

217/782-2113

CONSTRUCTION PERMIT - NESHAP SOURCE
NOTICE OF MACT APPROVAL

PERMITTEE

Oasis Industries, Inc.
Attn: Dale Graham
1600 Mountain Street
Aurora, Illinois 60505

Application No.: 02110048 I.D. No.: 197072AAF
Applicant's Designation: Date Received: November 21, 2002
Subject: Four fiberglass resin spray booths
Date Issued: April 25, 2003
Location: 800 Central Avenue, University Park

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of four new fiberglass resin spray booths as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

In conjunction with this permit, approval is given with respect to the regulations governing Constructed or Reconstructed Major Sources of Hazardous Air Pollutants (Section 112(g) of the Clean Air Act) for the above referenced equipment as described in the application, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 63.40-44. This approval is based upon and subject to the findings and conditions which follow:

Findings

1. Oasis Industries, Inc. ("Oasis") currently operates a reinforced plastic composites manufacturing operation. Oasis plans to install a four new fiberglass resin spray booth. The new fiberglass resin spray booths involve a combination of fiberglass and gel coating to supplement the production of fiberglass/acrylic bath fixtures and other plastic parts.
2. The proposed project has potential emissions that are more than 10 tons/year for styrene, which is classified as a hazardous air pollutant (HAP), as defined in Section 112(b) of the Clean Air Act. The USEPA has proposed rules establishing Maximum Achievable Control Technology (MACT) for emission of HAP for Reinforced Plastic Composites Production, however these rules have not yet been promulgated. Therefore, the project is subject to a source specific determination of MACT, pursuant to 40 CFR 63.40-44: Constructed and Reconstructed Major Sources of Hazardous Air Pollutants.

3. After reviewing all materials submitted by Oasis, the Illinois EPA has determined that the project will use work practices and control equipment that will comply with all applicable Board emissions standards and is proposing to use MACT.
4. A copy of the application, the Illinois EPA's review of the application, and a draft of this permit were forwarded to a location in the vicinity of the plant. The public was given notice and opportunity to examine this material, to submit comments, and to request and participate in a public hearing on this matter.

The Illinois EPA is issuing approval subject to the following conditions and consistent with the specifications and data included in the application. Any departure from the conditions of this approval or terms expressed in the application would need to receive prior written authorization from the Illinois EPA.

Conditions

1.0 Unit Specific Conditions

1.1 Unit: Fiberglass Resin Spray Booths

1.1.1 Description

The four new fiberglass resin spray booths will be a combination of fiberglass resin and gel coat spray booths to supplement production of fiberglass bath fixtures and other miscellaneous plastic parts.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
#2	Gel Coat Spray Booth	Filter Pack
#2	Skin Coat Spray Booth	Filter Pack
#1	Final Coat Spray Booth	Filter Pack
#2	Final Coat Spray Booth	Filter Pack

1.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected booths" for the purpose of these unit-specific conditions, are the fiberglass resin spray booths as described in Conditions 1.1.2 and 1.1.3.
- b. The affected booths are subject to 35 IAC Part 218, Subpart CC, Polyester Resin Product Manufacturing Process: Pursuant to 35 IAC 218.660.
 - i. The Permittee shall comply with a monomer content of no more than 48% by weight for polyester resin materials used for products requiring corrosion resistance or fire retardant, pursuant to 35 IAC 218.666(1) (A) (i).

- ii. The Permittee shall comply with a monomer content of no more than 50% by weight for clear gel coat as applied, pursuant to 35 IAC 218.666(1) (A) (iii).
 - iii. The Permittee shall comply with a monomer content of no more than 45% by weight as applied, for other pigmented gel coats, pursuant to 35 IAC 218.666(1) (A) (iv).
 - iv. The Permittee shall comply with all other applicable control requirements in 35 IAC 218.666.
- c. The affected booths are subject to 35 IAC 212.321(a), which provides that the Permittee shall not cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- d. The affected booths are subject to 35 IAC 218.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit. This standard is applicable to the affected booths because the principal constituent in the VOM emissions, styrene, constitute a photochemically reactive material, as described by 35 IAC 211.4690.
- e. i. This Permit is issued based on the source, including the affected booth, complying with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production 40 CFR 63, Subpart WWWW. The affected booth shall comply with all applicable requirements for new or reconstructed equipment in 40 CFR 63, Subpart WWWW, when these standards are adopted by USEPA and are effective and applicable to the affected booth.
- ii. For purpose of complying with Section 112(g) of the Clean Air Act, the affected booth shall comply with the proposed standards as stated in the Federal Register Vol. 66, No. 149 dated

August 2, 2001 pages 40324 to 40369, including the following requirements until such time as these requirements are superseded by provisions of 40 CFR 63 Subpart WWWW, as provided above.

- A. The Permittee shall comply with all applicable point values for specific open molding and centrifugal Casting Process stream, pursuant to proposed (66 FR 149, August 2, 2001, p40324-40369) 40 CFR 63.5797, 5798 and 5810.
- B. The Permittee shall comply with all applicable emission limits as required by 40 CFR 63.5805, 5810, 5835 and 5900.
- C. The Permittee shall comply with all applicable work practice standards in 40 CFR 63.5805.
- D. This Condition represents the Maximum Achievable Control Technology (MACT) for emissions of hazardous air pollutants (HAP) as applied to this project, pursuant to 40 CFR 63.42(c).

