



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

March 31, 2004

100 North Senate Avenue  
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Indianapolis, Indiana 46206-6015  
(317) 232-8603  
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[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Key Plastics, LLC / T099-17595-00018

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, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

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.



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## PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Key Plastics, LLC  
1615 W. McDonald Street  
Hartford City, Indiana 47348**

(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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T009-17595-00018	
Issued by: Original signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: March 31, 2004  Expiration Date: March 31, 2009

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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 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

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The Permittee owns and operates stationary multi-stage coating of painted automobile door handles/housing.

Responsible Official:	John W. Evans, Plant Manager.
Source Address:	1615 W. McDonald Street, Hartford City, Indiana 47348
Mailing Address:	1615 W. McDonald Street, Hartford City, Indiana 47348
General Source Phone Number:	(765)348-7300
SIC Code:	3714
County Location:	Blackford
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD ; Major Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) manual sample spray coating booth, installed in 1993, identified as EU22, with maximum capacity of 40 units per hour, utilizing electrostatic air atomized spray applications, with dry filters as controls, and exhausting through one (1) stack identified as Stack No.10.
- (b) A plastic parts washing and painting system, installed in 1993 including:
  - (1) Two (2) base coat paint booths, identified as No. 1 and No. 2 base coat booths, each with maximum capacity of 7,200 units per hour, and operating in series with respect to one another.
  - (2) One (1) pearl coat paint booth, with a maximum capacity of 7,200 units per hour.
  - (3) One (1) prime paint coating booth with a maximum capacity of 7,200 units per hour.
  - (4) Two (2) clear paint coating booths, each with a maximum capacity of 7,200 units per hour, and operating in series with respect to one another.

The six (6) automated coating booths that make up the plastic parts painting system are each equipped with electrostatic air atomization spray equipment and water wash and/or dry filter for particulate overspray controls.

- (5) One (1) natural gas 8-inch Tube-O-Flame, located at Stage No.2, with a maximum heat input rate of 1.00 million British thermal units (MMBtu) per hour, and exhausting to one(1) stack identified as Stack No. 2.

- (6) One (1) natural gas 6-inch Tube-O-Flame, located at Stage No. 3, with a maximum heat input rate of 0.60 MMBtu per hour and exhausting to one (1) stack identified as Stack No. 3.
- (7) One (1) natural gas dry-off oven with a maximum heat input rate of 0.60 MMBtu per hour, and exhausting to one (1) stack identified as No. 5.
- (8) One (1) natural gas fired prime bake oven with a maximum heat input rate of 0.80 MMBtu per hour.
- (9) One (1) natural gas fired final bake oven consisting of a radiant heating portion and a direct heating portion with maximum heat input rates of 0.40 MMBtu per hour and 0.80 MMBtu per hour, respectively.
- (10) One (1) natural gas fired regenerative thermal oxidizer, with maximum heat input rate of 5.2 MMBtu per hour and exhausting to Stack No. 11. The exhaust streams from the two (2) clear coat booths and the No. 1 base coat booth are ducted to the recirculating air house. Sixty percent (60%) of the exhaust streams from the prime coat booth, pearl coat booth, and No. 2 base coat booth is ducted to a thermal oxidizer exhausting to stack identified as Stack No. 11 to control emissions of volatile organic compounds. Process air entering the recirculation house is mixed with preheated fresh air and recycled back to the paint booths. The prime and final bake oven exhausts are ducted directly to a thermal oxidizer stack identified as Stack No. 11 to control emissions of volatile organic compounds.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units (MMBtu) per hour:
- (b) One (1) natural gas fired boiler, installed in 1993, with a maximum heat input rate of 0.84 MMBtu per hour, and exhausting to one (1) stack identified as Stack No. 9 [326 IAC 6-2].
- (c) One (1) natural gas fired air make-up unit, with a maximum heat input rate of 3.30 MMBtu per hour.
- (d) One (1) natural gas fired burner with a maximum heat input rate of 1.00 MMBtu per hour which preheats fresh air coming into the air recirculation house.
- (e) One (1) natural gas fired make-up unit with a maximum heat input rate of 0.26 MMBtu per hour.
- (f) Ten (10) radiant tube heaters firing natural gas, each with a maximum heat input rate of 0.13 MMBtu per hour, and respectively exhausting to stacks identified as Stacks Nos. 12A through 12J.
- (g) One (1) natural gas fired space heater with a maximum heat input rate 0.10 MMBtu per hour and exhausting to one (1) stack identified as Stack No. 14.
- (h) One (1) natural gas fired HVAC system with a maximum heat input rate of 0.35 MMBTU per hour firing natural gas, and exhausting to one (1) stack identified as Stack No. 14.

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

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

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

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

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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 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

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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, modifications, or amendments of this permit do not affect the expiration date.

### B.3 Enforceability [326 IAC 2-7-7]

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Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.5 Severability [326 IAC 2-7-5(5)]

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

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(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

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(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

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

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report 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) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

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

**B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]**  
**[326 IAC 1-6-3]**

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- (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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]**

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)].
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

**B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.16 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the

certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) 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.
- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

**B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]**  
[326 IAC 2-7-12 (b)(2)]

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance

of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

**B.20 Source Modification Requirement [326 IAC 2-7-10.5]**

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

**B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][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 Part 70 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 any records that must be kept under the conditions of this permit;
- (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 any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (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 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][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. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

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

- C.1 **Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]**
- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) 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. This condition is not federally enforceable.
- C.2 **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 nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 **Open Burning [326 IAC 4-1] [IC 13-17-9]**
- The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 **Incineration [326 IAC 4-2] [326 IAC 9-1-2]**
- The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.
- C.5 **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). 326 IAC 6-4-2(4) is not federally enforceable.
- C6 **Operation of Equipment [326 IAC 2-7-6(6)]**
- Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- C.7 **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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 the "responsible official" 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 [326 IAC 2-7-6(1)]**

#### **C.8 Performance Testing [326 IAC 3-6]**

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- (a) 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ,, if the source 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.9 Compliance Requirements [326 IAC 2-1.1-11]**

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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.

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

#### **C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to T009-7508-00018.

C.12 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.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of

pressure drop or other parameters.

### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

#### **C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

within ninety (90) days after the date of issuance of this permit.

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

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.  
[326 IAC 1-5-3]

#### **C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

#### **C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]**

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(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set

forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]  
[326 IAC 2-6] [326 IAC 2-7-19 (e)]**

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements and be used for the purpose of a Part 70 fee assessment:
  - (1) Indicate estimated actual emissions of criteria pollutants from the source;
  - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

Indianapolis, Indiana 46206-6015

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

- (c) The annual emission statement 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.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]**

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- (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 within ninety (90) days of permit issuance.

**C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) 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.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years.

**Stratospheric Ozone Protection**

**C.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for

motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1 FACILITY OPERATION CONDITIONS

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

One (1) manual sample spray coating booth, with maximum capacity of 40 units per hour with dry filters as controls, and exhausting through stack, identified as Stack No.10 and is not controlled by the thermal oxidizer.

(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 Particulate Matter (PM) [40 CFR 52 Subpart P]

Pursuant to OP No. T009-7508-00018, issued on January 12, 1999 and 40 CFR 52 Subpart P, the PM from the one (1) manual sample spray coating booth 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:

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

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

Pursuant to Part 70 No. T009-7508-00018 issued on January 12, 1999, any change or modification which may increase potential VOC usage to twenty-five (25) tons per year or more at EU22 shall require prior approval from the Office of Air Quality (OAQ) before such change can occur.

#### D.1.3 Particulate [326 IAC 6-3-2(d)]

Pursuant to OP No. T009-7508-00018 issued on January 12, 1999 and 326 IAC 6-3-2(d), particulate from the surface coating shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

#### D.1.5 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 stack 10 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

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

#### **D.1.6 Record Keeping Requirements**

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- (a) To document compliance with condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in condition D.1.2.
  - (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.
- (b) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain a log of weekly overspray observations, weekly observations of the water level in the pans (only use this when the source uses water pans for PM control), 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.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

A plastic parts washing and painting system, , installed in 1993 including:

- (a) Two (2) base coat paint booths, identified as No. 1 and No. 2 base coat booths, each with maximum capacity of 10,800 units per hour, and operating in series with respect to one another.
- (b) One (1) pearl coat paint booth, with a maximum capacity of 10,800 units per hour.
- (c) One (1) prime paint coating booth with a maximum capacity of 10,800 units per hour.
- (d) Two (2) clear paint coating booths, each with a maximum capacity of 10,800 units per hour, and operating in series with respect to one another.

The six (6) automated coating booths that make up the plastic parts painting system are each equipped with electrostatic air atomization spray equipment and water wash and/or dry filter for particulate overspray controls.

