INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: March 23, 2006

RE: Valeo Sylvania, LLC / 071-21822-00006

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 1/10/05

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Mr. Shawn Smith
Valeo Sylvania, L.L.C
1231 "A" Avenue North
Seymour, IN 47274

March 23, 2006

Re: 071-21822-00006
First Significant Source Modification to:
Part 70 permit No.: **T071-6559-00006**

Dear Mr. Smith:

Valeo Sylvania, L.L.C was issued Part 70 operating permit T071-6559-00006 on August 27, 1999 for a stationary source producing automotive plastic lighting assemblies. An application to modify the source was received on September 22, 2005. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) one (1) lens surface coating booth, to be installed in 2006, using flowcoating application method, with a maximum throughput of 144 lenses per hour, identified as #13, with VOC controlled by one (1) regenerative thermal oxidizer, which exhausts to one (1) stack, identified as HC-05-01;

(b) one (1) thermoplastic closed injection molding press, to be installed in 2006 and identified as BMC, for closed injection molding of automotive lighting reflectors, to be included with the existing eleven (11) thermoplastic closed injection molding presses installed in 1978;

(c) one (1) base coat surface coating process, to be installed in 2006, with a maximum throughput of 144 units per hour, using dry filters for particulate control, and exhausting inside the building.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. 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.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission 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.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Linda Quigley/EVP, c/o OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (973) 575-2555, ext. 3284, or dial (800) 451-6027, and ask for extension 3-6878.

Sincerely,

Original signed by
Paul Dubenetzky, Assistant Commissioner
Office of Air Quality

Attachments
Technical Support Document
Revised Part 70 Permit
LQ/EVP
cc: File - Jackson County
Jackson County Health Department
Air Compliance Section Inspector – Vaughn Ison
Compliance Data Section
Administrative and Development
Technical Support and Modeling

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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Valeo Sylvania, L.L.C.
1231 "A" Avenue North
Seymour, Indiana 47274

(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.: T071-6559-00006	
Original Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 27, 1999 Expiration Date: August 27, 2004

Permit Reopening No.: 071-13326, issued on March 18, 2002
First Administrative Amendment No.: 071-14925, issued on June 12, 2003
First Significant Permit Modification No.: 071-18127, issued on December 9, 2003

First Significant Source Modification: 071-21822-00006	Pages Affected: 6, 28, 29, 29a, 33, 34, 36, 37, 37a, 38, 42a and 42b
Issued by: Original signed by Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: March 23, 2006

(e) One (1) robotic argent paint system, identified as emission unit 10, for coating plastic automotive lighting assembly components, with a maximum capacity of 200 units per hour, using dry filters for overspray control exhausting to one (1) stack, identified as PP-E-03-101.

(f) Eleven (11) Thermoset Closed Injection Molding Presses, installed in 1978, and one (1) Thermoset Closed Injection Molding Press, to be installed in 2006, collectively identified as BMC, for closed injection molding of automotive lighting reflectors with a throughput capacity of 1194.20 pounds of bulk mold compound per hour.

(g) One (1) lens surface coating booth, to be installed in 2006, using flowcoating application method, with a maximum throughput of 144 lenses per hour, identified as #13, with VOC controlled by one (1) regenerative thermal oxidizer, which exhausts to one (1) stack, identified as HC-05-01.

(h) One (1) base coat surface coating process, to be installed in 2006, with a maximum throughput of 144 units per hour, using dry filters for particulate control, and exhausting inside the building.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Two (2) spray paint booths, Aero Coating Booth and the South Wing Manual Spray Paint Booth, identified as emission units 2 and 3, for coating plastic automotive lighting assembly components with a maximum capacity of 1,395 units per hour at Aero Coating, and 100 units per hour at the South Wing Manual Spray Paint Booth, using dry filters for overspray control, and exhausting to stacks PP-E-40, 75 and 88.

