



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

September 23, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Noble Composites, Inc / 039-19224-00556

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03



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Mr. Larry Farver
Noble Composites, Inc.
2424 East Kercher Road
Goshen, Indiana 46526

September 23, 2004

Re: 039-19224-00556
Significant Source Modification to:
Part 70 permit No.:T039-16024-00556

Dear Mr. Farver:

Noble Composites, Inc. was issued a Part 70 operating permit T039-16024-00556 on April 23, 2004 for a fiberglass panel manufacturing plant. An application to modify the source was received on May 24, 2004. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for modification at the source:

- (a) Two (2) gel coat tunnels, identified as EU1 and EU2, constructed in 2001 and modified in 2004, both equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.
- (b) One (1) laminating tunnel, identified as EU3, constructed in 2001 and modified in 2004, equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.

The following construction conditions are applicable to the proposed project:

- 1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- 2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

This significant source modification authorizes modification of the existing units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Elkhart County
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector - Greg Wingstrom
Compliance Data Section
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Noble Composites, Inc.
2424 East Kercher Road
Goshen, Indiana 46526**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-16024-00556	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: April 23, 2004 Expiration Date: April 24, 2009
First Significant Source Modification: T039-19224-00556	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: September 23, 2004



SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary fiberglass and wood reinforced plastic flat panel manufacturing plant.

Responsible Official:	President
Source Address:	2424 East Kercher Road, Goshen, Indiana 46526
Mailing Address:	2424 East Kercher Road, Goshen, Indiana 46526
General Source Phone Number:	(574) 534-0010
SIC Code:	3083
County Location:	Elkhart
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under Nonattainment NSR Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) gel coat tunnels, identified as EU1 and EU2, constructed in 2001 and modified in 2004, both equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.
- (b) One (1) laminating tunnel, identified as EU3, constructed in 2001 and modified in 2004, equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6-3]
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) Two (2) gel coat tunnels, identified as EU1 and EU2, constructed in 2001 and modified in 2004, both equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.
- (b) One (1) laminating tunnel, identified as EU3, constructed in 2001 and modified in 2004, equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

- (a) The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the fiberglass panel manufacturing operation described in 40 CFR 63.5790(b) except when otherwise specified in 40 CFR 63, Subpart WWWW.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.1.2 Reinforced Plastics Composites Production NESHAP [326 IAC 20-14-1] [40 CFR Part 63, Subpart WWWW]

- (a) The fiberglass panel manufacturing operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, (40 CFR 63, Subpart WWWW), effective April 21, 2003. Pursuant to this rule, the Permittee must comply with Subpart WWWW by April 21, 2006, or accept and meet an enforceable HAP emissions limit below the major source threshold prior to April 21, 2006. Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15, does not apply to paragraph (a) of this condition.
- (b) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart WWWW:
 - (1) Two gelcoat tunnels, identified as EU1 and EU2; and
 - (2) One laminating tunnel, identified as EU3;
- (c) The definitions of 40 CFR 63, Subpart WWWW at 40 CFR 63.5935 are incorporated by reference.

D.1.3 National Emissions Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production - Notification Requirements [40 CFR 63, Subpart WWWW][326 IAC 20-14-1]

- (a) Pursuant to 40 CFR 63.5905, the Permittee shall submit all of the notifications in Table 13 of 40 CFR 63, Subpart WWWW that apply to the affected source and chosen

compliance method by the dates specified. These notifications include, but are not limited to, the following

- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than August 19, 2003.
- (2) If complying with organic HAP emissions limit averaging provisions, the Permittee shall submit a Notification of Compliance Status, containing the information specified in 40 CFR 63.9(h), no later than May 21, 2007.
- (3) If complying with organic HAP content limits, application equipment requirements, or organic HAP emissions limit other than organic HAP emissions limit averaging, the Permittee shall submit a Notification of Compliance Status, containing the information specified in 40 CFR 63.9(h), no later than May 21, 2006.
- (4) If complying by using an add-on control device, the Permittee shall submit:
 - (A) A notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin.
 - (B) A notification of the date for the CMS performance evaluation, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
 - (C) A Notification of Compliance Status as specified in 40 CFR 63.9(h), no later than 60 calendar days after the completion of the add-on control device performance test and CMS performance evaluation.

- (b) The notifications required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.4 VOC and HAP Limits [326 IAC 2-4.1-1] [326 IAC 8-1-6] [326 IAC 2-1.1-5]

- (a) Pursuant to 326 IAC 8-1-6, MSOP #039-14254-00556, issued on August 9, 2001, and SPR #039-16410-00556, issued on March 28, 2003, the fiberglass panel manufacturing operation is subject to the requirements of 326 IAC 8-1-6 because the potential emissions are greater than twenty-five (25) tons per year and there are no other applicable Article 8 rules that apply. This rule requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the MACT determination of 326 IAC 2-4.1 (New Source Toxics Control).

- (b) Pursuant to the MACT determination under 326 IAC 2-4.1-1, and the BACT determination under 326 IAC 8-1-6, operating conditions for the fiberglass panel manufacturing operation shall be the following:
- (1) The VOC emissions from the gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by a thermal oxidizer.
 - (2) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit volatile organic HAP and VOC before control from use of such resins and gel coats only shall be less than:
 - (A) Two hundred forty five (245) tons per twelve (12) consecutive month period with compliance determined at the end of each month before initial start-up of the thermal oxidizer; or
 - (B) 616 tons per twelve (12) consecutive month period after initial start-up of the thermal oxidizer, with compliance determined at the end of each month.

