



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: October 7, 2005
RE: Federal Mogul Corporation / 017-18763-00029
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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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Federal Mogul Corporation, Inc.
101 Industrial Blvd.
Logansport, Indiana 46947**

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

| | |
|---|--|
| Operation Permit No.: MSOP 017-18763-00029 | |
| Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality | Issuance Date: October 7, 2005 Expiration Date: October 7, 2010 |

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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 and A.2 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary fuel pumps and auto light lenses manufacturing operation for the automotive industry.

Authorized individual: Plant Manager
Source Address: 101 Industrial Blvd., Logansport, Indiana 46947
Mailing Address: 101 Industrial Blvd., Logansport, Indiana 46947
General Source Phone: (574) 722-6141
SIC Code: 3647, 3714, 8713
County Location: Cass
Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit (MSOP)
Minor Source, under PSD Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Impregnation Line, identified as EU-02, installed in 1996, consists of the following equipment:
 - (1) Four (4) dip coating tanks, identified as TANK 1-4, each with a maximum coating rate of 288 pieces of metal fuel pump parts per hour. TANK 1 and 3 exhaust to one (1) stack ID #S-2. TANK 2 and 4 exhaust to one (1) stack GV;
- (b) Electric Fuel Pump Test Line, identified as EU-04, installed in 1997, consists of the following equipment:
 - (1) One (1) Cummins electric fuel pump tester, identified as CUMEFP, with a maximum test rate of 88.75 pumps per hour, combusting diesel fuel, exhausting through one (1) stack ID #S-22;
- (c) Technical Center Research and Development, identified as EU-05, installed in 1996, consists of the following equipment:
 - (1) Four (4) tanks, identified as T-1 through T-4, each containing spent fuel, unleaded gasoline, #2 diesel fuel, and GP-1140 fuel, respectively, each with a maximum tank capacity of 2000, 2000, 2000, and 1000 gallons, respectively;
 - (2) Three (3) fuel stands for testing pumps, with a maximum capacity of testing 4000 pumps per year, exhausting through stacks ST-1, ST-2, and ST-3, respectively;
 - (3) Flow testers for testing pump flows for sink, rotary vane #1 and rotary vane #2, with a maximum capacity of testing 119,600 pumps per year, exhausting through stacks ST-1, ST-2, and ST-3, respectively;

- (4) Stoddard solvent (drums) for testing fuel pumps with flow test sink, rotary vane #1, and rotary vane #2, exhausting through stacks ST-1, ST-2, and ST-3, respectively;
- (d) Ten (10) natural gas fired forced air heaters, identified as HTR1 through HTR10; respectively, each with a maximum heat input capacity of 0.03, 0.20, 0.15, 0.07, 0.13, 0.07, 0.09, 0.14, 0.12, and 0.11 MMBtu per hour, respectively;
- (e) Two (2) pump test stands, consisting of one (1) Roller Vane Diesel Tester designated as ROTVANTST and one (1) Oil Pump Audit Stand designated as OILAUDIT;
- (f) One (1) industrial parts washer utilizing a soap based, non-VOC containing cleaner;
- (g) One (1) roller vane oil pump test stand identified as ROLVANOILTST;
- (h) Two (2) cold cleaners with self closing lid, identified as DEGRDIE and DEGRTOOL, using 98 gallons per year and 56 gallons per year of solvent, respectively ;
- (i) Two (2) cold cleaners with drum reservoir, identified as DEGRPLAT and DEGRMOLD, using 133 gallons per year and 56 gallons per year of solvent, respectively;
- (j) One (1) Samsco wastewater evaporator, identified as WWEVAP, with an oil and grease content less than or equal to 1% by volume;
- (k) Twenty (20) plastic injection molding lines with no solvent in resin, identified as INJMOLD;
- (l) Nine (9) production line fuel pump testing units, identified as GEROTST, CHRYTST1, CHRYTST2, TURBTST, MARINTST, ROTVANTST, SOLENTST, DAUTTST and GERMIDTST, respectively, with total maximum VOC emission rate equal to 3.02 tons per year;
- (m) One (1) electrical and mechanical fuel pumps testing unit, identified as DURABTST, with a maximum VOC emission rate equal to 0.00018 tons per year;
- (n) One (1) pump flow static pressure testing unit, identified as GERAUDTST, with a maximum VOC emission rate equal to 0.00012 tons per year;
- (o) One (1) small blast cabinet located in satellite tool room serviced by 55 cfm dust collector and using dust collector as control; and
- (p) One (1) small blast booth located in the technical center research and development serviced by 55 cfm dust collector and using dust collector as control.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate 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.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue,
Indianapolis, IN 46204