(b) Eleven (11) Thermoset Closed Injection Molding Presses, installed in 1978, and one (1) Thermoset Closed Injection Molding Press, to be installed in 2006, collectively identified as BMC, for closed injection molding of automotive lighting reflectors with a throughput capacity of 1194.20 pounds of bulk mold compound per hour.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to CP-36-12-91-0103, issued on December 29, 1987, the quantity of paint usage and solvent content, as percent volatile organic compounds by weight, shall be such that the VOC emissions from the surface coating facilities shall not exceed ten (10) tons per month combined. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply.

D.1.2 Hazardous Air Pollutants (HAPs)

(a) The total styrene delivered to the twelve (12) thermoset closed injection molding presses shall be limited to less than 433.79 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) Styrene loss for the twelve (12) thermoset closed injection molding presses shall be limited to 1% of styrene input. This shall limit styrene emissions from the twelve (12) thermoset closed injection molding presses to less than 4.34 tons per year.

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the PM overspray from each of the two (2) paint booths (2 and 3) shall not exceed the pound per hour emission rate established as E in the following formula for each unit:

Interpolation and extrapolation 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

D.1.4 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 any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 90 days after the issuance of Significant Permit Modification 071-21932-00006, the Permittee shall perform testing on a representative thermoset closed injection molding press, in order to demonstrate compliance with Condition D.1.2, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C – Performance Testing.

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent month per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the two (2) paint booths (2 and 3) are in operation.

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

D.1.9 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 surface coating booth stacks (PP-E-40, 75 and 88) 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 Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating 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 an overspray emission, evidence of overspray emission, or other abnormal 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 Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and styrene usage limits and/or the VOC and styrene emission limits established in Conditions D.1.1 and D.1.2.

(1) The VOC and styrene content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The cleanup solvent usage for each month;

(4) The total VOC and styrene usage for each month; and

(5) The weight of VOCs and styrene emitted for each compliance period.

(b) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 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.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

a) One (1) paint booth, Hard Coat #1, identified as emission unit 8, for coating plastic automotive lighting assembly components with a maximum capacity of 720 units per hour, using an Oscar VIII Overspray Collection and Recovery System for overspray control and exhausting to stacks PP-E-30, 32, 33, and 34.

b) One (1) paint booth, Hard Coat #2, identified as emission unit 9, for coating plastic automotive lighting assembly components with a maximum capacity of 720 units per hour, using an Oscar VIII Overspray Collection and Recovery System for overspray control and exhausting to stacks PP-E-84, 85, and 90.

c) One (1) robotic argent paint system, identified as emission unit 10, for coating plastic automotive lighting assembly components, with a maximum capacity of 200 units per hour, using dry filters for overspray control exhausting to one (1) stack, identified as PP-E-03-101.

(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.3.1 Volatile Organic Compound (VOC)

Any change or modification which may increase potential emissions from the paint booths, identified as emission units 8, 9, and 10, to twenty-five (25) tons VOC or more per year, shall require prior approval from the OAQ to determine applicability requirements of 326 IAC 8-1-6, before such change may occur.

D.3.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(Particulate Emission Limitations for Manufacturing Processes), the PM from each of the three (3) paint booths 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

D.3.3 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from each of the three (3) paint booths shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.3.4 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 these facilities and any control devices.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter limit specified in Condition D.3.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.3.6 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 (PP-E-30, 32, 33, 34, 84, 85, 90, and PP-E-03-101) 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 Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating 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 an overspray emission, evidence of overspray emission, or other abnormal 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 - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.3.7 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (3) below:

(1) The amount and VOC content of each VOC based coating material and VOC based solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent VOC usage for each month;

(3) The total VOC usage for each month; and

(b) To document compliance with Condition D.3.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.8 Reporting Requirements

These records shall be made available upon request to the Office of Air Quality.

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) One (1) lens surface coating booth, to be installed in 2006, using flowcoating application method, with a maximum throughput of 144 lenses per hour, identified as #13, with VOC controlled by one (1) regenerative thermal oxidizer, which exhausts to one (1) stack, identified as HC-05-01.