Compliance with these limits shall be determined based upon the following criteria:

- (i) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (ii) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 2001. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purpose of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (3) The overall VOC/HAP control efficiency for the thermal oxidizer, including destruction efficiency and capture efficiency, shall be greater than 95%. Combined with Condition D.1.4(b)(2)(B), this is equivalent to 30.8 tons/yr of VOC/HAP emissions after control. Compliance with this limit also makes the requirements of Nonattainment NSR (326 IAC 2-1.1-5) not applicable.
 - (4) Before initial start-up of the thermal oxidizer, the HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emission mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production ¹ Gel Coat	36
Tooling Gel Coat	45
Production Resin	35
Tooling Resin	43

¹Production refers to the manufacture of parts

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions for higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) < (Emissions from compliant resin or gel coat) - Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF (HAP monomer emission factor for resin or gel coat used, %); EF, HAP monomer emission factor = emission factor expressed as pounds (lb) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (5) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via the use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, controlled spray used in combination with automated actuators, or installing a control device.

- (6) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (7) The listed work practices shall be followed:
- (A) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (B) For VOC- and/or HAP-containing materials:
 - (i) Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (ii) Cleanup stations shall be closed containers having soft-gasketed, springloaded closures and shall be kept completely closed when not in use.
 - (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
 - (C) All material storage containers shall be kept covered when not in use.

D.1.5 Work Practice Standards for Reinforced Plastic Composites Fabrication [326 IAC 20-25-4]
Pursuant to 326 IAC 20-25-4, the following work practice standards shall be implemented:

- (a) Non-atomizing spray equipment shall not be operated at pressures that atomize the material during the application process.
- (b) Except for mixing containers as described in item (g), HAP containing materials shall be kept in a closed container when not in use.
- (c) Solvents sprayed during cleanup and resin changes shall be directed into solvent collection containers.
- (d) Solvent collection containers shall be kept closed when not in use.
- (e) Clean-up rags with solvent shall be stored in closed containers.
- (f) Closed containers shall be used for the storage of the following:
 - (1) All production and tooling resins that contain HAPs.
 - (2) All production and tooling gel coats that contain HAPs.

- (3) Waste resins and gel coats that contain HAPs.
- (4) Cleaning materials, including waste cleaning materials.
- (5) Other materials that contain HAPs.
- (g) All resin and gel coat mixing containers with a capacity equal to or greater than fifty-five (55) gallons must have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

D.1.6 Operator Training for Reinforced Plastic Composites Fabrication [326 IAC 20-25-8]

Pursuant to 326 IAC 20-25-8, all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and spray-like applications (for example, those applications that could result in excess emissions if performed improperly) shall be trained according to the following schedule:

- (a) All personnel hired after March 7, 2001 shall be trained within fifteen (15) days of hiring.
- (b) All personnel hired before March 7, 2001 shall be trained or evaluated by a supervisor within thirty (30) days of the start of operation.
- (c) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.
- (d) Personnel who have been trained by another owner or operator subject to 326 IAC 20-25 are exempt from subdivision (a) if written documentation that the employee's training is current is provided to the new employer.
- (e) If the result of an evaluation shows that training is needed, such training shall occur within fifteen (15) days of the evaluation.
- (f) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (g) The owner or operator shall maintain the following training records on site and available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of all current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.

D.1.7 Particulate Matter (PM) [40 CFR 52 Subpart P] [326 IAC 6-3-2(d)]

- (a) Pursuant to 40 CFR 52 Subpart P, the particulate matter emissions from the fiberglass operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

- (b) Pursuant to MSOP #039-14254-00556, issued on August 9, 2001, SPR #039-16410-00556, issued on March 28, 2003, and 326 IAC 6-3-2(d), particulate from the gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.9 Hazardous Air Pollutants (HAP) and Volatile Organic Compounds (VOC)

Compliance with the HAP monomer content limitations in Conditions D.1.4(b)(2) and shall be determined by any of the following:

- (a) The manufacturer's certified product data sheet.
- (b) The manufacturer's material safety data sheet.
- (c) Sampling and analysis, using any of the following test methods, as applicable:
 - (1) 40 CFR 60, Method 24, Appendix A (July 1, 1998), shall be used to measure the total volatile HAP and volatile organic compound (VOC) content of resins and gel coats. Method 24 may be modified for measuring the volatile HAP content of resins or gel coats to require that the procedure be performed on uncatalyzed resin or gel coat samples.
 - (2) 40 CFR 63, Method 311, Appendix A (July 1, 1998), shall be used to measure HAP content in resins and gel coats by direct injection into a gas chromatograph.
- (d) An alternate method approved by IDEM, OAQ.
- (e) IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after initial startup the thermal oxidizer, the Permittee shall conduct a performance test to verify VOC/HAP control efficiency as per condition D.1.4(b)(3) for the thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.11 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. For the purposes of this

condition, continuous means no less than one minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature of 1,500°F.

- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limit in condition D.1.4(b)(3) as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature as observed during the compliant stack test.

D.1.12 Parametric Monitoring

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limit in condition D.1.4(b)(3) as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.1.13 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the reinforced plastics composites fabricating manufacturing processes shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications. This requirement to operate the control is not federally enforceable.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.14 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks EFG1 and EFL1 (before initial startup of the thermal oxidizer) or stack TO1 (after initial startup of the thermal oxidizer) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack(s) and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.15 Visible Emissions Notations

- (a) Weekly visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.16 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4(b)(2), the Permittee shall maintain records that are complete and sufficient to establish compliance with the VOC and HAP emission limits before control. Records maintained shall be taken monthly. Examples of such records include but are not limited to:
 - (1) The usage by weight and monomer content of each resin and gel coat used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS), manufacturer's certified product data sheets, and calculations necessary to verify the type, amount used, and HAP content of each resin or gel coat;
 - (2) A log of the dates of use;
 - (3) Method of application and other emission reduction techniques for each resin and gel coat used;
 - (4) Monthly calculations demonstrating compliance on an equivalent emissions mass basis if non-compliant resins or gel coats are used during that month.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following training records:
 - (1) A copy of the current training program.
 - (2) A list of all current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.
- (c) To document compliance with Condition D.1.11, the Permittee shall maintain the continuous temperature records for the thermal oxidizer and the hourly average