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue,
Indianapolis, IN 46204

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2]
[IC13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.12 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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 this 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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue,
Indianapolis, IN 46204

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

- (g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue,
Indianapolis, IN 46204

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ (and local agency) not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, (and local agency), if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

C.8 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.9 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.10 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.11 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue,
Indianapolis, IN 46204

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

EMMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description:

- (a) Impregnation Line, identified as EU-02, installed in 1996, consists of the following equipment:
 - (1) Four (4) dip coating tanks, identified as TANK 1-4, each with a maximum coating rate of 288 pieces of metal fuel pump parts per hour. TANK 1 and 3 exhaust to one (1) stack ID #S-2. TANK 2 and 4 exhaust to one (1) stack GV;
- (b) Electric Fuel Pump Test Line, identified as EU-04, installed in 1997, consists of the following equipment:
 - (1) One (1) Cummins electric fuel pump tester, identified as CUMEFP, with a maximum test rate of 88.75 pumps per hour, combusting diesel fuel, exhausting through one (1) stack ID #S-22;
- (c) Technical Center Research and Development, identified as EU-05, installed in 1996, consists of the following equipment:
 - (1) Four (4) tanks, identified as T-1 through T-4, each containing spent fuel, unleaded gasoline, #2 diesel fuel, and GP-1140 fuel, respectively, each with a maximum tank capacity of 2000, 2000, 2000, and 1000 gallons, respectively;
 - (2) Three (3) fuel stands for testing pumps, with a maximum capacity of testing 4000 pumps per year, exhausting through stacks ID ST-1, ST-2, and ST-3, respectively;
 - (3) Flow testers for testing pump flows for sink, rotary vane #1 and rotary vane #2, with a maximum capacity of testing 119,600 pumps per year, exhausting through stacks ID ST-1, ST-2, and ST-3, respectively;
 - (4) Stoddard solvent (drums) for testing fuel pumps with flow test sink, rotary vane #1, and rotary vane #2, exhausting through stacks ID ST-1, ST-2, and ST-3, respectively;

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

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-1]

In order that the source is not subject to the requirements of 326 IAC 8-2-9, the combined input of VOC to the four (4) dip coating tanks shall be limited to fifteen (15) pounds per day with compliance determined within 30 days of the end of each month based on the daily volatile organic compound usage for the most recent month.

D.1.2 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

The VOC input to the Technical Center Research and Development, identified as EU-05, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply.

Compliance Determination Requirements

D.1.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 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, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 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 daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

- (1) The amount and VOC content of each coating material and 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 volume weighted VOC content of the coatings used for each day and month;
- (3) The cleanup solvent usage for each day and month;
- (4) The total VOC usage for each day and month; and
- (5) The weight of VOCs emitted for each compliance period.

D.1.5 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. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Ten (10) natural gas fired forced air heaters, identified as HTR1 through HTR10; respectively, each with a maximum heat input capacity of 0.03, 0.20, 0.15, 0.07, 0.13, 0.07, 0.09, 0.14, 0.12, and 0.11 MMBtu per hour, respectively;
- (b) Two (2) pump test stands, consisting of one (1) Roller Vane Diesel Tester designated as ROTVANTST and one (1) Oil Pump Audit Stand designated as OILAUDIT;
- (c) One (1) industrial parts washer;
- (d) One (1) roller vane oil pump test stand identified as ROLVANOILTST;
- (e) Two (2) cold cleaners with self closing lid, identified as DEGRDIE and DEGRTOOL, using 98 gallons per year and 56 gallons per year of solvent, respectively;
- (f) Two (2) cold cleaners with drum reservoir, identified as DEGRPLAT and DEGRMOLD, using 133 gallons per year and 56 gallons per year of solvent, respectively;
- (g) One (1) Samsco wastewater evaporator, identified as WWEVAP, with an oil and grease content less than or equal to 1% by volume;
- (h) Twenty (20) plastic injection molding lines with no solvent in resin, identified as INJMOLD;
- (i) Nine (9) production line fuel pump testing units, identified as GEROTST, CHRYTST1, CHRYTST2, TURBTST, MARINTST, ROTVANTST, SOLENTST, DAUTTST and GERMIDTST, respectively, with total maximum VOC emission rate equal to 3.02 tons per year;
- (j) One (1) electrical and mechanical fuel pumps testing unit, identified as DURABTST, with a maximum VOC emission rate equal to 0.00018 tons per year;
- (k) One (1) pump flow static pressure testing unit, identified as GERAUDTST, with a maximum VOC emission rate equal to 0.00012 tons per year;
- (l) One (1) small blast cabinet located in satellite tool room and using dust collector as control; and
- (m) One (1) small blast booth located in the technical center research and development and using dust collector as control.