- (e) One (1) natural gas 8-inch Tube-O-Flame, located at Stage No.2, with a maximum heat input rate of 1.00 million British thermal units (MMBtu) per hour, and exhausting to one(1) stack identified as Stack No. 2.
- (f) One (1) natural gas 6-inch Tube-O-Flame, located at Stage No. 3, with a maximum heat input rate of 0.60 MMBtu per hour and exhausting to one (1) stack identified as Stack No. 3.
- (g) One (1) natural gas dry-off oven with a maximum heat input rate of 0.60 MMBtu per hour, and exhausting to one (1) stack identified as No. 5.
- (h) One (1) natural gas fired prime bake oven with a maximum heat input rate of 0.80 MMBtu per hour.
- (i) One (1) natural gas fired final bake oven consisting of a radiant heating portion and a direct heating portion with maximum heat input rates of 0.40 MMBtu per hour and 0.80 MMBtu per hour, respectively.
- (j) One (1) natural gas fired regenerative thermal oxidizer, with maximum heat input rate of 5.2 MMBtu per hour and exhausting to Stack No. 11. The exhaust streams from the two (2) clear coat booths and the No.1 base coat booth are ducted to the recirculating air house. Sixty percent (60%) of the exhaust streams from the prime coat booth, pearl coat booth, and No. 2 base coat booth is ducted to a thermal oxidizer exhausting to stack identified as Stack No. 11 to control emissions of volatile organic compounds. Process air entering the recirculation house is mixed with preheated fresh air and recycled back to the paint booths. The prime and final bake oven exhausts are ducted directly to a thermal oxidizer stack identified as Stack No. 11 to control emissions of volatile organic compounds. One(1)natural gas 8-inch Tube-O-Flame, located at Stage No.2, with a maximum heat input rate of 1.00 million British thermal units (MMBtu) per hour, and exhausting to stack identified as Stack No. 2.

(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.2.1 General Provisions Relating to HAPs [326 IAC 20-1][40 CFR Part 63, Subpart A] [Table 12 to 40 CFR Part 63, Subpart PPPP] [40 CFR 63.2398]**

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The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, except when otherwise specified by Table 2 to 40 CFR Part 63, Subpart PPPP. The Permittee must comply with these requirements on and after the effective date of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products.

### **D.2.2 National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products [40 CFR Part 63, Subpart PPPP] [40 CFR 63.4481] [40 CFR 63.4482]**

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- (a) The provisions of 40 CFR Part 63, Subpart PPPP (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products) apply to the affected source. A copy of this rule is available on the US EPA Air Toxics Website at <http://www.epa.gov/ttn/atw/plastic/plasticpg.html>. Pursuant to 40 CFR 63.4483(b), the Permittee must comply with these requirements on and after the date 3 years after the effective date of 40 CFR Part 63, Subpart PPPP.
- (b) This subpart applies is the surface coating of any plastic parts or products, as described in 40 CFR 63.4481, paragraph (a)(1), and it includes the following subcategories:
- (1) general use coating subcategory
  - (2) automotive lamp coating subcategory
  - (3) TPO coating subcategory
  - (4) assembled on-road vehicle coating subcategory
  - (5) These subcategories are further defined in 40 CFR 63.4481, paragraphs (a)(2) through (5).
- (c) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart PPPP:
- (1) All coating operations as defined in 40 CFR 63.4581;
  - (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
  - (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
  - (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.
- (d) Terminology used in this section are defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.4581, which are incorporated by reference.

**D.2.3 Best Available Control Technology (BACT) and Volatile Organic Compounds (VOCs)**  
**[326 IAC 8-1-6]**

Pursuant to 326 IAC 8-1-6 and OP No. T009-7508-00018, issued on January 12, 1999 and revised through this Title V renewal:

- (a) The regenerative thermal oxidizer and the fans moving the exhaust fumes from the six (6) automated coating booths of the plastic parts painting system, the prime bake oven and the final bake oven to the thermal oxidizer shall be in operation at all times that one of the six (6) automated coating booths, the prime bake oven or the final bake oven is operated, and that the water curtain and dry filters that control particulate matter emissions shall be operating and in place at all times that the system is in operation.
- (b) The fans shall operate within a fan amperage and the regenerative thermal oxidizer shall operate above a minimum operating temperature, as determined by the most recent test, that is demonstrated to achieve 80.75% overall control efficiency of the volatile organic compounds (VOC) emitted from the parts being coated and baked.
- (c) The regenerative thermal oxidizer and air recirculation system shall continue to be operated after the painting operations cease for at least the minimum period of time, as determined by the most recent test, demonstrated to purge the recirculation air system's residual VOC content through the thermal oxidizer and reduce the VOC concentration in the recirculated air to ambient levels.
- (d) The input of VOC to the plastic parts painting system and the usage of cleanup solvent for the plastic parts painting system shall be limited to 1,164 tons used per twelve (12) consecutive month period. This limitation will prevent the VOC emissions from the plastic parts painting system being greater than 224.4 tons per year. This limitation is based upon the use of a regenerative thermal oxidizer with an overall control efficiency of 80.75%.

**D.2.4 PSD Minor Limit [326 IAC 2-2]**

Pursuant to OP T009-7508-00018, issued on January 19, 1999, the use of VOC, including coatings, dilution solvents, and cleaning solvents shall be less than 250 per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit VOC to less than 250 tons per twelve (12) consecutive month period and is a condition of operation of this facility. Therefore, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not shield the Permittee from possible enforcement actions initiated by either the U.S. EPA or the Indiana Department of Environmental Management (IDEM) involving this facility. Compliance with the terms of this permit does not serve as proof of compliance for the facility described above. The Permittee shall, if needed, apply for revision of this permit to address the resolution of any such outstanding issue.

**D.2.5 Particulate Matter (PM) [40 CFR 52 Subpart P]**

Pursuant to Part 70 No. T009-7508-00018, issued on January 12, 1999, and 40 CFR 52 Subpart R, the particulate matter (PM) from the six (6) coating booths of the plastic parts painting system and the one (1) manual sample coating booth shall be limited by the following:

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

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

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

**D.2.6 Particulate [326 IAC 6-3-2(d)]**

Pursuant to Part 70 No. T009-7508-00018 issued on January 12, 1999, and 326 IAC 6-3-2(d), particulate from the one (1) manual sample coating booth shall be controlled by a dry particulate filter, and particulate from the six (6) coating booths of the plastic parts painting system shall be controlled by water wash and/or dry filters, and the Permittee shall operate each control device in accordance with manufacturer's specifications. This requirement to operate the control is not federally enforceable.

**D.2.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.2.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]**

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer to achieve compliance with condition D.2.1.

**D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

- (a) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify VOC control efficiency as per condition D.2.3 for 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.
- (b) Pursuant to 40 CFR 63, Subpart PPPP, if the Permittee elects to demonstrate compliance using 63.4510, 63.9(b), 63.9(h), 63.4881(d), 63.4481(e)(2) performance testing must be conducted in accordance with 40 CFR 63, Subpart PPPP.

**D.2.10 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 a three-hour (3-hr) average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the three-hour (3-hr) average temperature of the thermal oxidizer is below 1400 °F. A three-hour (3-hr) average temperature that is below 1400 °F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the three-hour (3-hr) average temperature of the thermal oxidizer is below the three-hour (3-hr) average temperature as observed during the compliant stack test. An hourly average temperature that is below the three-hour (3-hr) average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1, as approved by IDEM.

**D.2.11 Parametric Monitoring**

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in condition D.2.3, as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

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

#### **D.2.12 Particulate Matter (PM)**

Pursuant to OP No. T009-7508-0001, issued on January 12, 1999, the dry filters for PM control shall be in place and operating at all times when the six (6) automated spray booths are in operation.

#### **D.2.13 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 manual sample spray coating booth stack (No. 10) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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

#### **D.2.14 Record Keeping Requirements**

- (a) To document compliance with conditions D.2.3, D.2.4, D.2.10 and D.2.11, 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 conditions D.2.3 and D.2.4.
  - (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 an hourly average basis) for the thermal oxidizer and the hourly average temperature used to demonstrate compliance during the most recent compliant stack test.
- (6) Daily records of the duct pressure or fan amperage.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.15 Notification Requirements [40 CFR 63.4510]

- (a) General. You must submit the notifications in 40 CFR 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.
- (b) Initial notification. You must submit the initial notification required by 40 CFR 63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after the effective date of 40 CFR Part 63, Subpart PPPP, whichever is later. (For an existing affected source) you must submit the initial notification no later than 1 year after the effective date of 40 CFR Part 63, Subpart PPPP. If you are using compliance with the Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) under 40 CFR 63.4881(d) to constitute compliance with this subpart for your plastic part coating operations, then you must include a statement to this effect in your initial notification and no other notifications are required under this subpart. If you are complying with another NESHAP that constitutes the predominant activity at your facility under 40 CFR 63.4481(e)(2) to constitute compliance with this subpart for your plastic coating operations, then you must include a statement to this effect in your initial notification and no other notifications are required under this subpart.

Notification of compliance status. You must submit the notification of compliance status required by 40 CFR 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in 40 CFR 63.4540, 40 CFR 63.4550, or 40 CFR 63.4560 that applies to your affected source. The notification of compliance status must contain the information specified in 40 CFR 63.4510, paragraphs (c)(1) through (11) and in 40 CFR 63.9(h).

#### D.2.16 Record Keeping Requirements [40 CFR 63.4530] [40 CFR 63.4531] [40 CFR 63.10(b)(1)]

- (a) The Permittee must collect and keep records of the data and information specified in 40 CFR 63.4530, paragraphs (c) through (h). Failure to collect and keep these records is a deviation from the applicable standard.
- (b) Records must be in a form suitable and readily available for expeditious review. Where appropriate, the records may be maintained as electronic spreadsheets or as a database. you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. You may keep the records off-site for the remaining 3 years.