- temperature used to demonstrate compliance during the most recent compliant stack test.
- (d) To document compliance with Condition D.1.12, the Permittee shall maintain the daily records of the duct pressure or fan amperage.
 - (e) To document compliance with Conditions D.1.14, the Permittee shall maintain a log of weekly and monthly overspray observations, daily and monthly inspections and those additional inspections prescribed by the Preventive Maintenance Plan.
 - (f) To document compliance with Condition D.1.15, the Permittee shall maintain records of weekly visible emission notations of the fiberglass operations' stack exhaust.
 - (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements

- (a) To document compliance with Condition D.1.2, the Permittee must submit:
 - (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than August 19, 2003.
 - (2) If complying with organic HAP emissions limit averaging provisions, the Permittee must submit a Notification of Compliance Status, containing the information specified in 40 CFR 63.9(h), no later than May 21, 2007.
 - (3) If complying with organic HAP content limits, application equipment requirements, or organic HAP emissions limit other than organic HAP emissions limit averaging, the Permittee must submit a Notification of Compliance Status, containing the information specified in 40 CFR 63.9(h), no later than May 21, 2006.
 - (4) If complying by using an add-on control device, the Permittee must submit:
 - (A) A notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin.
 - (B) A notification of the date for the CMS performance evaluation, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
 - (C) A Notification of Compliance Status as specified in 40 CFR 63.9(h), no later than 60 calendar days after the completion of the add-on control device performance test and CMS performance evaluation.
- (b) A quarterly summary of the information to document compliance with Condition D.1.4(b)(2) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.2-1(1).
- (c) Sources using monthly emissions averaging pursuant to 326 IAC 20-25-3(h)(2) and Condition D.1.5(a) shall submit a quarterly summary report and supporting calculations

pursuant to 326 IAC 20-25-7(c). The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.18 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart WWWW, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine months before April 21, 2006.
- (c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Data Section

Part 70 Quarterly Report

Source Name: Noble Composites, Inc.
Source Address: 2424 East Kercher Road, Goshen, Indiana 46526
Mailing Address: 2424 East Kercher Road, Goshen, Indiana 46526
Part 70 Permit No.: T039-16024-00556
Facility: Fiberglass panel manufacturing unit
Parameter: VOC/HAP Emissions before control
Limit: (a) 245 tons per twelve (12) consecutive month period with compliance determined at the end of each month (before initial start-up of the thermal oxidizer); or
(b) 616 tons per twelve (12) consecutive month period with compliance determined at the end of each month (after initial start-up the thermal oxidizer)

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification

Source Background and Description

Source Name:	Noble Composites, Inc.
Source Location:	2424 East Kercher Road, Goshen, Indiana 46526
County:	Elkhart
SIC Code:	3089
Operation Permit No.:	T039-16024-00556
Operation Permit Issuance Date:	April 23, 2004
Significant Source Modification No.:	039-19224-00556
Significant Permit Modification No.:	039-19630-00556
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Noble Composites, Inc. relating to the modification of the following emission units and pollution control devices:

- (a) Two (2) gel coat tunnels, identified as EU1 and EU2, constructed in 2001 and modified in 2004, both equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.
- (b) One (1) laminating tunnel, identified as EU3, constructed in 2001 and modified in 2004, equipped with dry filters for particulate control, using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control, and exhausting to stack TO-1.

History

Noble Composites, Inc. is an existing fiberglass panel manufacturing plant and an existing Nonattainment NSR major source. Their Part 70 permit (T039-16024-00556) was issued on April 23, 2004. On May 24, 2004, the Permittee submitted an application to the OAQ requesting the following changes to their existing plant:

- (a) Increasing the fiberglass panel production rate of the existing manufacturing line. This is achieved by improving the existing mold conveying system.
- (b) Installing and operating a thermal oxidizer (identified as VECD1) to control VOC and HAP emissions from the open molding process. This thermal oxidizer will provide more than 95% overall control efficiency for VOC and HAP.
- (c) Using gel coats and resins with higher HAP monomer contents.

Currently, the potential to emit VOC/HAP from the use of resins and gel coats is limited to less than 245 tons/yr in the source's Part 70 permit (T039-16024-00556, issued on April 23, 2004), pursuant to 326 IAC 8-1-6 (BACT) and 326 IAC 2-4.1 (MACT). Since the VOC/HAP emissions will be controlled by a thermal oxidizer, the potential to emit VOC/HAP after control will be decreased significantly after this modification. The potential to emit PM/PM10 of this modification is less than 15 tons/yr for PM10 and 25 tons/yr for PM. Therefore, this modification is not major for NSR and PSD review purposes.

After installing the thermal oxidizer, the source will reduce 95% of the VOC/HAP emissions from the fiberglass panel manufacturing at this source. In order to be consistent with the requirements in 40 CFR 63, Subpart WWWW, this source will no longer be required to comply with the specific HAP monomer content limits in T039-16024-00556, issued on April 23, 2004, after initial start-up of the thermal oxidizer.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and the Part 70 Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 24, 2004. Additional information was received on July 6, 2004 and July 7, 2004.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 4).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	57.7
PM-10	57.7
SO ₂	--
VOC	616
CO	--
NO _x	--

HAP's	Potential To Emit (tons/year)
Styrene	532
MMA	84.0
TOTAL	616

Justification for Modification

This modification is being performed through a Part 70 Significant Source Modification because: (1) the potential to emit of this modification is greater than 25 tons/yr for PM, PM10, and VOC pursuant to 326 IAC 2-7-10.5(f)(4); and (2) the potential to emit of this modification is greater than 10 tons/yr for a single HAP and greater than 25 tons/yr for any combination of HAPs pursuant to 326 IAC 2-7-10.5(f)(6). The permit modification is being performed through a Part 70 Significant Permit Modification pursuant to 326 IAC 2-7-12(d).