(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.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] [326 IAC 2-3]

(a) Pursuant to 326 IAC 8-1-6 (Requirements for new facilities), BACT for the lens surface coating line shall be the use of a thermal oxidizer system with a capture efficiency of 100% and a destruction efficiency of 95%.

(b) The total amount of VOC delivered to the coating applicators of the lens surface coating booth shall be limited to less than 60.41 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This limit, in conjunction with (a), limits the potential to emit VOC from the lens coating booth to less than 3.02 tons per year.

Compliance with Condition D.4.1(b) shall render the requirements of 326 IAC 2-3 not applicable. Compliance with Conditions D.4.1(a) and D.4.1(b) shall satisfy the requirements of 326 IAC 8-1-6.

D.4.2 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 any control devices.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within sixty (60) days after achieving maximum capacity, but not later than one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify the overall control efficiency of the thermal oxidizer utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

D.4.4 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as 3-hour 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 3-hour average temperature of 1400^{o}F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.4.1, 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 3-hour average temperature as observed during the compliant stack test.

Compliance Monitoring Requirements

D.4.5 Parametric Monitoring

(a) The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in condition D.4.1 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. 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.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.6 Record Keeping Requirements

(a) To document compliance with condition D.4.1 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in condition D.4.1.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(3) The monthly cleanup solvent usage; and

(4) The total VOC usage for each month.

(5) The continuous temperature records (on a 3-hour average basis) for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(6) Daily records of the duct pressure or fan amperage.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1(b) 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 "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(a) 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 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(b) Manufacturing activities such as brazing equipment, cutting torches, soldering equipment, welding equipment.

(c) One (1) base coat surface coating process, to be installed in 2006, with a maximum throughput of 144 units per hour, using dry filters for particulate control, and exhausting inside the building.

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

Process Weight Activities

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

D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each of the grinding and machining operations and manufacturing activities such as brazing equipment, cutting torches, soldering equipment, and welding operations, shall not exceed allowable PM emission rate for each unit based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 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

D.5.2 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the base coat surface coating process, shall be controlled by dry filters and the Permittee shall operate the control devices in accordance with manufacturer's specifications.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Valeo Sylvania, LLC
Source Address: 1231 "A" Avenue North, Seymour, Indiana 47274
Mailing Address: 1231 "A" Avenue North, Seymour, Indiana 47274
Part 70 Permit No.: T071-6559-00006
Facility: One (1) lens surface coating booth, identified as #13
Parameter: VOC
Limit: The total amount of VOC delivered to the coating applicators of the lens surface coating booth shall be limited to less than 60.41 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This limit, in conjunction with D.4.1(a), limits the potential to emit VOC from the lens coating booth to less than 3.02 tons per year.

YEAR:

Month	VOC Emissions This Month	VOC Emissions previous 11 Months	VOC Emissions 12 Month Total
	Column 1	Column 2	Column 1 + Column 2
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ 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
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Valeo Sylvania, LLC
Source Address: 1231 "A" Avenue North, Seymour, Indiana 47274
Mailing Address: 1231 "A" Avenue North, Seymour, Indiana 47274
Part 70 Permit No.: T071-6559-00006
Facility: Twelve (12) Thermoset Closed Injection Molding Presses
Parameter: Styrene
Limit: The total styrene delivered to the twelve (12) thermoset closed injection molding presses shall be limited to less than 433.79 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

Month	Styrene Usage This Month	Styrene Usage previous 11 Months	Styrene Usage 12 Month Total
	Column 1	Column 2	Column 1 + Column 2
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ 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

Appendix B to the Technical Support Document (TSD) for a Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit

BACT Analysis

Source Background and Description

Source Name:	**Valeo Sylvania, LLC**
Source Location:	**1231 "A" Avenue North, Seymour, IN 47274**
County:	**Jackson**
SIC Code:	**3647**
Operation Permit No.:	**T071-6559-00006**
Operation Permit Issuance Date:	**August 27, 1999**
Source Modification No.:	**SSM071-21822-00006**
Significant Permit Modification No.:	**SPM071-21932-00006**
Permit Reviewer:	**Linda Quigley/EVP**

The Indiana Department of Environmental Management (IDEM) has performed the following BACT review for a major modification to an existing stationary source producing automotive plastic lighting assemblies owned and operated by Valeo Sylvania, LLC, located in Seymour, Indiana.