#### D.2.17 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3 and D.2.4 shall be submitted to the addresses 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).

#### D.2.18 Reporting Requirements [40 CFR 63.4520]

The Permittee must submit semiannual compliance reports for each affected source according to the requirements of 40 CFR 63.4520, paragraphs (a)(1) through (7). The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in 40 CFR 63.4520, paragraph (a)(2).

D.2.19 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

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

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart PPPP, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart PPPP.
- (c) The significant permit modification application shall be submitted to:  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

**SECTION D.3**

**FACILITY OPERATION CONDITIONS**

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

The following specifically regulated insignificant activities:

One (1) natural gas fired boiler with a maximum heat input rate of 0.84 million British thermal units (MMBtu) per hour, and exhausting to stack, identified as Stack No.9.

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

**D.3.1 Particulate [326 IAC 6-2-3]**

Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) the PM from the 0.84 MMBtu per hour heat input boiler shall be limited to 0.1 pounds per MMBtu heat input.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Key Plastics, LLC  
Source Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Mailing Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Part 70 Permit No.: T009-17595-00018

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_
- Report (specify) \_\_\_\_\_
- Notification (specify) \_\_\_\_\_
- Affidavit (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Key Plastics, LLC  
Source Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Mailing Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Part 70 Permit No.: T009-17595-00018

**This form consists of 2 pages**

**Page 1 of 2**

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

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

**Part 70 Quarterly Report**

Source Name: Key Plastics, LLC  
Source Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Mailing Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Part 70 Permit No.: T009-17595-00018  
Facility: Plastic Parts Painting System  
Parameter: VOC  
Limit: 1,164 tons input per twelve(12) consecutive month period

YEAR: \_\_\_\_\_

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

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

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

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Key Plastics, LLC  
Source Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Mailing Address: 1615 W. McDonald Street, Hartford City, Indiana 47348  
Part 70 Permit No.: T009-17595-00018

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

#### Source Background and Description

**Source Name:** Key Plastics, LLC.  
**Source Location:** 1615 W. McDonald Street, Hartford City, Indiana 47348  
**County:** Blackford  
**SIC Code:** 3714  
**Operation Permit No.:** T009-17595-00018  
**Permit Reviewer:** Femi Ogunsola/EVP

The Office of Air Quality (OAQ) has reviewed a Part 70 permit renewal application from Key Plastics, Inc., relating to the operation of a plastic parts painting process to produce painted automobile door handles. Key Plastics, Inc. was issued Part 70 No. T009-7508-00018 on January 12, 1999.

#### History

On May 30, 2003, Key Plastics submitted an amendment to the original Part 70 (Title V) renewal application, submitted on April 15, 2003, requesting a change in the language to reflect the fact that it achieves the overall VOC control efficiency with a slightly different values for capture and for control. However, upon evaluation of this request, IDEM has decided that since the capture and destruction efficiencies limits were parts of the requirements of 326 IAC 8-1-6 (General Reduction Requirements), a re-analysis of VOC reduction using best available control technology (BACT) is necessary to comply with this rule. Key Plastics, L.L.C. submitted a revised BACT analysis on November 10, 2003. The BACT analysis for Key Plastics, L.L.C. is discussed in this TSD.

#### Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) manual sample spray coating booth, installed in 1993, identified as EU22, with maximum capacity of 40 units per hour, utilizing electrostatic air atomized spray applications, with dry filters as controls, and exhausting through one (1) stack identified as Stack No.10.
- (b) A plastic parts washing and painting system, installed in 1993 including:
  - (1) Two (2) base coat paint booths, identified as No. 1 and No. 2 base coat booths, each with maximum capacity of 7,200 units per hour, and operating in series with respect to one another.
  - (2) One (1) pearl coat paint booth, with a maximum capacity of 360 units per hour.
  - (3) One (1) prime paint coating booth with a maximum capacity of 7,200 units per hour.
  - (4) Two (2) clear paint coating booths, each with a maximum capacity of 7,200 units per hour, and operating in series with respect to one another.

The six (6) automated coating booths that make up the plastic parts painting system are each equipped with electrostatic air atomization spray equipment and water wash and/or dry filter particulate overspray controls.

- (5) One (1) natural gas 8-inch Tube-O-Flame, located at Stage No.2, with a maximum heat input rate of 1.00 million British thermal units (MMBtu) per hour, and exhausting to one(1) stack identified as Stack No. 2.
- (6) One (1) natural gas 6-inch Tube-O-Flame, located at Stage No. 3, with a maximum heat input rate of 0.60 MMBtu per hour and exhausting to one (1) stack identified as Stack No. 3.
- (7) One (1) natural gas dry-off oven with a maximum heat input rate of 0.60 MMBtu per hour, and exhausting to one (1) stack identified as No. 5.
- (8) One (1) natural gas fired prime bake oven with a maximum heat input rate of 0.80 MMBtu per hour.
- (9) One (1) natural gas fired final bake oven consisting of a radiant heating portion and a direct heating portion with maximum heat input rates of 0.40 MMBtu per hour and 0.80 MMBtu per hour, respectively.
- (10) One (1) natural gas fired regenerative thermal oxidizer, with maximum heat input rate of 5.2 MMBtu per hour and exhausting to Stack No. 11. The exhaust streams from the two (2) clear coat booths and the No.1 base coat booth are ducted to the recirculating air house. Sixty percent (60%) of the exhaust streams from the prime coat booth, pearl coat booth, and No. 2 base coat booth is ducted to a thermal oxidizer exhausting to stack identified as Stack No. 11 to control emissions of volatile organic compounds. Process air entering the recirculation house is mixed with preheated fresh air and recycled back to the paint booths. The prime and final bake oven exhausts are ducted directly to a thermal oxidizer stack identified as Stack No. 11 to control emissions of volatile organic compounds.

### **Unpermitted Emission Units and Pollution Control Equipment**

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

### **New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval**

There are no new facilities proposed at this source during this review process.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units (MMBtu) per hour:

- (a) One (1) natural gas fired boiler, installed in 1993, with a maximum heat input rate of 0.84 MMBtu per hour, and exhausting to one (1) stack identified as Stack No.9 [326 IAC 6-2-4].
- (b) One (1) natural gas fired air make-up unit, with a maximum heat input rate of 3.30 MMBtu per hour.

- (c) One (1) natural gas fired burner with a maximum heat input rate of 1.00 MMBtu per hour which preheats fresh air coming into the air recirculation house.
- (d) One (1) natural gas fired make-up unit with a maximum heat input rate of 0.26 MMBtu per hour.
- (e) Ten (10) radiant tube heaters firing natural gas, each with a maximum heat input rate of 0.13 MMBtu per hour, and respectively exhausting to stacks identified as Stacks Nos. 12A through 12J.
- (f) One (1) natural gas fired space heater with a maximum heat input rate 0.10 MMBtu per hour and exhausting to one (1) stack identified as Stack No. 14.
- (g) One (1) natural gas fired HVAC system with a maximum heat input rate of 0.35 MMBTU per hour firing natural gas, and exhausting to one (1) stack identified as Stack No. 14.

### Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) Operating Permit No.: T009-7508-00018, issued on January 12, 1999;
- (a) First Significant Permit Modification No.: 009-12016-00018, issued on November 8, 2000; and
- (b) First reopening No. R009-13138-00018, issued on November 27, 2001

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.

The following terms and conditions from previous approvals were amended as requested by the source. The source was required to operate the thermal oxidizer with capture efficiency of 85% and destruction efficiency of 95% and overall control efficiency of 80.75%. The overall efficiency was to reduce the source-wide VOC emissions to less than 224.4 tons per year to render PSD requirements not applicable. Also, the source has indicated that it has always been achieving the 80.75% overall control efficiency. The Permittee has requested, as part of this renewal, that the capture and destructive efficiency requirements be replaced with the overall control efficiency. The changes are incorporated into this Title V renewal with overstrike indicated the condition that are changed and replacement in bold as follows:

#### D.2.3 Best Available Control Technology (BACT) and Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

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- (a) The regenerative thermal oxidizer and the fans moving the exhaust fumes from the six (6) automated coating booths of the plastic parts painting system, the prime bake oven and the final bake oven to the thermal oxidizer shall be in operation at all times that one of the six (6) automated coating booths, the prime bake oven or the final bake oven is operated, and that the water curtain and dry filters that control particulate matter emissions shall be operating and in place at all times that the system is in operation.

- (b) The fans shall operate within a fan amperage, and the regenerative thermal oxidizer shall operate above a minimum operating temperature as determined by the most recent test, that is demonstrated to achieve **80.75% overall control efficiency** of the volatile organic compounds (VOC) emitted from the parts being coated and baked.
- (c) The regenerative thermal oxidizer and air recirculation system shall continue to be operated after the painting operations cease for at least the minimum period of time, as determined by the most recent test, demonstrated to purge the recirculation air system's residual VOC content through the thermal oxidizer and reduce the VOC concentration in the recirculated air to ambient levels.
- (d) The input of VOC to the plastic parts painting system and the usage of cleanup solvent for the plastic parts painting system shall be limited to 1,164 tons used per twelve (12) consecutive month period. This limitation will prevent the VOC emissions from the plastic parts painting system being greater than 224.4 tons per year. This limitation is based upon the use of a regenerative thermal oxidizer with an overall control efficiency of 80.75%.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

The staff recommends to the Commissioner that the Part 70 permit 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 administratively complete Part 70 permit application for the purposes of this review was received on April 15, 2003.