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO _x	Attainment
8-Hour Ozone	Nonattainment
1-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Elkhart County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) and 326 IAC 2-2.
- (c) Fugitive Emissions
 Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Nonattainment NSR applicability.

Source Status

Existing Source Nonattainment NSR Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Less than 22.7
PM-10	Less than 22.7
SO ₂	Negligible
VOC	Less than 250 and greater than 100
CO	Negligible
NOx	Negligible

- (a) This existing source is an Nonattainment NSR major stationary source because a nonattainment regulated pollutant (VOC) is emitted at a rate of one hundred (100) tons per year or more, and it is not in one (1) of the twenty-eight (28) listed source categories.
- (b) These emissions are the potential to emit of this source, according to the TSD of #T039-16024-00556, issued on April 23, 2004.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
PTE of Tunnels EU1, EU2, and EU3	Less than 12.0	Less than 12.0	--	Less than 30.8	--	--	Less than 30.8
NG Combustion in Thermal Oxidizer	0.09	0.09	0.01	0.07	1.01	1.20	Negligible
PTE of the Trimming and Grinding Operations	Less than 0.74	Less than 0.74	-	-	-	-	-
*Actual Emissions from EU1, EU2, and EU3	3.03	3.03	--	110	--	--	110
*Actual Emissions from Trimming and Grinding Operations	0.24	0.24	--	--	--	--	--
**Total PTE of this Modification	Less than 9.56	Less than 9.56	0.01	Less than -79.1	1.01	1.20	Less than -79.2
NSR Significant Thresholds	25	15	40	40	100	40	NA

Note: (*)The actual emissions are the averaged emissions for these units in 2002 and 2003, which were provided by Noble Composites, Inc. based on the actual gel coat and resin usages and the actual operating hours.
 (**) Total PTE of this Modification = (PTE of the Modified Units) - (Actual Emissions of the Modified Units) + PTE of NG Combustion in Thermal Oxidizer.

This modification to an existing Nonattainment NSR major source is not major because the emission increase is less than the Nonattainment NSR significant levels. Therefore, the requirements of Nonattainment NSR do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) This source does not have a spin wool fiberglass insulation manufacturing line. Therefore, the New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants (40 CFR Part 60.680 - 60.685, Subpart PPP) are not applicable.
- (c) This source does not apply surface coating to any business machines. Therefore, the New Source Performance Standards for Surface Coating of Plastic Parts for Business Machines (40 CFR Part 60.720 - 60.726, Subpart TTT) are not applicable.
- (d) The fiberglass panel manufacturing units EU1, EU2, and EU3 manufacture products with thermoset resins and gel coats. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Reinforced Plastic Composites Production

Facilities (40 CFR Part 63.5780 - 63.5935, Subpart WWWW) are applicable. Pursuant to 40 CFR 63.5795, this source is considered an existing HAP major source under 40 CFR 63, Subpart WWWW. Therefore, it is required to comply with this NESHAP by April 21, 2006, pursuant to 40 CFR 63.5800.

Pursuant to T039-16024-00556, issued on April 23, 2004, the Permittee shall submit an application for a significant permit modification nine (9) months prior to the compliance date for the MACT, April 21, 2006, that will specify the option or options for the emission limitations and standards and methods for determining compliance chosen by the Permittee. At that time, IDEM, OAQ will include the specific details of the rule and how the Permittee will demonstrate compliance.

- (e) This modification does involve pollutant-specific emissions units (EU1, EU2, and EU3) as defined in 40 CFR 64.1:
- (1) With the potential to emit before controls equal to or greater than the major source threshold;
 - (2) That is subject to an emission limitation or standard; and
 - (3) Uses a control device (a thermal oxidizer) as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

However, these units are subject to the NESHAP for Reinforced Plastic Composites Production Facilities (40 CFR 63, Subpart WWWW) and this NESHAP was promulgated after November 15, 1990. Therefore, pursuant to 40 CFR 64.2(b)(i), these units are exempt from the requirements of 40 CFR 64 (Compliance Assurance Monitoring).

State Rule Applicability - Entire Source

326 IAC 2-1.1-5 (Nonattainment NSR)

This source was constructed in 2001, and modified in 2003 and 2004 (this modification). This source is located in Elkhart County, which was redesignated as nonattainment area for 8-hour ozone standard. This source is not in 1 of 28 source categories and has actual VOC emissions greater than 100 tons/yr. Therefore, this existing source is a major source under Nonattainment NSR.

The potential to emit NOx of this modification is less than 40 tons/yr and the potential to emit VOC of this modification is limited to less than 40 tons/yr by using a thermal oxidizer with the existing fiberglass panel manufacturing line (see the discussion for 326 IAC 8-1-6 (BACT) requirements below). Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 2001, and modified in 2003 and 2004 (this modification). This existing source is a NSR major source and the potential to emit of this modification after control is less than 25 tons/yr for PM, 15 tons/yr for PM10, 40 tons/yr for SO₂, and 100 tons/yr for CO. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable. The use of dry filters for the spray applications and the use of baghouses for trimming and grinding operations ensures that the potential to emit PM/PM10 of this modification is less than 25 tons/yr for PM and less than 15 tons/yr for PM10.