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

Emission Limitations and Standards

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, identified as DEGRDIE, DEGRTOOL, DEGRPLAT and DEGRMOLD, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, identified as DEGRDIE and DEGRTOOL, the Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.2.3 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from small blast cabinet located in satellite tool room and small blast booth located in the technical center research and development, which are not exempt under 326 IAC 6-3-1(b) or (c) and each have a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply, shall each not exceed 0.551 pounds per hour.

D.2.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the small blast cabinet located in satellite tool room and small blast booth located in the technical center research and development and any control devices.

Compliance Determination Requirement

D.2.5 Particulate Control

In order to comply with D.2.3, the dust collectors for particulate control shall be in operation and control emissions from the small blast cabinet located in satellite tool room and small blast booth located in the technical research and development center at all times that the equipment are in operation.

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

MSOP Quarterly Report

Source Name: Federal Mogul Corporation, Inc.
Source Address: 101 Industrial Blvd., Logansport, Indiana, 46947
Mailing Address: Same as above
FESOP No.: 017-18763-00029
Facility: Technical Center Research and Development, identified as EU-05
Parameter: Volatile Organic Compounds (VOC)
Limit: 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|----------------------------|------------------------------------|--------------------------|
| | Total VOC Usage This Month | Total VOC Usage Previous 11 Months | 12 Month Total VOC Usage |
| 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

MSOP Quarterly Report

Source Name: Federal Mogul Corporation, Inc.
Source Address: 101 Industrial Blvd., Logansport, Indiana, 46947
Mailing Address: Same as above
FESOP No.: 017-18763-00029
Facility: Four (4) dip tanks, identified as TANK 1-4
Parameter: Input of Volatile Organic Compounds (VOC)
Limit: Fifteen (15) pounds per day combined

Month: _____ Year: _____

| Day | Input this day (pounds/day) | Day | Input this day (pounds/day) |
|-----|-----------------------------------|-----|-----------------------------------|
| 1 | | 17 | |
| 2 | | 18 | |
| 3 | | 19 | |
| 4 | | 20 | |
| 5 | | 21 | |
| 6 | | 22 | |
| 7 | | 23 | |
| 8 | | 24 | |
| 9 | | 25 | |
| 10 | | 26 | |
| 11 | | 27 | |
| 12 | | 28 | |
| 13 | | 29 | |
| 14 | | 30 | |
| 15 | | 31 | |
| 16 | | | |

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 BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

| | |
|----------------------|--|
| Company Name: | Federal Mogul Corporation, Inc. |
| Address: | 101 Industrial Blvd. |
| City: | Logansport, Indiana 46947 |
| Phone #: | (574) 722-6141 |
| MSOP #: | 017-18763-00029 |

I hereby certify that source is still in operation.
 no longer in operation.

I hereby certify that source is in compliance with the requirements of MSOP 017-18763-00029.
 not in compliance with the requirements of MSOP 017-18763-00029.

| |
|---------------------------------------|
| Authorized Individual (typed): |
| Title: |
| Signature: |
| Date: |

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

| |
|-----------------------|
| Noncompliance: |
| |
| |
| |
| |
| |

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERM LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Federal Mogul Corporation, Inc. PHONE NO. (574) 722-6141
LOCATION: (CITY AND COUNTY) Logansport Cass
PERMIT NO. 017-18763-00029 AFS PLANT ID: 017-00029 AFS POINT ID: _____ INSP: DTR
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

| | |
|--|---|
| Source Name: | Federal Mogul Corporation, Inc. |
| Source Location: | 101 Industrial Blvd., Logansport, Indiana, 46947 |
| County: | Cass |
| SIC Code: | 3647, 3714, 8713 |
| Operation Permit No.: | 017-18763-00029 |
| Operation Permit Issuance Date: | TBD |
| Permit Reviewer: | GS/EVP |

The Office of Air Quality (OAQ) has reviewed a MSOP application from Federal Mogul Corporation, Inc. relating to the operation of a fuel pumps and auto light lenses manufacturing operation for the automotive industry.

