

**Air Permit Review**

**Permit Issue Date: DRAFT**

**Region:** Mooresville Regional Office  
**County:** Rowan  
**NC Facility ID:** 8000176  
**Inspector's Name:** Jim Westmoreland  
**Date of Last Inspection:** 05/26/2009  
**Compliance Code:** 3 / Compliance - inspection

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>		
<b>Applicant (Facility's Name):</b> Magna Composites LLC - Salisbury Operations  <b>Facility Address:</b> Magna Composites LLC - Salisbury Operations 6701 Statesville Boulevard Salisbury, NC 28147  <b>SIC:</b> 3089 / Plastics Products, Nec <b>NAICS:</b> 326199 / All Other Plastics Product Manufacturing  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<b>SIP:</b> N/A <b>NSPS:</b> N/A <b>NESHAP:</b> N/A <b>PSD:</b> N/A <b>PSD Avoidance:</b> N/A <b>NC Toxics:</b> N/A <b>112(r):</b> N/A <b>Other:</b> 15A NCAC 2D .1109 <i>[112(j) – Part 2 MACT Hammer for Boilers &amp; Process Heaters]</i>		
<b>Contact Data</b>			<b>Application Data</b>		
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<b>Application Number:</b> 8000176.09C <b>Date Received:</b> 09/14/2009 <b>Application Type:</b> 112(j) Part I <b>Application Schedule:</b> TV-Significant <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 09076/T08 <b>Existing Permit Issue Date:</b> 12/03/2009 <b>Existing Permit Expiration Date:</b> 06/30/2012		
Christopher Scotland Human Resources Manager (704) 645-2142 6701 Statesville Blvd. Salisbury, NC 28147	Brian Duivesteyn General Manager (704) 645-2150 6701 Statesville Blvd Salisbury, NC 28147	Christopher Scotland Human Resources Manager (704) 645-2142 6701 Statesville Blvd. Salisbury, NC 28147			
<b>Review Engineer:</b> Jenny Kelvington  <b>Review Engineer's Signature:</b> _____		<b>Date:</b> _____	<b>Comments / Recommendations:</b> Issue 09076/T09 <b>Permit Issue Date:</b> <b>Permit Expiration Date:</b>		

**I. Introduction and Purpose of Application**

Magna Composites manufactures plastic parts used for automotive components. Currently permitted sources include: eighteen (18) thermosetting presses, five (5) spray booths, a natural gas-fired curing oven, two (2) natural gas-fired boilers, an adhesive bonding operation, and a sanding operation controlled by a bagfilter. Magna is a major source of hazardous air pollutant (HAP) emissions. The presses are subject to MACT Subpart WWW, while the coating operations are subject to MACT Subpart PPPP.

Magna Composites is located in Salisbury, Rowan County, North Carolina. Application No. 8000176.09C, received September 14, 2009, is a Part 2 MACT "Hammer" application for two natural gas fired boilers, each rated at 10.1 million British thermal units per hour (MMBtu/hr).

Additionally, because the addition of the MACT "Hammer" requires public notice and a 45 day opportunity for EPA to provide comments, the requirement to submit a Part 2 application for a significant modification for the seven emission sources (**ID Nos. P-38 through P-42, PSB-6, and PSB-7**) added with Permit 09076T08, issued December 3, 2009, has been removed. The permit shield described in General Condition R now applies and compliance certification is required as described in General Condition P. The compliance certification will

also apply to the four paint spray booths (**ID Nos. PSB-2 through PSB-5**) previously added to the permit as a minor modification.

## II. Permit Modifications/Changes

The following table describes the modifications to the current permit.

Page	Section	Description
Cover	-	-amended permit revision number and all dates.
All	Header	-amended permit revision number.
3	Table of Emission Sources	-added 112j under the emission source ID for boilers B-1 and B-2.
4	Footnote under Table	-removed statement pertaining to processing schedule under 15A NCAC 02Q .0501(c)(2).
10	2.1.D.5	-added 15A NCAC 2D .1109 section requiring best combustion practices for boilers B-1 and B-2

