

AIR PERMIT REVIEW

APPLICANT Meridian Automotive Systems	SITE LOCATION Newton	COUNTY Catawba
CDS PLANT ID 3703500380		
CONTACT Aaron Swartley Manager, EHS	PHONE (828) 465-5759	
APPLICATION FOR Renewal		EXISTING P/N 06676T13
APP No. 1800380.04A	REVIEWER Rahul P. Thaker	SIGNATURE DATE November 15, 2004
RECOMMENDATION and COMMENT Issue Permit 06676T14		FEE CLASS Title V

1. Purpose of Application

This revision is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (06676T13) was issued on April 10, 2003 and is currently scheduled to expire on December 31, 2004. The renewal application was received on March 10, 2004 or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

2. Facility Description

Meridian Automotive Systems ("facility") manufactures molded styrene valve and fan covers, and various other fiberglass and plastic automotive parts. Current hours of operation are 24 hours/day, 5 days/week, and 50 weeks/year. This facility is a major source under the Title V of the Federal Clean Air Act (CAA). The implementing regulations for the Title V of CAA have been written at 40 CFR 70 and included in NC State Implementation Plan (SIP) at 15A NCAC 2Q .0500. The potential to emit for the facility for emission of styrene, which is a hazardous air pollutant (HAP), exceeds the major source threshold of 10 tons/yr for individual HAP.

3. Application Chronology

March 10, 2004 - Air permit application was received by the Division of Air Quality (DAQ), Mooresville Region Office (MRO) and was sent to Raleigh Central Office (RCO) for processing on the same day. Permit application was considered incomplete as of March 18, 2004 for the lack of compliance assurance monitoring (CAM) applicability analysis and responsible official signature requirement.

March 24, 2004 - Permit application was deemed complete.

April 14, 2004 - Received region review for this application.

4. **Permit Modification/Changes**

The initial Title V permit (06676T09) was issued on January 12, 2000.

Permit (06676T10) was issued on December 11, 2000 to change the names of the owner and the facility, using the provisions of 15A NCAC 2Q .0524.

Pursuant to 15A NCAC 2Q .0523, the following Section 502(b)(10) changes were made to issue subsequent revisions (06676T11, 06676T12, and 06676T13).

- Add a thermosetting press (ID No. 109) under permit (06676T11), issued on January 18, 2002.
- Remodeled styrene (NC air toxic) emissions under the permit (06676T12), issued on November 19, 2002.
- Added a bagfilter (ID No. BF-1) under the permit (06676T13), issued on April 10, 2003.

5. **Regulatory Review**

The facility is subject to the following regulations:

2D .0515 "Particulates from Miscellaneous Industrial Processes"
2D .0521 □Control of Visible Emissions□
2D .0958 "Work Practices for Sources of Volatile Organic Compounds"
2D .1104 □Toxic Air Pollutant Guidelines□
2Q .0711 "Emission Rates Requiring a Permit"

However, no regulatory review is required at this time since there are no new applicable regulations for this permit renewal.

6. **NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM**

NSPS

New Source Performance Standards (NSPS) do not apply to this facility.

NESHAP/MACT

The initial notification, dated July 31, 2003, prepared in accordance with 40 CFR 63.9(b) and submitted by company, indicates that the Meridian Automotive Systems' Newton NC facility is an existing major source for "Reinforced Plastic Composites Production" MACT (40 CFR 63 Subpart WWWW).

It appears from this notification that the facility is not intending to install any controls to comply with the referred MACT standard and will use work practice standards as allowed in this standard to comply.

This MACT standard was promulgated on April 21, 2003 and required that the existing major sources must comply by April 21, 2006, or by this date, take a federally enforceable condition in the Title V permit to become a minor source under the MACT program and thus avoid the applicability to this standard.

The renewed permit will include a compliance date statement.

PSD

This facility is a minor source under the "250 tons" category for Prevention of Significant Deterioration (PSD) for regulated pollutants.

Attainment Status

This facility is located in Catawba County, and is in attainment for all criteria pollutants, except for 8-hr ozone standard. The county has elected to participate in the voluntary Early Action Compact (EAC) program for this matter. For EAC areas, PSD rule applies for major sources and major modifications, and the implementation date for 8-hr ozone standard has been deferred until December 2007.

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule.

CAM

Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 do not apply to any of the permitted emission sources at this facility.