History

The source currently operates under FESOP no. F017-10438-00029, issued on February 23, 2000. Based on the information provided in the FESOP renewal application received on February 26, 2004, the potential to emit (as defined in 326 IAC 2-7-1(29)) of all pollutants is less than 100 tons per year and the potential to emit VOC is greater than 25 tons per year. Therefore the source is now subject to the provisions of 326 IAC 2-6.1. Hence, a minor source operating permit will be issued.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Impregnation Line, identified as EU-02, installed in 1996, consists of the following equipment:
 - (1) Four (4) dip coating tanks, identified as TANK 1-4, each with a maximum coating rate of 288 pieces of metal fuel pump parts per hour. TANK 1 and 3 exhaust to one (1) stack ID #S-2. TANK 2 and 4 exhaust to one (1) stack GV;
- (b) Electric Fuel Pump Test Line, identified as EU-04, installed in 1997, consists of the following equipment:
 - (1) One (1) Cummins electric fuel pump tester, identified as CUMEFP, with a maximum test rate of 88.75 pumps per hour, combusting diesel fuel, exhausting through one (1) stack ID #S-22;
- (c) Technical Center Research and Development, identified as EU-05, installed in 1996, consists of the following equipment:
 - (1) Four (4) tanks, identified as T-1 through T-4, each containing spent fuel, unleaded gasoline, #2 diesel fuel, and GP-1140 fuel, respectively, each with a maximum tank capacity of 2000, 2000, 2000, and 1000 gallons, respectively;
 - (2) Three (3) fuel stands for testing pumps, with a maximum capacity of testing 4000 pumps per year, exhausting through stacks ST-1, ST-2, and ST-3, respectively;

- (3) Flow testers for testing pump flows for sink, rotary vane #1 and rotary vane #2, with a maximum capacity of testing 119,600 pumps per year, exhausting through stacks ST-1, ST-2, and ST-3, respectively;
- (4) Stoddard solvent (drums) for testing fuel pumps with flow test sink, rotary vane #1, and rotary vane #2, exhausting through stacks ST-1, ST-2, and ST-3, respectively;
- (d) Ten (10) natural gas fired forced air heaters, identified as HTR1 through HTR10; respectively, each with a maximum heat input capacity of 0.03, 0.20, 0.15, 0.07, 0.13, 0.07, 0.09, 0.14, 0.12, and 0.11 MMBtu per hour, respectively;
- (e) Two (2) pump test stands, consisting of one (1) Roller Vane Diesel Tester designated as ROTVANTST and one (1) Oil Pump Audit Stand designated as OILAUDIT;
- (f) One (1) industrial parts washer utilizing a soap based, non-VOC containing cleaner;
- (g) One (1) roller vane oil pump test stand identified as ROLVANOILTST;
- (h) Two (2) cold cleaners with self closing lid, identified as DEGRDIE and DEGRTOOL, using 98 gallons per year and 56 gallons per year of solvent, respectively ;
- (i) Two (2) cold cleaners with drum reservoir, identified as DEGRPLAT and DEGRMOLD, using 133 gallons per year and 56 gallons per year of solvent, respectively;
- (j) One (1) Samsco wastewater evaporator, identified as WWEVAP, with an oil and grease content less than or equal to 1% by volume;
- (k) Twenty (20) plastic injection molding lines with no solvent in resin, identified as INJMOLD;
- (l) Nine (9) production line fuel pump testing units, identified as GEROTST, CHRYTST1, CHRYTST2, TURBTST, MARINTST, ROTVANTST, SOLENTST, DAUTTST and GERMIDTST, respectively, with total maximum VOC emission rate equal to 3.02 tons per year;
- (m) One (1) electrical and mechanical fuel pumps testing unit, identified as DURABTST, with a maximum VOC emission rate equal to 0.00018 tons per year;
- (n) One (1) pump flow static pressure testing unit, identified as GERAUDTST, with a maximum VOC emission rate equal to 0.00012 tons per year;
- (o) One (1) small blast cabinet located in satellite tool room serviced by 55 cubic feet per minute (cfm) dust collector; and
- (p) One (1) small blast booth located in the technical center research and development serviced by 55 cfm dust collector.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) FESOP No. F017-10438-00029, issued on February 23, 2000;
- (b) First Administrative Amendment No. 017-12586-00029, issued on September 21, 2000;
- (c) Second Administrative Amendment No. 017-12888-00029, issued on December 15, 2000;
- (d) First Reopening No. 017-13016-00029, issued on September 24, 2001;
- (e) Third Administrative Amendment No. 017-16469-00029, issued on August 27, 2002; and
- (f) Fourth Administrative Amendment No. 017-19722-00029, issued on September 3, 2004.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation 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 February 26, 2004, with additional information received on December 9, 2004 and December 29, 2004.