There was no notice of completeness letter mailed to the source.

### **Emission Calculations**

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

### **Potential To Emit**

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

The source was issued a Part 70 Operating Permit on January 12, 1999. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/facility	Potential to Emit (tons/year)							
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Surface Coating Facilities (EU 22 (6), Plastic Parts Paint Booths)	7.84 <sup>(1)</sup>	7.84 <sup>(1)</sup>	0.00	112.4 <sup>(2)</sup>	0.00	0.00	9.49 (Xylene)	45.0
Natural Gas Combustion ( including insignificant activities)	0.10	0.50	0.00	0.40	5.80	6.90	0.12 (Hexane)	0.13
<b>Total Emissions</b>	<b>11.82</b>	<b>12.22</b>	<b>0.00</b>	<b>&lt;249.99</b>	<b>5.80</b>	<b>6.90</b>	<b>9.49 (Xylene)</b>	<b>&lt;50.00</b>

1. Controlled emission rates pursuant to 326 IAC 6-3-2(d). Assumes PM10 equal to PM.  
2. Reflects limit of less than 25 tons per year for manual spray booth EU22, such that the requirement of 326 IAC 8-1-6 do not apply; and a limit of 224.4 to satisfy the requirements of 326 IAC 8-1-6 for the plastic parts surface coating facility.

- (a) The unrestricted potential emissions of VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The unrestricted potential emissions of any single HAP are equal to or greater than ten (10) tons per year and the unrestricted potential emissions of the combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (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 emissions are not counted toward determination of PSD applicability.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the actual emissions submitted in the Title V application (Form GSD-07) for 2002. Only VOC emission data was recorded consistently for the source in 1997, 1998, 1999, 2000 and 2001.

(A) Criteria Air Pollutants:

Pollutant	Actual Emissions (tons/year)
PM	21.08
PM-10	no data
SO <sub>2</sub>	0.05
VOC	129.97
CO	1.51
NO <sub>x</sub>	7.55

(B) Hazardous Air Pollutants:

Pollutant	Actual Emissions (tons/year)
Ethylbenzene	2.02
Methyl Alcohol	4.23
Methyl ethyl ketone	18.94
Methyl isobutyl ketone	7.52
Formaldehyde	0.53
Toluene	37.59
Xylene	22.68

**County Attainment Status**

The source is located in Blackford County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Blackford County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Blackford County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

**Federal Rule Applicability**

- (a) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units).

The 0.84 MMBtu per hour natural gas fired boiler, as an insignificant activity, installed in 1993, is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c through 60.48c, Subpart Dc) because the unit has a maximum heat input rate below the rule applicability threshold of 10 MMBtu per hour.

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

- (b) This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Plastics Parts Surface Coating 40 CFR Part 63, Subpart PPPP and 326 IAC 20-1-1, because it conducts surface coating of plastics parts of automobile door handles; and it is a major source of hazardous air pollutants.
- (1) Pursuant to 326 IAC 20-1, 40 CFR Part 63, Subpart A , Table 12 to 40 CFR Part 63, Subpart PPPP, and 40 CFR 63.2398] (General Provisions Relating to HAPs), The provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected source, except when otherwise specified by Table 2 to 40 CFR Part 63, Subpart PPPP. The Permittee must comply with these requirements on and after the effective date of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products.
- (2) Pursuant to 40 CFR Part 63, Subpart PPPP, 40 CFR 63.4481, 40 CFR 63.4482 ( National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products),
- (A) the provisions of 40 CFR Part 63, Subpart PPPP (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products) apply to the affected source. A copy of this rule is available on the US EPA Air Toxics Website at <http://www.epa.gov/ttn/atw/plastic/plasticpg.html>. Pursuant to 40 CFR 63.4483(b), the Permittee must comply with these requirements on and after the date 3 years after the effective date of 40 CFR Part 63, Subpart PPPP.
- (B) This subpart applies is the surface coating of any plastic parts or products, as described in 40 CFR 63.4481, paragraph (a)(1), and it includes the following subcategories:
- (i) general use coating subcategory
- (ii) automotive lamp coating subcategory
- (iii) TPO coating subcategory
- (iv) assembled on-road vehicle coating subcategory
- (v) These subcategories are further defined in 40 CFR 63.4481, paragraphs (a)(2) through (5).
- (3) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart PPPP:
- (A) All coating operations as defined in 40 CFR 63.4581;
- (B) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

- (C) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
  - (D) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.
- (4) Terminology used in this section are defined in the CAA, in 40 CFR Part 63, Section 63.2, and in 40 CFR 63.4581, which are incorporated by reference.

Pursuant to 40 CFR 63.4510 ( Notification Requirements),

- (A) General. You must submit the notifications in 40 CFR 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.
- (B) Initial notification. You must submit the initial notification required by 40 CFR 63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after the effective date of 40 CFR Part 63, Subpart PPPP, whichever is later. (For an existing affected source) you must submit the initial notification no later than 1 year after the effective date of 40 CFR Part 63, Subpart PPPP. If you are using compliance with the Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) under 40 CFR 63.4881(d) to constitute compliance with this subpart for your plastic part coating operations, then you must include a statement to this effect in your initial notification and no other notifications are required under this subpart. If you are complying with another NESHAP that constitutes the predominant activity at your facility under 40 CFR 63.4481(e)(2) to constitute compliance with this subpart for your plastic coating operations, then you must include a statement to this effect in your initial notification and no other notifications are required under this subpart.
- (C) Notification of compliance status. You must submit the notification of compliance status required by 40 CFR 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in 40 CFR 63.4540, 40 CFR 63.4550, or 40 CFR 63.4560 that applies to your affected source. The notification of compliance status must contain the information specified in 40 CFR 63.4510, paragraphs (c)(1) through (11) and in 40 CFR 63.9(h).

Pursuant to [40 CFR 63.4530] [40 CFR 63.4531] [40 CFR 63.10(b)(1)] ( Record Keeping Requirements),

- (A) the permittee must collect and keep records of the data and information specified in 40 CFR 63.4530, paragraphs (c) through (h). Failure to collect and keep these records is a deviation from the applicable standard.
- (B) records must be in a form suitable and readily available for expeditious review. Where appropriate, the records may be maintained as electronic spreadsheets or as a database. you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. You may keep the records off-site for the remaining 3 years.

Pursuant to 40 CFR 63.4520 Reporting Requirements, the Permittee must submit semiannual compliance reports for each affected source according to the requirements of 40 CFR 63.4520, paragraphs (a)(1) through (7). The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in 40 CFR 63.4520, paragraph (a)(2).

Pursuant to 326 IAC 2-7-12 and 326 IAC 2-7-5(Requirement to Submit a Significant Permit Modification Application), the Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

- (A) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart PPPP, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

The significant permit modification application shall be submitted no later than twenty-seven months after the effective date of 40 CFR 63, Subpart PPPP.

- (B) The significant permit modification application shall be submitted to:  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) A pollutant-specific emissions unit as defined in 40 CFR 64.1 for VOC at this source shall be subject to the requirements of 40 CFR 64, Compliance Assurance Monitoring, if the following three criteria are met:

- (1) the potential to emit before controls equal to or greater than one hundred (100) tons per year of VOC;
- (2) is subject to an emission standard for VOC and has a control device that is necessary to meet that limit
- (3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

The primer booth and base booth each has uncontrolled potential to emit of VOC greater than 100 tons per year at this source and has control device to limit the VOC emissions. Therefore the primer booth and the base booth are subject to the requirements of 40 CFR 64, Compliance Assurance Monitoring.

The primer booth and base booth have applicable monitoring conditions as specified below:

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 stack (Stack No. 10) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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 a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-2 (PSD Minor Limit)**

Pursuant to OP T009-7508-00018, issued on January 19, 1999, the use of VOC, including coatings, dilution solvents, and cleaning solvents shall be less than 250 per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is required to limit the potential to emit VOC to less than 250 tons per twelve (12) consecutive month period and is a condition of operation of this facility.

#### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year) of VOC and is located in Blackford County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### **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 this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) 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 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

This source is not subject to this rule. This rule applies to major sources of hazardous air pollutants (HAP) that were constructed or reconstructed after July 27, 1997. All the facilities at this source were constructed before July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

### **State Rule Applicability - Individual Facilities**

#### **326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)**

The 0.84 MMBtu/hr natural gas fired boiler (insignificant activity) is subject to 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions shall be limited to 0.1 pounds per million Btu heat input.

This limitation is based on the following equation:

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Particulate matter emissions from the boiler are based on an emission factor of 11.9 lbs/MMCF of gas burned. Based on 1 MMCF of gas combusted being equivalent to 1000 MMBtu of heat input, the potential emissions from the 0.84 MMBtu/hr boiler are expected to be 0.012 lbs/MMBtu. Therefore, the boiler has the potential to comply with the rule when combusting natural gas. This limit will not be reflected in the permit because it is assumed that natural gas combustion will always comply with this rule.