326 IAC 2-4.1 (New Source Toxic Control)

The potential to emit HAP from this modification is greater than 10 tons per year for a single HAP and greater than 25 tons per year for any combination of HAPs. However, this modification is not considered a reconstruction to the existing fiberglass panel manufacturing line and the existing fiberglass panel manufacturing line is subject to 40 CFR 63, Subpart WWWW (NESHAP for Reinforced Plastic Composites Production Facilities). Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable to this modification.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Gel Coat and Laminating Tunnels (EU1, EU2, and EU3)

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) of the fiberglass panel manufacturing line were constructed after 1980 and each has potential VOC emissions greater than 25 tons/yr. Therefore, these units are subject to the requirements of 326 IAC 8-1-6 and are required to control VOC emissions with Best Available Control Technology (BACT).

Pursuant to the source's Part 70 permit (T039-16024-00556, issued on April 23, 2004), the following limitations have been determined to be the BACT for gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3):

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit VOC from use of such resins and gel coats only shall be less than two hundred forty five (245) tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emission mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production ¹ Gel Coat	36
Tooling Gel Coat	45
Production Resin	35
Tooling Resin	43

¹Production refers to the manufacture of parts.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via the use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, controlled spray used in combination with automated actuators, or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant

purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ to be equivalent to the spray applicators listed above.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - (A) Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (B) Cleanup stations shall be closed containers having soft-gasketed, springloaded closures and shall be kept completely closed when not in use.
 - (C) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (D) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (E) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
 - (3) All material storage containers shall be kept covered when not in use.

The source requested to increase their production rate in this modification. The potential to emit VOC of the fiberglass panel manufacturing line before control will be increased to 616 tons/yr. Since the VOC emission increase from this modification is greater than 25 tons/yr, this source is required to control VOC emissions from the existing fiberglass panel manufacturing line with BACT. The source has proposed the following requirements as the BACT for the fiberglass panel production processes at this source (EU1, EU2, and EU3):

- (a) The VOC/HAP emissions from the gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by a thermal oxidizer.
- (b) After initial start-up of the thermal oxidizer, use of resins and gel coats that contain styrene shall be limited such that the potential to emit VOC/HAP before control from use of such resins and gel coats only shall be less than 616 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) The overall VOC/HAP control efficiency, including destruction efficiency and capture efficiency, for the thermal oxidizer shall be greater than 95%. Combined with the VOC/HAP emission limit of 616 tons/yr (before control), this is equivalent to 30.8 tons/yr of VOC/HAP emissions after control.
- (d) The spray application technology requirements in T039-16024-00556, issued on April 23, 2004.
- (e) The work practice requirements in T039-16024-00556, issued on April 23, 2004.

According to the BACT analysis in the TSD for SPR #039-16140-00556, issued on March 28, 2003, using thermal oxidizer to control the VOC emissions from the fiberglass panel

manufacturing process is a technically feasible control option and thermal oxidizers have the highest VOC destruction efficiency (98%) among all the technically feasible control options. Therefore, IDEM, OAQ agreed that the above requirements are the BACT for the fiberglass panel manufacturing line at this source.

Note that the HAP monomer content limits for resins and gel coats used at this source have been removed from the BACT requirements, in order to be consistent with the NESHAP requirements in 40 CFR 63, Subpart WWWW.

326 IAC 20-25 (Reinforced Plastics Composites Fabricating Emission Units)

The potential to emit HAP of this source is greater than 10 tons/yr for a single HAP and greater than 25 tons/yr for any combination HAPs. In addition, this source has actual styrene emissions greater than 3 tons/yr. Therefore, the fiberglass panel manufacturing line at this source is subject to 326 IAC 20-25 and shall comply with the following requirements on or after January 1, 2002:

Emission Standards and Application Technology

Since the fiberglass panel manufacturing line at this source was subject to the requirements of 326 IAC 2-4.1 (MACT) when it was constructed in 2001, this line is not subject to the emission standards and the application technology requirements in 326 IAC 20-25-3, pursuant to 326 IAC 20-25-3(f).

Work Practice Standards

Pursuant to 326 IAC 20-25-4, the following work practice standards shall be implemented:

- (a) Non-atomizing spray equipment shall not be operated at pressures that atomize the material during the application process.
- (b) Except for mixing containers as described in item (g), HAP containing materials shall be kept in a closed container when not in use.
- (c) Solvents sprayed during cleanup and resin changes shall be directed into solvent collection containers.
- (d) Solvent collection containers shall be kept closed when not in use.
- (e) Clean-up rags with solvent shall be stored in closed containers.
- (f) Closed containers shall be used for the storage of the following:
 - (1) All production and tooling resins that contain HAPs.
 - (2) All production and tooling gel coats that contain HAPs.
 - (3) Waste resins and gel coats that contain HAPs.
 - (4) Cleaning materials, including waste cleaning materials.
 - (5) Other materials that contain HAPs.
- (g) All resin and gel coat mixing containers with a capacity equal to or greater than fifty-five (55) gallons must have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

Operator Training

Pursuant to 326 IAC 20-25-8, all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and spray-like applications (for example, those applications that could result in excess emissions if performed improperly) shall be trained according to the following schedule:

- (a) All personnel hired after March 7, 2001 shall be trained within fifteen (15) days of hiring.
- (b) All personnel hired before March 7, 2001 shall be trained or evaluated by a supervisor within thirty (30) days of the start of operation.
- (c) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.
- (d) Personnel who have been trained by another owner or operator subject to 326 IAC 20-25 are exempt from subdivision (a) if written documentation that the employee's training is current is provided to the new employer.
- (e) If the result of an evaluation shows that training is needed, such training shall occur within fifteen (15) days of the evaluation.
- (f) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (g) The owner or operator shall maintain the following training records on site and available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of all current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.