This modification will permit the construction of one (1) lens surface coating booth, identified as #13, with VOC controlled by one (1) regenerative thermal oxidizer, which exhausts to one (1) stack, identified as HC-05-01.

The source is located in Jackson County which is designated as nonattainment for the 8-hour ozone standard and attainment for all other criteria pollutants. Based upon emission calculations completed by IDEM and the source, the modification shall result in potential volatile organic compound (VOC) emissions of greater than twenty-five (25) tons per year. Therefore, pursuant to 326 IAC 8-1-6 the source shall reduce VOC emissions from the new facility, which is not regulated by other provisions of 326 IAC 8, using best available control technology (BACT). The purpose of this BACT Analysis is to evaluate the level of control that constitutes BACT for the affected facility.

The specific facility requiring evaluation in this analysis is one (1) lens surface coating booth, identified as #13.

The Permittee provided the BACT analyses in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, which outlines the steps for conducting a top-down BACT analysis and was approved by IDEM. The steps are listed as follows:

(1) Identify alternative emission control techniques;
(2) Technical Feasibility Analysis of BACT Options;
(3) Rank remaining control technologies by control effectiveness;
(4) Evaluate the technically feasible control technologies; and
(5) Selecting BACT.

Also in accordance with the *"Top-Down" Best Available Control Technology Guidance Document* outlined in the 1990 draft USEPA *New Source Review Workshop Manual*, BACT analyses take into account the energy, environmental, and economic impacts on the source. Emission reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution thereby protecting public health and the environment.

Step 1 – Identify Alternative Emission Control Techniques

The first step in evaluating BACT is identifying all applicable control technology options for the flowcoat surface coating of plastic parts. Nine (9) available technologies are initially considered potential control alternatives to reduce VOC emissions from the surface coating operation:

- Non-photochemically reactive solvent substitutes
- Waterborne Coatings
- High solids application
- Transfer efficiency of equipment
- Adsorption
- Incineration
- Chemical Scrubbers
- Condensation, and
- Biofiltration

Step 2 – Technical Feasibility Analysis of BACT Options

Elimination of Technically Infeasible Control Options

Waterborne Coatings and non-photochemically reactive solvent substitutes

Acetone (a non-VOC carrier solvent) was evaluated as a substitute solvent. Test runs showed that the acetone evaporated too rapidly resulting in product quality control problems.

The coating to be used by Valeo Sylvania for automotive headlight lenses is approved by its customer, an automotive original equipment manufacturer, and no variation of the coating formulation is allowed. No water-based coatings have been approved for this purpose.

Due to the quality assurance issues, waterborne coatings and non-chemically reactive solvent substitutes are not considered technically feasible control alternatives and are eliminated from further consideration for the flowcoat surface coating of plastic parts.

High solids application

High solids application is not a feasible technology in the context of a flowcoating system. A fixed viscosity must be maintained to control the flow of coating over the part and control the thickness of the coating applied. Therefore, increasing the solids content in the coating would have to be corrected by a corresponding increase of the make up solvent flow. Therefore, no benefit would be derived.

Due to an increase in solvent flow, VOC emissions would increase, and therefore it is not considered a technically feasible control alternative and is eliminated from further consideration for the flowcoat surface coating of plastic parts.

Transfer efficiency of application equipment

Unlike spray application systems, the flowcoating system achieves essentially 100% transfer efficiency, making it unnecessary to consider increasing transfer efficiency.