#### 40 CFR 52 Subpart P (Indiana SIP)

Pursuant to Part 70 No. T009-7508-00018, issued on January 12, 1999, and 40 CFR 52 Subpart R, the particulate matter (PM) from the six (6) coating booths of the plastic parts painting system and the one (1) manual sample coating booth shall be limited by the following:

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

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission}$$

Pt =  $\frac{1.09}{Q^{0.26}}$  in pounds per hour and P = process weight  
rate in tons per hour

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

Pursuant to Part 70 No. T009-7508-00018 issued on January 12, 1999, and 326 IAC 6-3-2(d), particulate from the one (1) manual sample coating booth shall be controlled by a dry particulate filter, and particulate from the six (6) coating booths of the plastic parts painting system shall be controlled by dry filters, and the Permittee shall operate each control device in accordance with manufacturer's specifications.

#### 326 IAC 8-1-6 (General Provisions Relating to VOC Rules)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compounds (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8 to reduce VOC emissions using Best Available Control Technology (BACT). Key Plastics, L.L.C. submitted a revised BACT analysis on November 10, 2003. This revised BACT analysis is a revision of the original BACT analysis submitted on November 7, 1996.

The first step in evaluating potential applicable control technologies involved a review of alternative control technologies available in the plastic part surface coating industry. The BACT analysis submitted by Key Plastics, L.L.C. has been performed in accordance with the USEPA, Office of Air Quality Planning Standards, Draft "Top Down: BACT Guidance". This analysis involved the use of the following:

- (a) Comprehensive review of USEPA's RACT /BACT /LAER clearinghouse (RBLIC);
- (b) Permits from other regulatory agencies;
- (c) Permits engineers;
- (d) Vendors/suppliers;
- (e) Inspection & performance reports; and OAQPS control cost manual and trade journals.

The revised BACT analysis submitted by Key Plastics, L.L.C. has been evaluated by OAQ. The OAQ agrees with the chosen controls and/or limits. A summary of the revised BACT

analysis is as follows.

- (a) List of technologies considered for implementation for VOC control and a brief description of the technology:
- (1) **Waterborne Paints**: These paints are formulated as a water based emulsion and contain a small amount of wetting solvent, or cosolvent (typically less than 10% - 25%). Water based paints can be applied conventionally or electrostatically, however electrostatic application requires special technology to compensate for the paints high conductivity.
  - (2) **100% Solids or Other High Solids Paints**: These paints are formulated utilizing materials that do not meet the criteria for VOC (0% VOC, although these is typically a small percentage of VOCs emitted during the paint curing process). They are typically thick, viscous materials and can only be applied using airless spray technology.
  - (3) **Powder Coating**: Powder coating applies a film of dry powder to the part which becomes fluid in the curing oven. This technology is being used in the major appliance industry, as well as some automotive applications. These are typically no VOCs emitted from the coating process, however a small amount of VOC is emitted during curing.
  - (4) **Conductive Plastics**: Adding carbon fibers to the plastic resin formulation prior to molding can allow a plastic part to be conductive. Conductive plastics provide better transfer efficiency in electrostatic applications, however the coating adhesion is questionable.
  - (5) **Supercritical CO<sub>2</sub> Painting**: This is a newly developed technology through Union Carbide and Purdue University. Carbon dioxide gas raised above its critical pressure and critical temperature is utilized as the carrier solvent. This greatly reduces the solvent composition in the paint and can also be used as a line flush.
  - (6) **HVLP Paint Application**: High volume, low pressure (HVLP) spray guns have been in existence for many years. They utilize low pressure atomization which enhances transfer efficiency by allowing the paint particles to exit the gun with a lower forward velocity. The only drawbacks to HVLP technology are the inability to spray high viscosity materials and difficulties in matching metallic coatings.
  - (7) **Electrostatic Rotary Bell Paint Application**: These application devices use a spinning bell to atomize the paint and a small amount of air to shape the paint particles. The paint exits the bell with little or no forward velocity and the dominant force driving the paint to the part is the electrostatic field being applied.
  - (8) **Conventional Paint Application**: These application devices use conventional high pressure air atomization and can be used to apply a wide variety of coatings. The primary draw back is the high forward velocity of the paint particle as it leaves the gun which causes low transfer efficiencies.
  - (9) **Airless Paint Application**: Airless paint application devices pressurize the paint and force it through a small orifice for atomization. These devices can apply a high volume of paint very quickly, however the finish obtained from these devices is rough.

- (10) **Electrostatic Paint Application:** Electrostatic application equipment can be added to any the application devices discussed above: conventional, HVLP, airless, or supercritical CO<sub>2</sub>. These devices form a charged field between the gun and the part being painted which enhances transfer efficiency by pushing the paint particles toward the surface to be painted.
- (11) **Thermal Oxidization:** Thermal oxidizers destroy VOCs by raising the exhaust gas temperature above the ignition temperature. These incinerators typically operate at a temperature of 1400E F and 1600E F and have a destruction and removal efficiencies around 75%. These devices are also know as afterburners or flares.
- (12) **Recuperative Thermal Oxidation:** Process air containing VOCs is preheated by passing through heat exchanger tubes. This preheated process is oxidized in a ceramic lined combustion chamber. The hot exhaust air is then cycled back around the heat exchanger tubes, transferring heat to the incoming process air. The destruction and removal efficiencies of a recuperative thermal oxidizer is typically 95% to 99%. The thermal efficiency of these type of oxidizers can be as high as 80%.
- (13) **Regenerative Thermal Oxidization:** A regenerative thermal oxidizer cycles process air containing VOCs through a canister containing a hot ceramic bed heat exchanger. As the process air is heated, the canister cools. The VOCs are oxidized in a combustion chamber with a residence time of 0.1 second. By preheated the process air, less energy is required to oxidize the VOCs. This system alternatively cycles the VOC laden process air to another preheated canister. Hot exhaust air is then used to reheat the cool canister. Heat is recovered from the oxidation of VOCs with a thermal efficiency of 95%. The destruction and removal efficiency of these devices is typically 95% to 99%.
- (14) **Catalytic Oxidation:** Process air contamination with Vocs enters the catalytic oxidizer and passes through a preheat burner. The temperature of the air is raised anywhere from 600EF to 900EF. The air is then passed througha catalyst bed which promotes oxidization at a lower temperature. The hot combustion air can then be passed through a heat recovery device, or exhausted to the atmosphere.
- (15) **Rotary Adsorption / Thermal Oxidization:** Rotary adsorption systems remove VOCs from process exhaust air using rotary carbon or zerolite adsorption wheels. The clean process air is the exhausted to the atmosphere. After the adsorption media has removed the VOCs, a separate low volume stream of heated air is passed through a segmented portion of the media, desorbing the VOCs, and transferring them to final treatment. Final treatment is normally a high efficiency thermal oxidizer. Rotary adsorption and thermal oxidization typically destroy 75% to 80% of the VOCs.

- (16) **Fixed Bed Adsorption/Thermal Oxidization:** VOC contaminated air flows downward through a bed of carbon contained in an adsorber vessel. The carbon removes the VOCs by adsorption and the clean air is discharged to the atmosphere. When the carbon begins to near its maximum VOC holding capacity, the flow is directed to a second adsorber vessel, and the first adsorber is placed in a regeneration cycle. Regeneration is accomplished by heating the carbon with a hot, inert gas stream which flows upward through the bed. The resultant regeneration gas is sent to a thermal oxidizer for final treatment. These devices typically destroy 75% to 80% of VOCs.

Combinations of the various technologies can also be utilized to obtain lower VOC emissions rates, however special considerations must be taken to prevent problems.

- (b) Technical feasibility analysis shows that many of the technologies available to reduce VOC emissions are not suitable for automotive parts painting operations. The following could be potentially implemented but have been found to be infeasible processes for Key Plastics L.L.C. to reduce VOC emissions:

(1) **Waterborne paints**

Waterborne paints are currently being used in automotive paint operations. The plants that have implemented this technology have been designed specifically for this purpose. Waterbased paints are also in use at automotive parts suppliers that paint a specific type of part with a limited amount of colors. There are drawbacks to implement this technology highlighted as follows:

- (A) Key Plastics, L.L.C supplies painted parts to G.M., Ford, Chrysler, and Honda. Each of the companies has different specifications for their painted parts and each requires a specific paint formulation. There may be certain colors for which waterbased paint substitutes have been developed, however other colors would still use existing solvent based coatings.
- (B) To implement waterbased paints, Key Plastics, L.L.C. would have to purchase paint guns designed to apply waterbased paints, voltage blocking equipment, and new fluid lines. The waterbased system would have to be set-up in parallel to the existing solvent based system so, depending upon the color and the part being painted, the appropriate system could be used.
- (C) To switch operations entirely to waterbased paints, new equipment would have to be purchased (see (B) above), and our existing solvent based paint formulations would have to be developed using waterborne technology. This would require extensive development, as Key Plastics L.L.C. presently paints over 250 different colors. Furthermore, switching to waterbased coatings would require process approval with all our customers. This process typically requires one to two years depending upon the auto manufacturer. During the interim period Key would have to outsource its current solvent based jobs, or have parallel water and solvent based paint equipment.

Overall, this process is infeasible.