326 IAC 6-3-2 (Process Operations)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued, these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirement from the previous version of 326 IAC 6-3 (Process Operations), which has been approved into the SIP, remains an applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR 52, Subpart P, the particulate matter (PM) from each of the fiberglass panel manufacturing processes (EU1, EU2, and EU3) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

P = process weight rate in tons per hour

Pursuant to the revised 326 IAC 6-3-2(d), particulate from these spray applicators shall be controlled by dry filters, or equivalent control devices, and the Permittee shall operate the control device in accordance with manufacturer's specifications. This source currently uses dry filters to control overspray. Therefore, fiberglass panel manufacturing processes (EU1, EU2, and EU3) are in compliance with 326 IAC 6-3-2.

Testing Requirements

In order to demonstrate compliance with the BACT limits for the fiberglass panel production line, within one hundred and eighty (180) days after initial startup the thermal oxidizer, the Permittee shall conduct a performance test to verify VOC/HAP control efficiency for the thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The spray applicators for gel coat and laminating tunnels (EU1, EU2, and EU3) have applicable compliance monitoring conditions as specified below:
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the stack TO-1 while one or more of the spray applicators are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (b) Monthly inspections shall be performed of the emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission occurs or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance

Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (d) Visible emissions notations of the stack TO-1 shall be performed once per week during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (e) A continuous temperature monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer/heat recovery steam generator for measuring operating temperature. For the purposes of this condition, continuous means no less than once per minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the thermal oxidizer/heat recovery steam generator is below 1,500°F. An hourly average temperature that is below 1,500°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.
- (e) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in this permit, as approved by IDEM.
- (f) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the hourly average temperature of the thermal oxidizer/heat recovery steam generator is below the hourly average temperature as observed during the compliant stack test. An hourly average temperature that is below the hourly average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.
- (g) The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in this permit, as approved by IDEM.
- (h) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer/heat recovery steam generator is in operation. When for any one reading, the duct pressure or fan amperage is outside the normal range as established in most recent compliant stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A reading that is

outside the range as established in the most recent compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

These monitoring conditions are necessary because these spray applicators and the thermal oxidizer must operate properly to ensure compliance with 40 CFR 52, Subpart P, 326 IAC 2-4.1 (MACT), 326 IAC 8-1-6 (BACT), and 326 IAC 2-2 (PSD).

Proposed Changes

Bold language has been added, language with a line through it has been deleted.

A.1 General Information ~~[326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]~~

The Permittee owns and operates a stationary fiberglass and wood reinforced plastic flat panel manufacturing plant.

Responsible Official:	President
Source Address:	2424 East Kercher Road, Goshen, Indiana 46526
Mailing Address:	2424 East Kercher Road, Goshen, Indiana 46526
General Source Phone Number:	(574) 534-0010
SIC Code:	3083
County Location:	Elkhart
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Minor Source, under PSD Nonattainment NSR Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary ~~[326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]~~

This stationary source consists of the following emission units and pollution control devices:

- (a) Two **(2)** gel coat tunnels, identified as EU1 and EU2, constructed in 2001 **and modified in 2004**, ~~each with a maximum throughput of 7.5 molds per hour~~, both equipped with dry filters for particulate control, **using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control**, and exhausting to stack ~~EFG4~~ **TO-1**.
- (b) One **(1)** laminating tunnel, identified as EU3, constructed in 2001 **and modified in 2004**, ~~with a maximum throughput of 7.5 molds per hour~~, equipped with dry filters for particulate control, **using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control**, and exhausting to stack ~~EFL4~~ **TO-1**.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) Two **(2)** gel coat tunnels, identified as EU1 and EU2, constructed in 2001 **and modified in 2004**, ~~each with a maximum throughput of 7.5 molds per hour~~, both equipped with dry filters for particulate control, **using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control**, and exhausting to stack EFG† TO-1.
- (b) One **(1)** laminating tunnel, identified as EU3, constructed in 2001 **and modified in 2004**, ~~with a maximum throughput of 7.5 molds per hour~~, equipped with dry filters for particulate control, **using a natural gas-fired thermal oxidizer (identified as VECD1, with a maximum heat input capacity of 2.75 MMBtu/hr) for VOC/HAP control**, and exhausting to stack EFL† TO-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.4 ~~New Source Toxics Control~~ **VOC and HAP Limits** [326 IAC 2-4.1-1] ~~and VOC~~ [326 IAC 8-1-6] ~~and Prevention of Significant Deterioration~~ [326 IAC 2-2] **[326 IAC 2-1.1-5]**

- (a) Pursuant to 326 IAC 8-1-6, MSOP #039-14254-00556, issued on August 9, 2001, and SPR #039-16410-00556, issued on March 28, 2003, the fiberglass panel manufacturing operation is subject to the requirements of 326 IAC 8-1-6 because the potential emissions are greater than twenty-five (25) tons per year and there are no other applicable Article 8 rules that apply. This rule requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the MACT determination of 326 IAC 2-4.1 (New Source Toxics Control).
- (b) Pursuant to the MACT determination under 326 IAC 2-4.1-1, **and the BACT determination under 326 IAC 8-1-6**, operating conditions for the fiberglass panel manufacturing operation shall be the following:
 - (1) **The VOC emissions from the gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by a thermal oxidizer.**
 - (+2) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit volatile organic HAP and VOC **before control** from use of such resins and gel coats only shall be less than:
 - (A) **Two hundred forty five (245) tons per twelve (12) consecutive month period with compliance determined at the end of each month before initial start-up of the thermal oxidizer; or**
 - (B) **616 tons per twelve (12) consecutive month period after initial start-up of the thermal oxidizer**, with compliance determined at the end of each month.

Compliance with ~~this~~ **these** limits shall be determined based upon the following criteria:

- (Ai) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is

appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.

- (Bii) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 2001. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purpose of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.

