis to show compliance with their synthetic minor PSD limits. These records will be submitted to the Department quarterly.

The coating line is controlled by a thermal oxidizer. This oxidizer is for the control of VOCs and will have its operational temperature (which was set by performance testing) monitored and recorded for compliance with their facility wide VOC limit. Due to the inherent nature of the fuels and vapors in this incinerator, additional monitoring of opacity and particulates from the unit would not be required.

The monitoring for the coating process is the same as in the existing Title V Permit. This monitoring has been shown to be sufficient in the past and, therefore, no change to the monitoring is needed.

Boiler Operations

Applicable Regulations

Rehau has two natural gas fired boilers (propane backup) to supply heat for their operations. These boilers are subject to 40 CFR Part 60, Subpart D_c , the Standards of Performance for New Stationary Sources: Small Industrial – Commercial – Institutional Steam Generating Units. These boilers are subject to New Source Performance Standards (NSPS) recordkeeping requirements. These boilers are also required to have an annual tune-up according to the requirements in 40 CFR Part 63.7540(a)(10).

No other criteria pollutants that are emitted in sufficient quantities, actually or potentially, to exceed the major source threshold of 100 tons per year.

Testing of Emissions

Due to the clean burning nature of natural gas, no periodic testing of emissions is required.

Monitoring of Emissions

The boilers are natural gas fired with propane as a backup. Due to the clean nature of burning these fuels, no monitoring of emissions will be done. However, these units are subject to NSPS Subpart Dc regulations, which require record keeping of fuel usage on a monthly basis.

Due to the burning of natural gas in the boilers, SO₂ generation is expected to be nominal. Therefore, no monitoring of SO₂ will be required.

CAM

Rehau will meet the Compliance Assurance Monitoring (CAM) requirements through compliance with the proposed post November 15, 1990, NESHAP (Plastic Parts) regulations within this Title V permit.

Following the Maximum Achievable Control Technology (MACT) requirements should be sufficient to meet the CAM monitoring for VOCs. For the thermal oxidizer, the minimum set-point temperature of the combustion chamber was set by performance testing. The temperature will be monitored and recorded continuously using a thermocouple and chart. This facility shall maintain emission records and supporting background documents to this Department and submit records that pertain to their MSOP whenever requested.

Compliance Assurance Monitoring (CAM) is not applicable for the Title V permit for the other units listed herein because potential uncontrolled emissions of criteria pollutants do not exceed 100 tons per year on any one unit with control device(s).

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

No notification of the issuance of this major source operating permit to any affected state bordering Alabama is necessary since all states are notified automatically when the public notice is issued.

Recommendations

I recommend that the attached permit be issued to Rehau following a public comment period and EPA review.

Steve Wakefield Chemical Branch June 2025

Han Waller