In order to be subject to the Part 64 requirement, the following three criteria must be satisfied:

- (i) pollutant specific emission unit (eg. boiler, spray booth etc.) shall be subject to an emission limitation or a standard other than the exempt limitations or standards (eg. post-1990 federal standards such as MACT, NSPS etc.),
- (ii) the pollutant specific emission unit uses an active control device to achieve compliance with the applicable requirement, and
- (iii) potential precontrol device emission rate for the pollutant specific emission unit for any regulated pollutant shall be greater than major source threshold.

Per 40 CFR 64.2, facility-wide sanding and drilling operations (ID No. FWS-1) and facility-wide housekeeping operations (ID No. FWS-2) are required to be reviewed for Part 64 applicability, because these are the only sources which have active control devices.

The potential pre-control emission rate for facility-wide sanding and drilling operations (ID No. FWS-1) is approximately 96 tons/yr. Also, potential pre-control emission rate for facility-wide housekeeping operations (ID No. FWS-2) is approximately 24 tons/yr. The applicable requirement is 2D .0515. These sources (FWS-1 and FWS-2) are controlled by baghouse (BF-1) and cyclone (C-1), respectively.

Because the potential precontrol PM-10 emission rate for each is less than 100 tons/yr, the CAM plan is not required for each of these sources per 40 CFR 64.2. Please refer the attached spreadsheet for potential PM-10 emissions estimate.

The company provided estimate and methodology are reasonable. Per company estimate, an 80% of total particulates, generated from the sanding and drilling operations, are expected to be entrained in air and will be conveyed to the bagfilter (BF-1). The remaining 20% is expected to settle around the equipment and will be conveyed to the cyclone (C-1) during vacuuming.

The emission calculations assume the worst-case 1% loss of product and accounts for the maximum number of

parts, which can be molded and subsequently sanded in 8760 hrs of operation. Although, this approach accounts for the maximum number of parts which can be molded, it is expected that the downtime associated with the molding equipment and other bottlenecks in the manufacturing process will reduce the number of parts which can be molded in 8760 hrs of operation.

In brief, the PM-10 calculations represent the worst-case scenario.

Also, as indicated above, some of the permitted sources will be required in future to comply as existing affected sources, with "Reinforced Plastic Composites Production" MACT (post 1990 MACT) for HAP emissions. Hence, none of the permitted sources are subject to CAM requirement due to HAP emissions.

7. Facility Wide Air Toxics

The existing permit includes modeled emission rate for facility-wide styrene emissions, and the monitoring and reporting requirements. The renewal application does not change it. It should also be noted that the facility would be required to demonstrate compliance with NC air toxic program at the time of complying with the MACT Subpart RRRR. The compliance date for existing affected sources under this MACT standard is April 21, 2006.

8. Facility Compliance Status

The facility was inspected on 3/11/04 by Bill Bass of MRO. The facility was found to be in compliance of the applicable air quality regulations.

9. Statement of Compliance

The applicant has certified through a submittal of E5 form that the facility is in compliance with all applicable requirements.

10. Facility Emissions Review

There is no change in emissions for this renewal.

11. Stipulation Review

Air permit 06676T13 will be revised for the following:

- Revise descriptor for source FWS-1 to include "etching" in Section 1 Table and Section 2.1 B.
- Revise Section numbers in Section 2.1 A.
- Revise Section 2.1 B.2.c. for visible emission monitoring.
- Remove Section 2.2 B. and label it as Section 2.1 A.3.
- Include a new Section 2.2 B.1. for MACT requirement.
- Include the latest version of General Conditions.
- Remove Part II of the permit.

12. Public Notice / EPA and Affected State Review

Pursuant to 2Q .0521, a notice of the draft Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and

each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. The Affected states as specified by 15A NCAC 2Q .0503(1) and 40 CFR 70.8(b) are South Carolina and Catawba Indian Nation in York County, South Carolina.

13. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

MRO recommends issuance of the permit per region review dated April 8, 2004. The draft permit was e-mailed to Bill Bass of MRO on 11/9/04 for review and comment. Bill responded on 11/12/04 indicating that he did not have any comment on the draft permit.

The draft permit was also e-mailed to company on 11/9/04 for review and comment. The company (Aaron Swartley) responded on 11/10/04 stating that he did not have any comment.

RCO recommends renewing the permit.

The renewed permit will be issued after the completion of 30-day public comment period and 45-day EPA review period.