Compliance with this limit renders 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

- (3) **The overall VOC/HAP control efficiency for the thermal oxidizer, including destruction efficiency and capture efficiency, shall be greater than 95%. Combined with Condition D.1.4(b)(2)(B), this is equivalent to 30.8 tons/yr of VOC/HAP emissions after control. Compliance with this limit also makes the requirements of Nonattainment NSR (326 IAC 2-1.1-5) not applicable.**
- (e4) **Before initial start-up of the thermal oxidizer, the HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emission mass basis:**

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production ¹ Gel Coat	36
Tooling Gel Coat	45
Production Resin	35
Tooling Resin	43

¹Production refers to the manufacture of parts

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions for higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) < (Emissions from compliant resin or gel coat) - Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF (HAP monomer emission factor for resin or gel coat used, %); EF, HAP monomer emission factor = emission factor expressed as pounds (lb) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (d5) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via the use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, controlled spray used in combination with automated actuators, or installing a control device.

- (e6) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (f7) The listed work practices shall be followed:
- (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - (A) Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (B) Cleanup stations shall be closed containers having soft-gasketed, springloaded closures and shall be kept completely closed when not in use.
 - (C) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (D) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (E) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent

shall be disposed of in such a manner that evaporation is minimized.

- (3) All material storage containers shall be kept covered when not in use.

...

D.1.9 Hazardous Air Pollutants (HAP) and Volatile Organic Compounds (VOC)

Compliance with the HAP monomer content limitations in Conditions D.1.4(b)(2) and shall be determined by any of the following:

...

D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after initial startup the thermal oxidizer, the Permittee shall conduct a performance test to verify VOC/HAP control efficiency as per condition D.1.4(b)(3) for the thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.11 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. For the purposes of this condition, continuous means no less than one minute. The output of this system shall be recorded as an hourly average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature of 1,500EF.
- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limit in condition D.1.4(b)(3) as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature as observed during the compliant stack test.

D.1.12 Parametric Monitoring

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limit in condition D.1.4(b)(3) as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.1.4013 Particulate [326 IAC 6-3-2(d)]

D.1.4114 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks EFG1 and EFL1(**before initial startup of the thermal oxidizer**) or stack TO1 (**after initial startup of the thermal oxidizer**) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should

result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack(s) and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

...

D.1.4215 Visible Emissions Notations

D.1.4316 Record Keeping Requirements

- (a) To document compliance with Conditions ~~D.1.3~~, D.1.4**(b)(2)**, and ~~D.1.5~~, the Permittee shall maintain records that are complete and sufficient to establish compliance with the **VOC and HAP monomer content emission limits before control**. Records maintained shall be taken monthly. Examples of such records include but are not limited to:

....

- (c) **To document compliance with Condition D.1.11, the Permittee shall maintain the continuous temperature records for the thermal oxidizer and the hourly average temperature used to demonstrate compliance during the most recent compliant stack test.**
- (d) **To document compliance with Condition D.1.12, the Permittee shall maintain the daily records of the duct pressure or fan amperage.**
- (~~ee~~) To document compliance with Conditions D.1.4314 , the Permittee shall maintain a log of weekly and monthly overspray observations, daily **and monthly** inspections ~~of the filters~~; and those additional inspections prescribed by the Preventive Maintenance Plan.
- (~~df~~) To document compliance with Condition D.1.4415, the Permittee shall maintain records of weekly visible emission notations of the fiberglass operations' stack exhaust.
- (~~eg~~) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.4417 Reporting Requirements

...

- (b) A quarterly summary of the information to document compliance with Condition D.1.4**(b)(2)** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.2-1(1).

D.1.4518 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Data Section

Part 70 Quarterly Report

Source Name: Noble Composites, Inc.
 Source Address: 2424 East Kercher Road, Goshen, Indiana 46526
 Mailing Address: 2424 East Kercher Road, Goshen, Indiana 46526
 Part 70 Permit No.: T039-16024-00556
 Facility: Fiberglass ~~plan~~ panel manufacturing unit
 Parameter: VOC/HAP **Emissions before control**
 Limit: **(a) 245 tons per twelve (12) consecutive month period with compliance determined at the end of each month (before initial start-up of the thermal oxidizer); or**
(b) 616 tons per twelve (12) consecutive month period with compliance determined at the end of each month (after initial start-up the thermal oxidizer)

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May, 18 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language will be incorporated into the Significant Permit Modification to address credible evidence:

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the proposed Part 70 Significant Source Modification No. 039-19224-00556. The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 039-19630-00556.

Appendix A: Emission Calculations
Reinforced Plastics and Composites Open Molding Operations
HAPs Emissions
From Fiberglass Panel Manufacturing Processes EU1, EU2, and EU3

Company Name: Noble Composites, Inc.

Address: 2424 East Kercher Rd., Goshen, IN 46526

SSM: 039-19224-00556

Reviewer: ERG/YC

Date: July 6, 2004

Unit	Application Method	Material	Density (lbs/hr)	Max. Production Rate (unit/hr)	Max. Coating Usage (gal/unit)	Maximum Usage (lbs/hr)	Weight % Styrene	*Emission Factor for Styrene (lbs/ton)	PTE of Styrene (tons/yr)	Weight % MMA	*Emission Factor for MMA (lbs/ton)	PTE of MMA (tons/yr)	Total HAPs (tons/yr)
EU1	Controlled Spray Application	Gel Coat	10.84	10.0	2.36	256	35.0%	245	137	5.0%	75	42.0	
EU2	Controlled Spray Application	Gel Coat	10.84	10.0	2.36	256	35.0%	245	137	5.0%	75	42.0	
EU3	Mechanical Atomized Application with Controlled Spray (covered-cure after roll-out)	Resin	10.84	10.0	11.8	1,279	35.0%	91.8	257	0.0%	0	0.00	
Total PTE before Control (tons/yr)									532			84.0	616
**Total PTE after Control (tons/yr)									26.6			4.20	30.8

* Styrene emission factor for gel coat is based on "Unified Emission Factors for Opening Molding of Composites" (July 23, 2001) and the unit is pounds of HAP per ton resin/gel coat processed.