Emission Calculations

See Appendix A of this document for detailed emission calculations (Pages 1 through 6)

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit 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, the department, or the appropriate local air pollution control agency.”

| Pollutant | Potential to Emit (tons/yr) |
|-----------------|-----------------------------|
| PM | 0.04 |
| PM-10 | 0.04 |
| SO ₂ | 0.003 |
| VOC | 57.59 |
| CO | 0.41 |
| NO _x | 0.49 |

| HAPs | Potential to Emit (tons/yr) |
|---------------|-----------------------------|
| Glycol Ethers | 2.24 |
| MTBE | 2.52 |
| Hexane | 0.01 |
| Benzene | 0.84 |
| Toluene | 2.52 |
| Ethyl Benzene | 0.34 |
| Xylene | 2.01 |
| Other HAPs | negligible |
| Total | 10.52 |

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all pollutants is less than 100 tons per year and the potential to emit VOC is greater than 25 tons per year. Therefore the source, previously operating under FESOP No. F017-10438-00029, is now subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit of combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not a major source of HAPs as defined in 326 IAC 2-7-1(22).
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (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 particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Cass County.

| Pollutant | Status |
|-----------------|------------|
| PM-10 | attainment |
| PM-2.5 | attainment |
| SO ₂ | attainment |
| NO ₂ | attainment |
| 1-hour Ozone | attainment |
| 8-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 emissions and NOx are considered when evaluating the rule applicability relating to ozone. Cass County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Cass County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.

- (c) Cass County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

| Pollutant | Emissions (tons/yr) |
|------------------|---------------------|
| PM | 0.04 |
| PM-10 | 0.04 |
| SO ₂ | 0.003 |
| VOC | 35.12 |
| CO | 0.41 |
| NO _x | 0.49 |
| Single HAP | 2.52 |
| Combination HAPs | 10.52 |

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions are based on information provided by the Permittee with permit application for MSOP No. 017-18763-00029, dated February 26, 2004.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 017-18763-00029, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60.40c), Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, are not included in the permit for the ten (10) natural gas fired forced air heaters because the heaters are not steam generating units.
- (b) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60.110b), Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, are not included in the permit for the four (4) tanks, identified as T-1 through T-4, since each of them has a storage capacity of less than 75 cubic meters (39,890 gallons).

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart T are not included in the permit for the solvent cleaners because the requirements of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent and the source does not have any washer/degreaser that uses any solvent mentioned in 40 CFR 63.460 (a).
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart DDDDD are not included in the permit for the evaporator and air heaters because the requirements of this subpart apply to existing and new industrial, commercial, or institutional boilers and process heaters located at a major source of HAP emissions and this source is not a major source.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ are not included in the permit for the diesel fired reciprocating internal combustion engine since the engine is located at a source which is not a major source of HAP emissions.

State Rule Applicability – Entire Source

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

This source, which is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, is not subject to the requirements of 326 IAC 2-2 (PSD). The potential emissions of all attainment criteria pollutants are less than 250 tons per year; therefore, this source is not a major PSD source.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The auto parts surface coating operation will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Since the source is not a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2) or (3).

326 IAC 8-6-1 (Organic Solvent Emission Limitations)

326 IAC 8-6-1 is not applicable to this source since the source is located in Cass County, and was constructed after January 1, 1980. Moreover, the source-wide VOC emissions are less than one hundred (100) tons per year.

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (e) (2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2 (b) through (d) do not apply shall not exceed 0.551 pounds per hour.