Add on Controls

For add-on controls to be feasible, it is desirable to minimize the exhausted air flow and maximize the VOC concentration. At Valeo Sylvania the concentration of VOC in the lens flowcoat line waste stream (1090 ppm) is moderate when compared to total air flow. At such VOC concentrations, the fuel value of the emission is not negligible. As a result, a lower quantity of fuel needs to be added from an outside source to operate the equipment. For this reason, end of stack devices are a feasible means of VOC control at this facility, even without the use of concentrator systems.

(1) Adsorption

Adsorption systems operate by providing a large surface area to which the air pollutant can adhere. Carbon is commonly used as the adsorptive solid. Due to its internal pore structure, activated carbon has significant surface area, giving it a large adsorption capacity.

Concentrators

It has been determined that a carbon adsorption unit would not be recommended for two reasons. First, either carbon or zeolite may be used as the adsorption bed. Second, although a carbon bed itself may be less expensive than a zeolite bed, the carbon bed would require a fire suppression system to control fires associated with the carbon beds. The carbon bed with a fire suppression system would cost essentially the same as the safer zeolite bed. Although a fire suppression system could put out a fire, the occurrence of a fire would entirely shut down the process thus increasing the overall cost of a carbon system with the indirect cost of lost production. Due to the fire hazard and similar capital cost to the zeolite unit, the carbon unit was not further evaluated.

Neither the carbon or zeolite concentrator systems are feasible because the air concentration of VOCs (1090 ppm) is beyond the range for which such systems are normally designed. The use of concentrators on the air stream would result in rapid breakthrough, loss of VOCs and lowered VOC removal efficiency.

(2) Incineration

Two types of incineration systems were evaluated for use at the facility: a recuperative catalytic system, and a regenerative thermal oxidizer system. As indicated above, a concentrator with an incinerator was not considered because the air stream VOC concentration is already high enough and concentrator systems would not improve the removal efficiency.

Recuperative Catalytic Oxidizer

The catalytic oxidizer system operates similarly to a common afterburner, but uses a catalyst to lower the oxidation temperature of the hydrocarbons, thus reducing the fuel requirements. Typically, a common afterburner system will use 20 times more fuel than a catalytic incineration system and therefore was not considered further in this evaluation.

Catalytic oxidation systems are technically feasible (without concentrator), achieve about 85% destruction efficiency and will be evaluated further for use in controlling emissions from the lens flowcoat line.

Regenerative Thermal Oxidizer Systems

Regenerative thermal oxidizer systems combine a combustion chamber with a heat recovery system to recover up to 95 percent of the heat generated during the thermal oxidation process. Air exhausted from the combustion chamber passes through one of two beds of ceramic packing to recover the heat. Inlet air (with VOCs from the paint booth) passes through the alternate bed and is preheated close to the combustion temperature. Air flow is switched between beds ever 1.5 to 8.0 minutes. The heat recovery system recovers 95% of the heat, thereby reducing the system fuel requirements.

The regenerative thermal oxidizer system is technically feasible and achieves at least 95% destruction efficiency. The regenerative thermal oxidizer system will be evaluated further for use in controlling emissions from the lens flowcoat line.

(3) Chemical Scrubber

A chemical scrubber is an absorption system in which the waste stream is dissolved in a solvent. Water is the most common solvent used; other solvents are used dependent upon the components of the waste stream. Scrubbers are often not a feasible option because waste streams generally contain several components, and thus may require a different solvent for each target chemical. The waste stream at this facility is primarily IPA, which is miscible in water. The IPA could not be readily separated from the water and a high volume waste water stream would result. Chemical scrubbers achieve about 90% removal efficiency which is less than the removal efficiency of the RTO system.

Use of a chemical scrubber would result in higher emissions and a high volume waste water stream and therefore it is not considered a technically feasible control alternative and is eliminated from further consideration for the flowcoat surface coating of plastic parts.

(4) Condensation

Condensation systems refrigerate the waste stream to condense the gases. The condensate is then collected and reused on-site or treated as a waste. This system is highly efficient (95%) for streams with high concentrations of vapors. The concentrations in Valeo Sylvania's waste stream are low relative to the effective range of condensation systems. Therefore it is not considered a technically feasible control alternative and is eliminated from further consideration for the flowcoat surface coating of plastic parts.