1.1.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected booths not being a modification subject to 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM) because the emissions of VOM from the affected booths are less than 25 tons per year (See Attachment A).

1.1.5 Control Requirements and Operational Requirements

- a. Total usage of gel coats shall not exceed 19,660 lb/month and 196,595 lb/yr.
- b. The total usage of resin from the skin coat and final coat spray booths shall not exceed 84,970 lbs/month and 849,716 lb/year.
- c. The Permittee shall follow good operating practices for the affected booths, including periodic inspection, routine maintenance and prompt repair of defects.
- d. The Permittee shall not use volatile organic material for cleanup of the affected booths.

1.1.6 Emission Limitations

- a. Emissions of volatile organic material (VOM), including HAP (styrene plus MMA) from the affected booths shall not exceed 3 tons/month and 24.25 tons/year.
- b. Emissions of MMA from the gel coat spray booth shall not exceed 2.90 lb/hr and 0.65 tons/year.
- c. This permit is issued based on emissions of particulate matter (PM) from the affected booths being negligible. For this purpose negligible emissions shall not exceed 0.1 lb/hr and 0.44 tons/year.

1.1.7 Testing Requirements

- a. The Permittee shall conduct initial compliance demonstration with all applicable emission standards in 40 CFR 63.5805, pursuant to 40 CFR 63.5860, as proposed, no later than 180 days after initial start up of the affected booths.
- b. The Permittee shall keep records of all compliance demonstration that is performed.

1.1.8 Monitoring Requirements

None

1.1.9 Recordkeeping Requirements

- a. The Permittee shall keep on file a demonstration that the maximum hourly emissions of organic material from the affected booths are no more than 8.0 lb/hr. This demonstration shall be based on the maximum usage of material that would occur for the production of any products made in the booths and the maximum VOM content and loss associated with such product.
- b. The Permittee shall keep the following records related to material usage in the affected booths.
 - i. The name and identification number of each gel coating and resin as applied on the affected booths;
 - ii. Records of each gel coating and resin usage for the affected booths, (lb/month and lb/yr); and

- iii. The VOM, styrene, MMA and other HAP percent by weight content of the gel coatings and resin with the source of this information.
- c. Log of inspection and maintenance for the affected booths.
- d. The Permittee shall keep the following records related to emissions from the affected booths.
 - i. A file containing the appropriate emission factors for VOM and HAP.
 - ii. The monthly and aggregate VOM and HAP emissions from the affected booths based on the material usage, with all supporting calculations and documentation.
- e. The Permittee shall comply with all applicable recordkeeping, notification and reporting requirements in the NESHAP 40 CFR 63.5905 and 63.5910, until such time as the provision are adopted by USEPA and applicable to the booths, the Permittee shall comply with the proposed version of these provisions.
- f. The Permittee shall comply with all applicable recordkeeping and reporting requirements pursuant to 35 IAC 218.672.

1.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA of noncompliance of an affected booths with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.
- b. Two copies of the Final Report(s) and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016
Telephone: 847/294-4000 Facsimile: 847/294-4018

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

1.1.12 Compliance Procedures

- a. Compliance with Condition 1.1.3(c) is assumed to be achieved by proper operation of the affected booths, as addressed by Condition 1.1.5.
- b. To determine compliance with Condition 1.1.6, VOM and HAP emissions from the affected booths shall be calculated based on the recordkeeping requirements in Condition 1.1.9, the appropriate emission factors and emission formula listed below:

$$E_m = PWR \times \text{Content} \times \% \text{ Loss Factor}$$

Where:

- E_m = Emission rate
- PWR = Material usage (Styrene resin, gel coat, etc.).
- Content = The maximum fraction of VOM or HAP (styrene monomer) present in the material (lb/lb).
- Loss = Appropriate factor for loss of monomer as emissions (lb/lb) from the Unified Emission Factor for Composites or other more reference approved by the Illinois EPA and USEPA.

- 2a. Under this permit, the affected booths may be operated for a period of up to 1 year from initial startup to allow for equipment shakedown and testing as required. This period may be extended by the Illinois EPA upon request of the Permittee if additional time is needed to complete shakedown or perform testing.

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- b. Upon successful compliance demonstration with all applicable short-term limitations, the Permittee may continue to operate the affected booths as provided a complete CAAPP application is submitted within 12 month of initial startup, as required by Section 39.5(5) of the Environmental Protection Act.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

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cc: Region 1

ATTACHMENT A

Summary of Emissions (Tons/Year)*

Equipment	VOM	Styrene	MMA
Gel Coat Spray Booth	8.09	8.09	0.65
Skin Coat Spray Booth	4.13	4.13	--
Final Coat Spray Booth	6.01	6.01	--
Final Coat Spray Booth	6.01	6.01	--
Total	24.24	24.24	0.65

* Note: Based on no increase in VOM emissions for the contemporaneous period of 1999 to 2003.

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