The small blast cabinet located in satellite tool room and small blast booth located in the technical center research and development have a maximum process weight rate of 80 pounds per hour each and the methods in 326 IAC 6-3-2 (b) through (d) do not apply. Therefore the allowable emissions for each of these facilities will be 0.551 pounds per hour.

The dust collectors for particulate control shall be in operation at all times the mechanical shot blaster is in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

New facilities existing as of January 1, 1980 which have potential VOC emissions of 25 tons per year or more and are not subject to any other provision of 326 IAC 8 shall reduce VOC emissions using Best Available Control Technology (BACT).

- (a) The potential VOC emissions from Technical Center Research and Development, identified as EU-05, are 26.5 tons per year. The VOC emissions from the Technical Research and Development Center are restricted to less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply.
- (b) The potential to emit of VOC from Electric Fuel Pump Test Line, identified as EU-04, is less than 25 tons per year. The potential to emit of VOC from the four (4) dip coating tanks, identified as EU-02, is also less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply to these facilities.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to condition D.1.1 in the permit, the Permittee shall not allow the combined input of VOC to the four (4) dip coating tanks to exceed fifteen (15) pounds per day. Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) do not apply.

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-2, the owner or operator of the cold cleaning facilities, identified as DEGRDIE, DEGRTOOL, DEGRPLAT and DEGRMOLD, shall:

- (a) equip each cleaner with a cover;
- (b) equip each cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;

- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operation requirements;
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

- (a) The requirements of 326 IAC 8-3-5 apply to any new cold cleaner degreaser located in any county in Indiana and not equipped with remote solvent reservoirs. The cold cleaners with self closing lid, identified as DEGRDIE and DEGRT00L, are not equipped with remote solvent reservoirs and therefore the requirements of 326 IAC 8-3-5 shall apply.

Pursuant to 326 IAC 8-3-5(a), the owner or operator of the cold cleaner degreaser facilities, identified as DEGRDIE and DEGRT00L, shall:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) the solvent is agitated; or
 - (C) the solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5 (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.

- (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

The requirements of 326 IAC 8-3-5 do not apply to two (2) cold cleaners, identified as DEGRPLAT and DEGRMOLD, because both cold cleaners are equipped with remote solvent drum reservoirs.

- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 20-6-1 (Halogenated solvent cleaning)

326 IAC 20-6-1 is not applicable to the part washer, cold cleaners and degreaser facilities because these facilities do not use any solvent containing the halogenated compounds listed in 326 IAC 20-6-1 (a).

Conclusion

The operation of this fuel pumps and auto light lenses manufacturing operation shall be subject to the conditions of the Minor Source Operating Permit 017-18763-00029.

Appendix A: Emission Calculations

Company Name: Federal Mogul Corporation
Address City IN Zip: 101 Industrial Boulevard, Logansport, IN 46947
MSOP No.: 017-18763
Pit ID: 017-00029
Reviewer: Gaurav Shi/EVP
Date: 10/06/05

| Uncontrolled Potential Emissions (tons/year) | | | | | |
|---|----------------------------|--|-------------------------------|------------------------------|----------------------------|
| Emissions Generating Activity | | | | | |
| Pollutant | Impregnation Line EU-02 | Cummins Fuel Pump Tester ⁽¹⁾ EU-04 | Technical Center R&D EU-05 | Natural Gas Fired Heaters | TOTAL⁽⁴⁾ |
| PM | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 |
| PM10 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 |
| SO2 | 0.00 | 0.00 | 0.00 | 0.003 | 0.003 |
| NOx | 0.00 | 0.00 | 0.00 | 0.49 | 0.49 |
| VOC | 23.72 | 7.35 | 26.50 | 0.03 | 57.59 |
| CO | 0.00 | 0.00 | 0.00 | 0.41 | 0.41 |
| total HAPs | 2.24 | 0.00 | 8.27 | 0.01 | 10.52 |
| worst case single HAP | 0.7 (Glycol Ethers) | 0.00 | 2.52 (MTBE) | 0.01 (Hexane) | |
| Total emissions based on rated capacity at 8,760 hours/year. | | | | | |
| Controlled Potential Emissions (tons/year) | | | | | |
| Emissions Generating Activity | | | | | |
| Pollutant | Impregnation Line EU-02 | Cummins Fuel Pump Tester EU-04 | Technical Center R&D EU-05 | Insignificant Activities | TOTAL⁽⁴⁾ |
| PM | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 |
| PM10 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 |
| SO2 | 0.00 | 0.00 | 0.00 | 0.003 | 0.003 |
| NOx | 0.00 | 0.00 | 0.00 | 0.49 | 0.49 |
| VOC | 2.74 ⁽³⁾ | 7.35 | 25 ⁽²⁾ | 0.03 | 35.12 |
| CO | 0.00 | 0.00 | 0.00 | 0.41 | 0.41 |
| total HAPs | 2.24 | 0.00 | 8.27 | 0.01 | 10.52 |
| worst case single HAP | 0.7 (Glycol Ethers) | 0.00 | 2.52 (MTBE) | 0.01 (Hexane) | |
| Total emissions based on rated capacity at 8,760 hours/year, after control. | | | | | |