(5) Biofiltration

Biofiltration is a relatively new technology in the United States. This system is a land intensive setup in which contaminated air is fed under an active bed of soil containing microorganisms. As the air rises through the soil, the microorganisms consume and convert the chemicals to carbon dioxide and water. Biofiltration has been used successfully to control VOC emissions in Europe. However, there are only a few applications of biofilters for VOC control in the United States. In addition, biofilters achieve a destruction efficiency of about 60%. For these reasons, it is not considered a technically feasible control alternative and is eliminated from further consideration for the flowcoat surface coating of plastic parts.

The USEPA's RACT /BACT /LAER clearinghouse (RBLC) database was also searched for the purpose of identifying comparable sources that have implemented BACT for the affected facilities. This search was performed in the following steps:

(a) A review of BACT determinations utilizing the EPA RBLC database was conducted and the results are detailed in Table 1 below. Searches for "flowcoat", "headlight", "lens", "UV", "polycarbonate", and related words included in the process name produced no results. Since surface coating of plastic parts may be found under several SIC codes, the primary search was conducted for all Case-by-Case determinations in the US with the Process Type 41.016 (Plastic Parts & Products Surface Coating – except 41.015).

The initial search performed in August 2005 showed a total of 11 facilities with 23 processes listed. A follow up search in October 2005 showed a total of 23 facilities with 36 processes listed. However, the 13 additional processes found in the October search were not included in this BACT because all of the processes except one were unrelated to coating automobile headlight lenses (i.e.: rubber coating, lithographic printing sources, etc…). The additional facility and process found, Honda Manufacturing of Alabama, RBLC ID: AL-0192, was for coating plastic bumpers. The BACT determination only included VOC content limits on the paints and did not include end-of-stack controls. This BACT is less restrictive than and less comparable than the top three facilities (which include some controls). Therefore, it does not impact the Review of Similar BACT Determinations of this analysis.

(b) All facilities listed spray application of paints and none listed flowcoating, UV protective coating, polycarbonate or automobile headlight lenses. Five (5) facilities were SIC 3714 (motor vehicle parts and accessories), one (1) was SIC 3711 (motor vehicles and car bodies), three (3) were SIC 3089 (plastic products), one (1) was SIC 3479 (metal coating and allied services), and one was SIC 3751 (motorcycles, bicycles and parts). Eight (8) of the facilities conducted spray painting of automotive plastic parts, however, four (4) of those were specifically for bumpers or interior plastic parts (none of which are polycarbonate). No contact could be established with the remaining four (4) facilities. The remaining four (4) are also unlikely to be for headlight lenses or other UV coatings on polycarbonate. For example, Delphi Automotive makes electrical components and therefore is not likely to be coating lenses. Orion was never constructed and was not comparable since there were adhesion, primer, basecoat, and topcoat lines, but no UV coating line (their permit has since been cancelled). Likewise, Artisan lists a topcoat, primer and lacquer, but no UV coating. Therefore, none of the facilities operate the same process as Valeo Sylvania.

(c) Of the 11 Case-by-Case determinations, one (Mascotech) was a LAER determination, one was a supplemental environmental project to offset a non-compliance fine (SEP-Venture), and one (Orion) was never constructed. One determination (Nailite) was rescinded after it was determined that capture was too low and the facility accepted a synthetic minor limit rather than pursue BACT. Of the remaining seven (7) BACT determinations four (4) were coating content limits only. The top three (3) BACT determinations were add-on controls, including a mix of RTO systems, carbon concentrators with RTO systems and uncontrolled processes. Estimated or determined capture efficiencies were 70 to 90% and destruction efficiencies were 80 to 97%. Overall control of one (1) facility (Albar) was estimated at less than 50%, including uncontrolled processes.

Review of Table 1 reveals that add-on control devices with overall control (including capture and destruction) efficiencies from 50% to 67% have been established as BACT for automotive VOC sources, including surface coating operations.