(2) **100% solids or other high solid paints**

These paints are not currently in use in automotive painting applications. One hundred percent solid paints require application with an airless spraying system, which produces a rough finish and is not suitable for Class A automotive surfaces similar to those that Key Plastics, L.L.C. paints.

Overall, this process is infeasible.

(3) **Powder coating**

Powder Coating has been used in small and large appliance industries and some automotive operations. The automotive operations that use powder coatings have been specifically tailored for this technology. Powder coatings have not been developed for metallic basecoats. They are primarily utilized in clear coat operations. The drawbacks to implementing this technology are listed below:

(A) Powder coatings could only be used on non-metallic basecoats and clearcoats. Metallic paints would have to be run using existing solvent base technology. This would require separate paint systems to apply both solvent and powder based technology.

(B) To switch operations entirely to powder coatings, new equipment would have to be purchased (see (A) above), and our existing solvent based paint formulations would have to be developed using powder technology (non-metallic paints only). This would require extensive development, as Key Plastics, L.L.C. presently paints over 250 different colors. Furthermore, switching to powder coatings would require process approval with all of our customers. This process typically requires one to two years depending upon the auto manufacturer. During the interim period Key would have to outsource its current solvent based jobs, or have parallel powder and solvent based paint equipment.

Overall, this process is infeasible.

(4) **Conductive Plastics**

Additive that allow non-conductive plastics to be conductive are developed based on carbon fiber technology. Conductive additives can be added to any substrate and can enhance the transfer efficiency in any electrostatic paint application process. Parts formulated with carbon fibril technology have been tried at Key Plastics, L.L.C. without any success. The adhesion of the paint to the plastic part has been below the standards required by the automotive plants that we supply.

Additionally, conductive additives only enhance the painting process at the prime coating application. After a part has been primed, it is conductive regardless of the composition of the substrate. Economic analysis has demonstrated that prime coating is more cost effective than adding carbon fibrils to the substrate.

Conductive plastic additives and the paint application process are still under evaluation with Key Plastics, L.L.C. and could be implemented in future business. Implementation is dependent upon the success of future trials and pricing.

Overall, this process is feasible. However further experimentation and

approval will be required to implement this change.

(5) **Supercritical Carbon Dioxide Painting**

This is a new technology developed by Union Carbide and Purdue University. It is currently in use at the Ford plant in Milan, Michigan to paint Lincoln Mark VIII grille assemblies. This technology can be used to apply prime coatings, non-metallic base coats, and clear coats. The spray pattern produced by this application is similar to that of a rotary bell, except that the forward velocity of the paint particles is slightly higher. The drawbacks to this technology are listed below:

- (C) Switching to supercritical carbon dioxide paint application would require purchasing new application equipment and a carbon dioxide supply and metering system. In addition, there would be a significant process development time to obtain the required finish quality for the painted parts.
- (D) Prior to utilizing the supercritical carbon dioxide coating process, Key Plastics, L.L.C. would have to obtain process approval with all of our customers. This process typically requires one to two years depending on auto manufacturer.

Overall, this process is infeasible.

(6) **HVLP paint application**

HVLP technology is in use in automotive operations across the country. The primary drawback to HVLP application is the inability to spray coatings with high viscosities (high solids). HVLP technology also changes the metallic orientation and distribution on the painted parts causing appearance variations. The drawbacks to HVLP technology are as follows:

- (A) Switching to HVLP application devices would require Key Plastics, L.L.C. to add more thinning solvent to our paints to lower the viscosity and make them sprayable. To compensate for thinner paint, higher fluid application settings and longer trigger-on times would be required from the application devices. The transfer efficiency would not improve dramatically over the existing conventional, air atomizing electrostatic applicators, due to the air flow configuration in the paint booth and the density of the parts on the carriers. Additionally, the minimal increase in transfer efficiency from the HVLP guns would be offset by the additional solvent required to thin the paint.
- (B) All of the existing paint programs would have to be tailored to the HVLP technology. The paint line scrap rate would be extremely high during process fine tuning, which would jeopardize Key Plastics, L.L.C.'s ability to supply parts to customers.

Overall, this process is infeasible.

(7) **Electrostatic Rotary Bell Paint Application**

Rotary bells are in use in many automotive plants and many automotive parts suppliers. They work well with different part configurations and can spray all types of paints with exception of metallic basecoats and extremely viscous materials (i.e. very high solids paints, 100% solids paints, etc.). Typically,

rotary bells are used to apply the first basecoat, and a conventional spray gun is used to apply the second basecoat. This allows proper orientation of the metallic particles on the painted surface.

- (A) The primary drawback to utilizing rotary bells at Key Plastics, L.L.C. is the airflow pattern in the paint booths. The forward velocity of the paint particle as it leaves the bell is very small. The primary driving force of the paint to the part is the electrostatic field applied. Strong air currents can divert the paint from the electrostatic field and drastically reduce the transfer efficiency. Altering the airflow in the booths could be accomplished by increasing the volume of air in the booth. However, this would require re-routing all of the fluid supply lines, increasing the size of the air houses, and potentially increasing the size of the control device.
- (B) Changing all of the existing paint processes to rotary bells would require extensive testing and process fine tuning. The paint line scrap rate would be extremely high during fine tuning, which would jeopardize Key Plastics, L.L.C.'s ability to supply parts to customers.
- (C) Trials with rotary bells have been conducted by Ransburg and Key Plastics, L.L.C. employees at Ransburg's facility in Dayton, Ohio. These trials were conducted in a booth with similar air flow characteristics using paint from existing business. The results (painted parts) from the test did not meet Key Plastics, L.L.C.'s or customers quality standards for film build and part appearance.

This technology is infeasible with our existing paint system due to the size of the paint booths and the airflow pattern.

- (8) **Airless paint application.**  
The finish quality from airless paint application is not suitable for Class A automotive surfaces. This technology is not in use at any automotive or automotive parts manufacturer that produces Class A surfaces.

Overall, this process is infeasible.

- (c) VOC reduction technologies that are feasible and are considered for BACT analysis:
  - (1) Single technologies considered are:
    - (A) Conventional Paint Application
    - (B) Electrostatic Application
    - (C) Recuperative Thermal Oxidization
    - (D) Regenerative Thermal Oxidization
    - (E) Catalytic Oxidization
    - (F) Rotary Adsorption / Thermal Oxidization
    - (G) Fixed Bed Adsorption / Thermal Oxidization
  - (2) Combinations of the technologies listed in (c)(1) above considered are:
    - (A) Conventional Application and Electrostatic Application
    - (B) Conventional Application and Thermal Oxidization
    - (C) Conventional Application and Recuperative Thermal Oxidization
    - (D) Conventional Application and Regenerative Thermal Oxidization
    - (E) Conventional Application and Catalytic Oxidization
    - (F) Conventional Application and Rotary Adsorption / Thermal Oxidization.
    - (G) Conventional Application and Fixed Bed Adsorption Thermal

- Oxidization.
- (H) Conventional and Electrostatic Application and Thermal Oxidization
  - (I) Conventional and Electrostatic Application and Recuperative Thermal Oxidization
  - (J) Conventional and Electrostatic Application and Regenerative Thermal Oxidization
  - (K) Conventional and Electrostatic Application and Catalytic Oxidization
  - (L) Conventional and Electrostatic Application and Rotary Adsorption/ Thermal Oxidization
  - (M) Conventional and Electrostatic Application and Fixed Bed Adsorption / Thermal Oxidization.

(d) **Ranking of Technically Feasible Technology Alternatives.**

Each of the technologies that are feasible add some degree of emission reduction. The following will be assumed to rank the options from highest level of control to the lowest. These assumptions are specific to Key Plastics, L.L.C.'s operations, however only one spray booth will be considered in the calculations. The addition of other five booths will not affect the outcome of this BACT analysis, it will only raise the hourly emission rate and all associated calculations.

- (1) Paint Composition:
  - (A) 50% solids and 50% VOC by weight (as applied)
  - (B) 8.98 pounds per gallon (as applied)
  
- (2) Process Specifications:
  - (A) Hybrid cross / down draft booth configuration
  - (B) 7200 parts painted per hour
  - (C) 0.002321 gallons of paint per part
  - (D) 85% booth capture efficiency
  - (E) Prime coated, small, non-conductive plastics parts that are arranged on a metallic rack (average of 100 pieces per rack).
  
- (3) Equipment Specifications:
  - (A) Conventional gun transfer efficiency = 15% (based on process configuration)
  - (B) Conventional electrostatic gun transfer efficiency - 25% (based on process configuration)
  - (C) Thermal oxidizer control efficiency = 75%
  - (D) Recuperative thermal oxidizer control efficiency = 95%
  - (E) Regenerative thermal oxidizer control efficiency = 95%
  - (F) Catalytic oxidizer control efficiency = 95%
  - (G) Rotary Adsorption / thermal oxidization = 75%
  - (H) Fixed Bed Adsorption / thermal oxidization = 75%

The top five resulting emissions rankings, including combustion gases (from lowest to the highest) are as follows:

- (1) Conventional, Electrostatic Spray with Catalytic Oxidation (ECS, CO)
- (2) Conventional, Electrostatic Spray with Regenerative Thermal Oxidation (ECS, RTO)
- (3) Conventional, Electrostatic Spray with Recuperative Thermal Oxidation (ECS, RcTO)
- (4) Conventional Spray with Catalytic Oxidation (CS, CO)
- (5) Conventional Spray with Regenerative Thermal Oxidation (CS, RTO)

The following table lists emission from the processes described above:

Option	Effective Control (%)	Emissions (lbs/hr)	% Reduction	Adverse Impact	% Energy Recovery
ECS, CO	95 - 99	15.0	88.0	No	70
ECS, RTO	95 - 99	15.1	87.9	No	95
ECS, RcTO	95 - 99	15.2	87.8	No	90
CS, CO	95 - 99	24.6	80.3	No	70
CS, RTO	95 - 99	24.8	80.2	No	95

Note: Percent emissions reduction is calculated using conventional spray equipment and no control technology as a baseline.