Notes

- (1) The emissions also include emissions from the production line fuel pump testing units, electrical and mechanical fuel pumps testing unit and pump flow static pressure testing unit. The emissions from these units are based on FESOP no. 017-10438-00029, issued on February 23, 2000.
- (2) Pursuant to condition D.1.2, the combined VOC input usage to EU-05 shall be limited to less than 25 tons per year.
- (3) Pursuant to condition D.1.1, the actual VOC input usage to EU-02 shall be limited to less than 15 pounds per day.
- (4) There are negligible emissions from roller vane diesel tester, oil pump audit stand, roller vane oil pump test stand, two (2) cold cleaners with self closing lid, two (2) cold cleaners with drum reservoir, samsco wastewater evaporator (oil & grease content less than 1%), blast cabinet located in satellite tool room and blast booth located in technical R & D center. All degreasing operations have an annual solvent usage less than 145 gallons per 12 months. The blast cabinets are serviced by 55 cfm dust collectors. The industrial parts washer uses a soap based, non-VOC cleaner and plastic injection molding lines do not contain any solvent in resin; therefore, there are no emissions from these units.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: Federal Mogul Corporation
Address City IN Zip: 101 Industrial Boulevard, Logansport, IN 46947
MSOP No.: 017-18763
Plt ID: 017-00029
Reviewer: Gaurav Shil/EVP
Date: 10/06/05**

| Material | Density (Lb/Gal) | Weight % Volatile (H2O & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|----------------------------------|------------------|------------------------------------|----------------|-------------------|----------------|---------------------------------|------------------------|---------------------|---|----------------------------------|-------------------------------|------------------------------|-----------------------------|--------------------------------|-------------------|---------------------|
| Impregnation Line (EU-02) | | | | | | | | | | | | | | | | |
| Dip Tank 1 | 8.3 | 100.00% | 0.0% | 100.0% | 0.0% | 0.00% | 0.00110 | 288 | 8.33 | 8.33 | 2.64 | 63.33 | 11.56 | 0.00 | NA | 100% |
| Dip Tank 2 | 8.3 | 100.00% | 99.3% | 0.7% | 99.4% | 0.00% | 0.15700 | 288 | 9.72 | 0.06 | 2.64 | 63.28 | 11.55 | 0.00 | NA | 100% |
| Dip Tank 3 | -- | 0.00% | 0.0% | 0.0% | 0.0% | 100.00% | 0.00640 | 288 | 0.08 | 0.08 | 0.14 | 3.34 | 0.61 | 0.00 | NA | 100% |
| Dip Tank 4 | 7.8 | 100.00% | 100.0% | 0.0% | 100.0% | 0.00% | 0.01000 | 288 | NA | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NA | 100% |

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

**Appendix A: Emission Calculations
HAP Emission Calculations**

Company Name: Federal Mogul Corporation
Address City IN Zip: 101 Industrial Boulevard, Logansport, IN 46947
MSOP No.: 017-18763
Pit ID: 017-00029
Reviewer: Gaurav Shil/EVP
Date: 10/06/05