Table 1- BACT determinations for Plastic Parts & Products Surface Coating

ID	Date	BACT	Determination	Facility
IN-0069	8/9/96	BACT	(95% destruction, capture unknown) RTO (57% overall) Carbon Concentrator with RTO coating content limits	Toyota – Gibson Co, IN

ID	Date	BACT	Determination	Facility
MI-0279	7/26/00	BACT	(67% overall) RTO, coating content limits	Textron, Michigan
MI-0339	7/18/02	BACT	(50% overall) Carbon Concentrator with RTO	Albar Industries, Michigan
MI-0246	6/11/98	PSD BACT	Coating content limits	Delphi, Michigan
MI-0255	1/12/99	BACT	Coating content limits	Ford Visteon, Michigan

Step 3 – Ranking of Technically Feasible BACT Options

The following table ranks the viable control options for flowcoat surface coating of plastic parts:

Rank	Control Device	Control Efficiency (% destruction)
1	Regenerative Thermal Oxidizer (RTO)	95%
2	Recuperative Catalytic Oxidizer	85%
3	No Add On Control	0%

Step 4 – The BACT Selection Process

Evaluation of the Most Cost Effective Controls

The economic, environmental, and energy impacts of the feasible control options were determined for the flowcoat lens coating operation. Order of magnitude cost estimates for each of the control options were generated using the USEPA publication, *OAQPS Cost Control Manual*, vendor quotations, and associated trade journals.

The following table summarizes the economic, environmental, and energy impacts of the three feasible control options for the lens coating operation.

Economic, Environmental and Energy Impacts for Lens Coating Operation, VOC Control Alternatives

Control Option	VOC Emissions After Control (tons/yr)	Emissions Reduction (tons/yr)	Overall Control Efficiency (%)	Economic Impacts			Collateral Environmental Impacts	Energy Impacts
				Total Annualized Cost ($/yr)	Average Cost Effectiveness ($/ton)	Incremental Cost Effectiveness ($/ton)		
RTO	3.02	57.40	95	$85,198.44	$1,484	N/A	SO_2, NO_X, CO - each negligible	1.53 MMcf natural gas usage 47,929 kwh/yr
Catalytic Incineration	9.06	51.34	85	$138,554	$2,698	N/A	SO_2, NO_X, CO - each negligible	2.44 MMcf natural gas usage 50,391 kwh/yr
No Control	60.41	0.0	0.0	$0	$0	$0	None	None

The average cost effectiveness for the RTO is $1,484 per ton of VOC removed. This estimate is considered economically feasible, so this option is an economically feasible control alternative. In addition, the advantage of using the RTO verses the catalytic incinerator is that the RTO has a control efficiency of 95%, whereas the catalytic incinerator has a control efficiency of 85%.

Step 5 – Selecting BACT

IDEM, OAQ has determined that the BACT for the one (1) lens surface coating booth, identified as #13 is the use of a RTO with an overall control efficiency of 95% to control VOC emissions from the lens surface coating booth. In addition, the source shall comply with the following emission limitations:

(a) The exhaust shall be vented to Regenerative Thermal Oxidizer with a minimum of 95% destruction and 100% capture efficiency for VOC;

(b) The total amount of VOC delivered to the coating applicators of the lens surface coating booth shall be limited to less than 60.41 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This limit in conjunction with (a) limits the potential to emit VOC from the one (1) lens surface coating booth to less than 3.02 tons per year.

Compliance with the above limits and conditions will satisfy the requirements of 326 IAC 8-1-6.