** HAP emissions from these units will be controlled by a thermal oxidizer with an overall control efficiency of 95%.

METHODOLOGY

Potential to Emit HAPs (tons/yr) = Max. Usage (lbs/hr) x 8760 hr/yr x 1 ton/2000 lbs x Emission Factor (lb/ton) x 1 tons/2000 lbs

Total PTE after Control (tons/yr) = Total PTE before Control (tons/yr) x (1-95%)

Appendix A: Emission Calculations
Reinforced Plastics and Composites Open Molding Operations
VOC and PM/PM10 Emissions
From Fiberglass Panel Manufacturing Processes EU1, EU2, and EU3

Company Name: Noble Composites, Inc.
Address: 2424 East Kercher Rd., Goshen, IN 46526
SSM: 039-19224-00556
Reviewer: ERG/YC
Date: July 6, 2004

These units are controlled by a thermal oxidizer and dry filters.

Unit	Application Method	Material	Density (lbs/gal)	Weight % VOC	Max. Production Rate (unit/hr)	Max. Coating Usage (gal/unit)	Maximum Usage (lbs/hr)	*VOC Emission Factor (lbs/ton)	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC before Control (tons/yr)	VOC Control Efficiency (%)	PTE of VOC after Control (tons/yr)	**PTE of PM/PM10 before Control (lbs/hr)	**PTE of PM/PM10 before Control (tons/yr)	***Transfer Efficiency	****PM/PM10 Control Efficiency	PTE of PM/PM10 after Control (lbs/hr)	PTE of PM/PM10 after Control (tons/yr)
EU1	Controlled Spray Application	Gel Coat	10.84	40.0%	10.0	2.36	256	320	40.9	982	179	95%	8.96	1.53	6.72	99%	76%	0.37	1.61
EU2	Controlled Spray Application	Gel Coat	10.84	40.0%	10.0	2.36	256	320	40.9	982	179	95%	8.96	1.53	6.72	99%	76%	0.37	1.61
EU3	Mechanical Atomized Application with Controlled Spray (covered-cure after roll-out)	Resin	10.84	35.0%	10.0	11.8	1,279	91.8	58.7	1,409	257	95%	12.9	8.31	36.4	99%	76%	2.00	8.74
Total											616		30.8		49.9				12.0

* The emission factors for gel coat and resin are the sum of the emission factors for styrene and MMA in page 1 of TSD Appendix A.

** Assume all the PM emissions equal PM10 emissions.

*** The transfer efficiency and control efficiency are from the "Draft Guide to the Estimation and Permitting of PM from the Manufacture of Reinforced Plastic Composites" by CFA in August, 2001.

**** The PM control efficiency includes 80% capture efficiency and 95% control efficiency for dry filters.

METHODOLOGY

Max. Usage (lbs/hr) = Max. Production Rate (unit/hr) x Max. Coating Usage (gal/unit) x Density (lbs/gal)

PTE of VOC (lbs/hr) = Max. Usage (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton)

PTE of VOC (lbs/day) = Max. Usage (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 24 hr/day

PTE of VOC before Control (tons/yr) = Max. Usage (lbs/hr) x 1 ton/2000 lbs x Emission Factor (lbs/ton) x 8760 hr/yr x 1 ton/2000 lbs

PTE of VOC after Control (tons/yr) = PTE of VOC (tons/yr) x (1-VOC Control Efficiency)

PTE of PM/PM10 before Control (lbs/hr) = Max. Usage (lbs/hr) x (1- Weight % VOC) x (1-Transfer Efficiency)

PTE of PM/PM10 before Control (tons/yr) = Max. Usage (lbs/hr) x (1- Weight % VOC) x (1-Transfer Efficiency) x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10 after Control (lbs/hr) = PTE of PM/PM10 before Control (lbs/hr) x (1 - Control Efficiency)

PTE of PM/PM10 after Control (tons/yr) = PTE of PM/PM10 before Control (lbs/hr) x (1 - Control Efficiency) x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From the Thermal Oxidizer**

**Company Name: Noble Composites, Inc.
Address: 2424 East Kercher Rd., Goshen, IN 46526
SSM: 039-19224-00556
Reviewer: ERG/YC
Date: July 6, 2004**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

2.75

24.1

	Pollutant					
Emission Factor in lbs/MMCF	PM*	PM10*	SO ₂	**NO _x	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	0.09	0.09	0.01	1.20	0.07	1.01

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission factors for NO_x: Uncontrolled = 100 lbs/MMCF.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

**Appendix A: Emission Calculations
PM10 and PM10 Emissions
From Woodworking and Grinding Operations (EU4 and EU5)**

**Company Name: Noble Composites, Inc.
Address: 2424 East Kercher Rd., Goshen, IN 46526
SSM: 039-19224-00556
Reviewer: ERG/YC
Date: July 6, 2004**

Unit ID	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Control Efficiency (%)	PTE of PM/PM10 after Control (lbs/hr)	PTE of PM/PM10 after Control (tons/yr)	PTE of PM/PM10 before Control (lbs/hr)	PTE of PM/PM10 before Control (tons/yr)
EU4	Baghouse	0.000437	10,000	95.5%	0.04	0.16	0.83	3.65
EU5	Baghouse	0.000437	35,000	86.3%	0.13	0.57	0.96	4.19
Total						0.74		7.84

Assume all PM emissions equal PM10 emissions.

Methodology

PTE of PM/PM10 after Control (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr

PTE of PM/PM10 after Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10 before Control (lbs/hr) = PTE of PM/PM10 after Control (lbs/hr) / (1-Control Efficiency)

PTE of PM/PM10 before Control (tons/yr) = PTE of PM/PM10 after Control (tons/yr) / (1-Control Efficiency)