| Material | Density (Lb/Gal) | Gallons of Material (gal/unit) | Maximum (unit/hour) | Weight % Xylene | Weight % Toluene | Weight % MEK | Weight % Benzene | Weight % Hexane | Weight % Glycol Ethers | Weight % Methanol | Xylene Emissions (ton/yr) | Toluene Emissions (ton/yr) | MEK Emissions (ton/yr) | Benzene Emissions (ton/yr) | Glycol Ethers Emissions (ton/yr) | Methanol Emissions (ton/yr) |
|----------------------------------|------------------|--------------------------------|---------------------|-----------------|------------------|--------------|------------------|-----------------|------------------------|-------------------|---------------------------|----------------------------|------------------------|----------------------------|----------------------------------|-----------------------------|
| Impregnation Line (EU-02) | | | | | | | | | | | | | | | | |
| Dip Tank 1 | 8.33 | 0.00110 | 288 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Dip Tank 2 | 8.33 | 0.15700 | 288 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.09% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 1.55 | 0.00 |
| Dip Tank 3 | -- | 0.006400 | 288 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Dip Tank 4 | 7.83 | 0.01000 | 288 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.70% | 0.00% | 0.00 | 0.00 | 0.00 | 0.00 | 0.69 | 0.00 |

Total State Potential Emissions

0.00 0.00 0.00 0.00 2.24 0.00

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

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Ten (10) Heaters**

**Company Name: Federal Mogul Corporation
Address City IN Zip: 101 Industrial Boulevard, Logansport, IN 46947
MSOP No.: 017-18763
Plt ID: 017-00029
Reviewer: Gaurav Shil/EVP
Date: 10/06/05**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.1

9.7

| Emission Factor in lb/MMCF | Pollutant | | | | | |
|-------------------------------|-----------|------|------|------------|------|------|
| | PM | PM10 | SO2 | NOx | VOC | CO |
| | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | *see below | | |
| Potential Emission in tons/yr | 0.04 | 0.04 | 0.00 | 0.49 | 0.03 | 0.41 |

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factors are condensable and filterable.

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

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

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 6 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Ten (10) Heaters
HAPs Emissions

Company Name: Federal Mogul Corporation
Address City IN Zip: 101 Industrial Blvd., Logansport, IN 46947
CP: 017-10438
Plt ID: 017-00029
Reviewer: Gaurav Shil/EVP
Date: 10/06/05

HAPs - Organics

| | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 |
| Potential Emission in tons/yr | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |

HAPs - Metals

| | | | | | |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf | Lead 5.0E-04 | Cadmium 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
| Potential Emission in tons/yr | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
 Research and Development Technical Center (EU-05)
 and Cummins Fuel Pump Tester (EU-04)
 VOC and HAP Emissions**

Company Name: Federal Mogul Corporation
Address City IN Zip: 101 Industrial Boulevard, Logansport, IN 46947
MSOP No.: 017-18763
Plt ID: 017-00029
Reviewer: Gaurav Shil/EVP
Date: 10/06/05

| Material | Gallons Purchased | Gallons used or sold | Gallons unaccounted | Density (lb/gal) | Lbs unaccounted/yr | TPY |
|------------------|-------------------|----------------------|---------------------|------------------|--------------------|--------------|
| Gasoline | 29425.71 | 24388.57 | 5037.14 | 6.66 | 33547.35 | 16.77 |
| #2 Diesel | 2879.63 | 2378.58 | 501.05 | 7.08 | 3547.43 | 1.77 |
| GP1140 | 4006.66 | 3173.48 | 833.18 | 6.16 | 5132.39 | 2.57 |
| Stoddard Solvent | 3523.93 | 2114.36 | 1409.57 | 6.41 | 9035.34 | 4.52 |
| Total | | | | | | 25.63 |

HAPs (TPY)

Gasoline Tons per year
 MTBE = 15% (by weight) * 16.77 (tons per year) = 2.52
 Xylene = 12% (by weight) * 16.77 (tons per year) = 2.01
 Toluene = 10% (by weight) * 16.77 (tons per year) = 1.68
 Benzene = 5% (by weight) * 16.77 (tons per year) = 0.84
 Ethyl Bz = 2% (by weight) * 16.77 (tons per year) = 0.34

GP1140
 Toluene = 22% (by weight) * 3.84 (tons per year) = 0.84

#2 Diesel
 Naphthalene = 1% (by weight) * 1.77 (tons per year) = 0.02

Total HAPs from R & D Technical Center = 8.27
 Total VOC from R & D Technical Center = 26.50

Emissions from Cummins Fuel Pump Center (EU-04)

VOC carry out losses = 5.05 g/pump
 VOC emissions (TPY) = gm/pump X pump/hr X hr/yr X lb/gm X ton/lb
 4.33 tons per year