(e) **BACT Selection**

The following table summarizes each control option on the basis of capital cost, annual cost, emissions, cost effectiveness of emission control (dollars per il/hr of VOCs), and incremental cost (dollars per incremental lb/hr of VOCs removed). The data contained in the table was obtained from COST-AIR, Control Cost Spreadsheets, prepared by William M. Vatavuk (see Attachment C for the spreadsheets). Since, Key Plastics, L.L.C. has a regenerative thermal oxidizer in use, the capital recovery costs have been updated to reflect the actual depreciation left on the unit. Cost changes due to eliminating the electrostatic application system have not been factored into this analysis.

Option	Capital Cost (\$)	Annual Cost (\$)	Emissions (lbs/hr)	Cost Effectiveness (\$)	Incremental Cost (\$)
ECS, CO	407,255	165,249	15.0	1,500	NA
ECS, RTO	954,348	127,694	15.1	1,161	375,550
ECS, RcTO	402,898	275,455	15.2	2,506	1,477,610
CS, CO	407,255	165,249	24.6	1,644	11,724
CS, RTO	954,348	127,649	24.8	1,273	188,000

Table below lists the estimated natural gas consumption in cubic feet per hour and the total electrical requirements in dollars per year of operation. These estimates are based on the actual process conditions, gas usage records, and information contained in COST-AIR, Control Cost Spreadsheets, prepared by William M. Vatavuk.

Option	Natural Gas Consumption (lbs/hr)	Emissions from Combustion (lbs/hr)	Electrical Requirements (\$/yr)
ECS, CO	4270	0.6	18,896.64
ECS, RTO	5200	0.7	1,722.27
ECS, RcTO	5500	0.7	17,818.37
CS, CO	4270	0.6	18,896.64
CS, RTO	5200	0.7	1,722.27

(f) The advantages and disadvantages of each control device have been summarized in the table below:

Option	Description of Environmental Impact	
	Advantages	Disadvantages
ECS, CO	<ul style="list-style-type: none"> <li>• Low capital requirement for purchase</li> <li>• Average natural gas consumption</li> <li>• Lowest emission rate</li> <li>• Lower operating temperatures</li> <li>• Reduced fire hazard</li> <li>• Less/No insulation</li> <li>• Recovers 70% of thermal energy</li> </ul>	<ul style="list-style-type: none"> <li>• Catalyst poisoning is possible</li> <li>• Particulate clogging is a problem</li> <li>• Difficulty disposing spent catalyst (Potential hazardous waste)</li> <li>• Average to low process up-time w/high maintenance requirements</li> </ul>
ECS, RTO	<ul style="list-style-type: none"> <li>• Average natural gas consumption</li> <li>• Low electrical requirements</li> <li>• No catalyst to poison</li> <li>• Recovers 95% of the thermal energy</li> <li>• High process up-time w/little maintenance requirements</li> <li>• handles particulate matter better than catalytic or recuperative thermal oxidizers.</li> </ul>	<ul style="list-style-type: none"> <li>• High capital requirement for purchase</li> <li>• High operating temperature</li> <li>• Ceramic bed must be monitored for degradation</li> </ul>
ECS, RcTO	<ul style="list-style-type: none"> <li>• Low capital requirement for purchase</li> <li>• Average electrical requirement</li> <li>• No catalyst to poison</li> <li>• Recovers up to 80% of the thermal energy</li> </ul>	<ul style="list-style-type: none"> <li>• High operating temperature</li> <li>• High natural gas consumption</li> <li>• High maintenance requirements</li> </ul>
CS, CO	<ul style="list-style-type: none"> <li>• Low capital requirement for purchase</li> <li>• Average natural gas consumption</li> <li>• Lowest emission rate</li> <li>• Lower operating temperatures</li> <li>• Reduced fire hazard</li> <li>• Less/No insulation</li> <li>• Recovers 70% of thermal energy</li> </ul>	<ul style="list-style-type: none"> <li>• Electrostatic application reduces the amount of paint that must be sprayed to cover the part.</li> <li>• Non-electrostatic application increases the amount of paint sprayed</li> <li>• increases the VOC emissions</li> <li>• increases the particulate emissions</li> </ul>

CS, RTO	<ul style="list-style-type: none"> <li>• Average natural gas consumption</li> <li>• Low electrical requirements</li> <li>• No catalyst to poison</li> <li>• Recovers 95% of the thermal energy</li> <li>• High process up-time w/little maintenance requirements</li> <li>• handles particulate matter better than catalytic or recuperative thermal oxidizers.</li> </ul>	<ul style="list-style-type: none"> <li>• Electrostatic application reduces the amount of paint that must be sprayed to cover the part.</li> <li>• Non-electrostatic application increases the amount of paint sprayed</li> <li>• increases the VOC emissions</li> <li>• increases the particulate emissions</li> </ul>
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Although the booths at Key Plastics, L.L.C. are equipped with a water wash/impingement scrubbing system, particulates still become entrained in the air flow leaving the paint booths. These particulates consist of paint and detackified paint droplets that deposit on the interior walls of the ductwork, in the fabric filters in the recirculating air house, and in the control device. These particulates could potentially clog or poison a catalytic oxidizer, while a regenerative thermal oxidizer can destroy the material without plugging.

(g) **Presentation of BACT**

A comparison of the top two options for BACT is presented in the following table:

Description	Electrostatic Conventional Spray and Catalytic Oxidation (ECS, CO)	Electrostatic Conventional Spray and Regenerative Thermal Oxidation (ECS, RTO)	Comments
Emissions (lbs/hr)	15.0	15.1	Marginal difference
Capital Cost (\$)	407,255	954,348	ECS, CO better
Annual Cost (\$)	165,249	127,694	ECS, RTO better
Effectivity (\$/lb)	1,500	1,161	ECS, RTO better
Natural Gas (cuft/hr)	4270	5200	ECS, CO better
Electricity (\$/yr)	18,896.64	1,722.27	ECS, RTO better
Environmental Impacts	Catalyst disposal	None	ECS, RTO better
Level of Maintenance	High, less reliable	Low, very reliable	ECS, RTO better
Particulate Handling	Poor	Average	ECS, RTO better

Based on the data presented in the table above, the best available control technology is electrostatic conventional spray guns with a regenerative thermal oxidizer. The annual cost and effectivity for the catalytic oxidizer are unfavorable when compared to the regenerative thermal oxidizer. Other concerns such as environmental impact, maintenance requirements, and the ability to handle particulate material, also rule out the catalytic oxidizer.

The Best Available Control Technology (BACT) for Key Plastics, L.L.C. is Conventional Electrostatic Spray Guns with a Regenerative Thermal Oxidizer.

326 IAC 8-1-6 (General Provisions Relating to VOC Rules) applies to this source as follows:

- (a) The manual sample spray coating booth, identified as EU22, constructed in 1993, does not have a potential to emit of VOC at 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply to this facility and records will be kept of VOC usage to verify this status. Pursuant to Part 70 No. T009-7508-00018, issued on January 12, 1999, any change or modification which may increase potential VOC usage to twenty-five (25) tons per year or more at EU22 shall require prior approval from the Office of Air Quality (OAQ) before such change can occur.
- (b) Pursuant to CP009-5583-00018, issued on March 20, 1997, the six (6) automated spray coating booths, the prime bake oven, and the final bake oven of the plastic parts painting system are subject to this rule because this process, as one facility, is newly constructed after January 1, 1980 (i.e., 1993), having the potential to emit VOC at 25 tons per year, and it is not regulated by any other Article 8 rule.