Appendix A: Emissions Calculations
VOC and Particulate
Emissions from Closed Molding Operations

Company Name: Valeo Sylvania, LLC
Address City IN Zip: 1231 A Avenue North, Seymour, IN 47274
Significant Source Modification: SSM071-21822-00006
Significant Permit Modification: SPM071-21932-00006
Reviewer: LQ/EVP
Date: 12/13/2005

PRODUCT	TYPE	STATUS	V [cm^3]	sg [g/cm^3]	BOM [lb]	BOM AS OF 4/8/03	Press Size	Cycle Time [sec]	sec per hour	hour per day	day per week	week per year	Refl per year	lbs molded per year		% Styrene in BMC	Max lbs of Styrene Input	Max lbs of Styrene Emitted	BMC Press #
NEON	H/L (BUX-RHD	CURRENT	244	1.838		0.9907	500 ton	57.0	3600	24	7	52	1,103,495	1,093,232	BMCI	11.2%	122,442	1,224	25
GMT 257	H/L	CURRENT	219	1.900	0.9173	0.9095	500 ton	62.3	3600	24	7	52	1,009,618	918,248	BMCI	11.2%	102,844	1,028	26
2003 CLIO	H/L	CURRENT	156	1.838	0.6321	0.6830	500 ton	53	3600	24	7	52	1,186,777	810,569	BMCI	11.2%	90,784	908	27
GMX 320	H/L	CURRENT	248	1.900	1.0388	0.9950	500 ton	81.0	3600	24	7	52	776,533	772,651	BMCI	11.2%	86,537	865	28
02 Viper		CURRENT	196	1.838		0.7930	250 ton	75.0	3600	24	7	52	838,656	665,054	BMCI	11.2%	74,486	745	41
GMT 265	DRL F/L	CURRENT	111	1.838		0.4500	250 ton	55	3600	24	7	52	1,143,622	514,630	BMCI	11.2%	57,639	576	42
03 ST22 Chrysler	H/L	CURRENT	327	1.900	1.3697	1.2950	500 ton	65.0	3600	24	7	52	967,680	1,253,146	REC T70	3.7%	46,366	464	29
05 WK	H/L (BUX-RHD	CURRENT	266	1.838	1.0777	1.0777	500 ton	60.0	3600	24	7	52	1,048,320	1,129,774	REC T70	3.7%	41,802	418	39
05 WK	H/L (BUX-LHD	CURRENT	266	1.838	1.0777	1.0777	500 ton	60.0	3600	24	7	52	1,048,320	1,129,774	REC T70	3.7%	41,802	418	40
05 WK	H/L (DOM.)	CURRENT	266	1.838	1.0777	1.0777	500 ton	60.0	3600	24	7	52	1,048,320	1,129,774	REC T70	3.7%	41,802	418	44
01 RS	H/L	CURRENT	205	1.900	0.8587	0.9132	500 ton	55	3600	24	7	52	1,143,622	1,044,355	REC T70	3.7%	38,641	386	45
																Total:	745,143	**7,451**	**lbs styrene**
																		3.73	**tons styrene per year**
Proposed Press:																			
Neon	H/L (BUX-RHD	Proposed	244	1.838		0.9907	500 ton	57	3600	24	7	52	1,103,495	1,093,232	BMCI	11.2%	122,442	1,224	Lean Cell

Emission factor = 1% styrene emitted, based on information supplied by manufacturer.
Emissons based on worst case material and maximum load for each press.
Note: Permittee will be required to test a representative molding press to verify the styrene emission factor.

Modification Total: **0.61 tpy**

Emissions from 12 presses: **4.34 tpy**

Maximum Input of Styrene: **867,585** **433.79 tpy**

Appendix A: Emission Calculations
HAP Emissions

Company Name: Valeo Sylvania, LLC
Plant Location: 1231 "A" Avenue North, Seymour, Indiana 47274
Significant Source Modification: SSM071-21822-00006
Significant Permit Modification: SPM071-21932-00006
Plant ID: 071-00006
Permit Reviewer: Linda Quigley/EVP
Date: December 13, 2005

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)		Weight % MEK		MEK Emissions (ton/yr)
UV SRC Topcoat	7.4	0.00200	144.000		5.00%		0.46
Isopropyl Alcohol	6.6	0.01300	144.000		0.00%		0.00

Total State Potential Emissions **0.46**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

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VOC and Particulate
Emissions from Closed Molding Operations

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