## III. Regulatory Review

1. **15A NCAC 2D .0503 – Particulates from Fuel Burning Indirect Heat Exchangers** – This regulation limits particulate matter (PM) emissions from the firing of fuel in indirect heat exchangers (in lb/mmBtu) based on the facility-wide heat input using the formula  $E = 1.090 Q^{-0.2594}$ . The total heat input for Magna Composites is 20.2 MMBtu/hr. Therefore, PM emissions from the combustion sources are limited to not greater than 0.50 lb/MMBtu. Using AP-42 emission factors, PM emissions from natural gas are estimated to be less than 0.50 lb/MMBtu, as follows:

$$\frac{\left( 7.6 \frac{\text{lbPM}_{total}}{\text{mmscf}} \right)}{1,020 \frac{\text{MMBtu}}{\text{mmscf}}} = 0.007 \frac{\text{lbPM}_{total}}{\text{mmBtu}}$$

Because worst-case PM emission rates are estimated to be less than the allowable PM emission rate, no monitoring, recordkeeping, or reporting shall be required to demonstrate compliance with this limitation.

2. **15A NCAC 2D .0516– Sulfur Dioxide Emissions From Combustion Sources** – This regulation limits sulfur dioxide (SO<sub>2</sub>) emissions to no greater than 2.3 lb/mmBtu of heat input for combustion sources. Using AP-42 emission factors, SO<sub>2</sub> emissions from natural gas are estimated to be less than 2.3 lb/MMBtu, as follows:

$$\frac{\left( 0.6 \frac{\text{lbSO}_2}{\text{mmscf}} \right)}{1,020 \frac{\text{MMBtu}}{\text{mmscf}}} = 0.0006 \frac{\text{lbSO}_2}{\text{mmBtu}}$$

Because worst-case SO<sub>2</sub> emission rates are estimated to be less than the allowable SO<sub>2</sub> emission rate, no monitoring, recordkeeping, or reporting shall be required to demonstrate compliance with this limitation.

3. **15A NCAC 2D .0521 – Control of Visible Emissions** – Visible emission (VE) standards provided in this regulation are applicable to potential VE emissions from any stack, vent, or outlet. This regulation limits visible emissions to no more than 20 percent opacity when averaged over a 6-minute period, except that 6-minute periods averaging more than 87 percent opacity may occur not more than once in any hour not more than four times in any 24-hour period. Because natural gas firing is associated with inherently low visible

emissions, no monitoring, recordkeeping, or reporting shall be required to demonstrate compliance with this limitation.

4. **15A NCAC 2D .0524 – New Source Performance Standards** – This regulation requires Magna Composites to maintain records of the natural gas fired in the boilers each month.
5. **15A NCAC 2D .1109 – CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters** – On July 20, 2007, the D.C. Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, which had been promulgated under 40 CFR 63, Subpart DDDDD. The North Carolina Attorney General's office has determined that the NESHAP vacatur equates to the failure of the U.S. EPA to promulgate a valid standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) standards required under CAA §112(j), commonly referred to as the MACT "hammer" provisions, have been triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 2D .1109.

On September 14, 2009, the NC DAQ received a Part 2 MACT "Hammer" application from this facility asking that the NC DAQ establish 112(j) emissions limitations in accordance with NC DAQ's recommendations.

No control technologies for the control of CO, metals, Hg, or HCl were identified for natural gas fired boilers in the state of North Carolina, nor were any such technologies identified in a North Carolina query using U.S. EPA's AirControlNet software (v4.1). The NC DAQ has determined that MACT is the use of best work practice standards for natural gas combustion sources of this size (i.e., 10.1 MMBtu/hr), consistent with the provisions in CAA § 112(d)(2)(D). Best work practice standards in this case shall include the annual inspection and maintenance of the boiler as follows:

*To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:*

- i. Inspect the burner, and clean or replace any components of the burner as necessary;*
- ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,*
- iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.*

*The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.*

In addition, the Permittee will be required to record the results of the annual inspection in a logbook (written or electronic format), which shall be retained on-site and made available to an authorized representative upon request.

#### **IV. Draft Permit Review Summary**

Jim Westmoreland of the Mooresville Regional Office was provided a draft permit and draft permit review document on December 14, 2009. Mr. Westmoreland recommends permit issuance after public notice.

Christopher Scotland, Magna Composites Human Resources Manager, was provided a draft permit for review on December 14, 2009. No comments were received.

#### **V. Recommendations**

This permit modification application for the Magna Composites facility located in Salisbury, Rowan County, North Carolina has been reviewed by NC DAQ to determine compliance with all procedures and requirements. NC DAQ has determined that this facility appears to be complying with all applicable requirements.

**Issue Permit No. 09076T09**