Pursuant to CP009-5583-00018, issued on March 20, 1997, and 326 IAC 8-1-6 (General Reduction Requirements), the source shall comply as follows:

The six (6) automated spray coating facilities are subject to Best Achievable Control Technology (BACT) requirements pursuant to this rule. The Best Available Control Technology (BACT) for Key Plastics, Inc. was determined to be the use of electrostatic spray guns controlled by a natural gas fired regenerative thermal oxidizer with a maximum heat input capacity of 5.2 MMBtu/hr. Key Plastics, Inc., also utilizes air recirculation to minimize the size of the regenerative thermal oxidizer (RTO) needed. The estimated overall efficiency of the key Plastics control system is estimated to be 80.75%. This BACT determination was made under CP009-5583, issued on March 20, 1997. Operation of the RTO and air recirculation system makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

- (c) The regenerative thermal oxidizer and the fans moving the exhaust fumes from the six (6) automated coating booths of the plastic parts painting system, the prime bake oven and the final bake oven to the thermal oxidizer shall be in operation at all times that one of the six (6) automated coating booths, the prime bake oven or the final bake oven is operated, and that the water curtain and dry filters that control particulate matter emissions shall be operating and in place at all times that the system is in operation.
- (d) The fans shall operate within a fan amperage and the regenerative thermal oxidizer shall operate above a minimum operating temperature, as determined by the most recent test, that is demonstrated to achieve 80.75% overall control efficiency of the volatile organic compounds (VOC) emitted from the parts being coated and baked.
- (e) The regenerative thermal oxidizer and air recirculation system shall continue to be operated after the painting operations cease for at least the minimum period of time, as determined by the most recent test, demonstrated to purge the recirculation air system's residual VOC content through the thermal oxidizer and reduce the VOC concentration in the recirculated air to ambient levels.
- (f) The input of VOC to the plastic parts painting system and the usage of cleanup solvent for the plastic parts painting system shall be limited to 1,164 tons used per twelve (12) consecutive month period. This limitation will prevent the VOC emissions from the plastic parts painting system being greater than 224.4 tons per year. This limitation is based upon the use of a regenerative thermal oxidizer with an overall control efficiency of 80.75%.

## Testing Requirements

- (a) Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct a performance test to verify overall VOC control efficiency as per condition D.2.1 for 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.
- (b) Pursuant to 40 CFR 63, Subpart PPPP, if the Permittee elects to demonstrate compliance using 63.4510, 63.9(b) , 63.9(h), 63.4881(d), 63.4481(e)(2) performance testing must be conducted in accordance with 40 CFR 63, Subpart PPPP.

## Compliance Requirements

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

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

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

- (a) The manual spray booth has applicable compliance monitoring conditions as specified below:

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 stack (Stack No. 10) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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 a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

These monitoring conditions are necessary because the dry filters for the spray coating processes must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

(b) The automated paint line has applicable compliance monitoring conditions as specified below:

(1) 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 (Stack No.2, 3, 5, and 11) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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 a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

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

(2) 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 a three-hour ( 3-hr) average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the three-hour (3-hr) average temperature of the thermal oxidizer is below 1400 °F. A three-hour (3-hr) average temperature that is below 1400 °F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1, as approved by IDEM.

On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the three-hour (3-hr) average temperature of the thermal oxidizer is below the three-hour (3-hr) average temperature as observed during the compliant stack test. An hourly average temperature that is below the three-hour (3-hr) average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan

- Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1, as approved by IDEM.

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.

These monitoring conditions are necessary because the dry filters for the spray coating processes must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70), and because the regenerative thermal oxidizer and air recirculation system must operate properly to ensure compliance with 326 IAC 8-1-6 (BACT).

## Conclusion

The operation of this automobile plastic parts multi-stage paint coating source shall be subject to the conditions of the attached proposed **Part 70 Permit No. T009-17595-00018**.

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

**Company Name: Key Plastics L.L.C. - Hartford City Plant  
Address City IN Zip: 1615 W. McDonald St, Hartford City, IN 47348  
Permit Number: T009-17595-00018  
Pit ID: 009-00018  
Reviewer: FO/EVP  
Date: 09/11/2003**

Material/Facility	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	
Primer Booth	9.4	40.70%	0.0%	40.7%	0.0%	39.70%	0.002321	7200.000	3.83	3.83	63.93	1534.41	280.03	244.80	9.64	40%	
Base Booth	8.9	52.07%	0.0%	52.1%	0.0%	51.07%	0.001010	7200.000	4.66	4.66	33.85	812.44	148.27	81.89	9.12	40%	
Clear Booth	8.4	46.30%	0.0%	46.3%	0.0%	45.30%	0.000724	7200.000	3.89	3.89	20.27	486.57	88.80	61.79	8.59	40%	
Pearl Booth	8.5	50.02%	0.0%	50.0%	0.0%	49.80%	0.000724	360.000	4.25	4.25	1.11	26.59	4.85	2.91	8.53	40%	
Manual Booth	8.9	52.07%	0.0%	52.1%	0.0%	51.07%	0.001010	50.000	4.63	4.63	0.23	5.62	1.03	0.57	9.07	40%	
Purge Solvent	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	0.000740	7200.000	6.67	6.67	35.54	852.91	155.66	0.00	#DIV/0!	100%	
<b>State Potential Emissions</b>											<b>154.94</b>	<b>3718.52</b>	<b>678.63</b>	<b>391.96</b>			
<b>Controlled Potential Emissions</b>														<b>111.97</b>	<b>7.84</b>		

**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)  
Total = Worst Coating + Sum of all solvents used

**NOTES**

Controlled Potential Emission for VOC calculated using 83.5% control efficiency  
Controlled Potential Emission for particulate calculated using 98% control efficiency

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

**Company Name: Key Plastics L.L.C. - Hartford City Plant  
Address City IN Zip: 1615 W. McDonald St, Hartford City, IN 47348  
Permit Number: T009-17595-00018  
Pit ID: 009-00018  
Reviewer: FO/EVP  
Date: 09/11/2003**

Material/Facility	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	
Primer Booth	9.4	40.70%	0.0%	40.7%	0.0%	39.70%	0.002321	7200.000	3.83	3.83	63.93	1534.41	280.03	244.80	9.64	40%	
Base Booth	8.9	52.07%	0.0%	52.1%	0.0%	51.07%	0.001010	7200.000	4.66	4.66	33.85	812.44	148.27	81.89	9.12	40%	
Clear Booth	8.4	46.30%	0.0%	46.3%	0.0%	45.30%	0.000724	7200.000	3.89	3.89	20.27	486.57	88.80	61.79	8.59	40%	
Pearl Booth	8.5	50.02%	0.0%	50.0%	0.0%	49.80%	0.000724	360.000	4.25	4.25	1.11	26.59	4.85	2.91	8.53	40%	
Manual Booth	8.9	52.07%	0.0%	52.1%	0.0%	51.07%	0.001010	50.000	4.63	4.63	0.23	5.62	1.03	0.57	9.07	40%	
Purge Solvent	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	0.000740	7200.000	6.67	6.67	35.54	852.91	155.66	0.00	#DIV/0!	100%	
<b>State Potential Emissions</b>											<b>154.94</b>	<b>3718.52</b>	<b>678.63</b>	<b>391.96</b>			
<b>Controlled Potential Emissions</b>													<b>111.97</b>	<b>7.84</b>			

**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)  
Total = Worst Coating + Sum of all solvents used

**NOTES**

Controlled Potential Emission for VOC calculated using 83.5% control efficiency  
Controlled Potential Emission for particulate calculated using 98% control efficiency

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

**Company Name: Key Plastics L.L.C. - Hartford City Plant**  
**Address City IN Zip: 1615 W. McDonald St., Hartford City, IN 47348**  
**Permit Number: T009-17595-00018**  
**Plt ID: 009-00018**  
**Permit Reviewer: FO/EVP**  
**Date: 09/11/2003**

Material/Facility	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
Primer Booth	9.4	0.002321	7200.00	0.00%	5.00%	5.70%	5.50%	0.00	34.40	39.22	37.84
Base Booth	8.94	0.001010	7200.00	13.00%	3.50%	5.00%	1.25%	37.02	9.97	14.24	3.56
Clear Booth	8.4	0.000724	7200.00	30.00%	10.00%	1.25%	0.00%	57.54	19.18	2.40	0.00
Pearl Booth	8.94	0.000724	360.00	7.80%	0.00%	0.00%	0.00%	0.80	0.00	0.00	0.00
Manual Booth	8.5	0.001010	40.00	13.00%	3.50%	0.00%	5.00%	0.20	0.05	0.00	0.08
Purge Solvent	6.67	0.000740	7200.00	0.00%	10.00%	0.00%	0.00%	0.00	15.57	0.00	0.00

<b>Unrestricted Single Worst Case</b>	<b>57.54</b>
<b>Controlled Single Worst Case</b>	<b>9.49</b>
<b>Unrestricted Combined Total Emission</b>	<b>272.04</b>
<b>Controlled Combined Total Emission</b>	<b>44.89</b>

**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 &lt; 100)

Company Name: Key Plastics, LLC  
 Address City IN Zip: 1615 W. McDonald Street  
 Title V: 009-17595  
 Plt ID: 009-00018  
 Reviewer: FO/EVP  
 Date: 8/12/2003

Heat Input Capacity MMBtu/hr	
3.30	Air Make-up Unit
1.00	Burner
0.60	Dry-off Oven
1.20	Final Bake Oven
5.20	Thermal Oxidizer Burner
0.80	Prime Bake Oven
1.30	Radiant Tube Heaters
0.10	Space Heater
1.00	Stage 2 Burner
0.60	Stage 3 Burner
0.35	Trane HVAC
0.26	Make-up
<b>15.71</b>	<b>Total</b>

Potential Throughput MMCF/yr
137.6

## Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.5	0.0	6.9	0.4	5.8

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 3

## Methodology

All emission factors are based on normal firing

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

## HAPs Emissions

## HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.445E-04	8.257E-05	5.161E-03	1.239E-01	2.340E-04

## HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.440E-05	7.569E-05	9.633E-05	2.615E-05	1.445E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.