



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: December 7, 2009

RE: Cook Compression / 019-28568-00136

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FN-REGIS.dot 1/2/08



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## REGISTRATION OFFICE OF AIR QUALITY

**Cook Compression  
2540 Centennial Blvd  
Jeffersonville, Indiana 47130**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 019-28568-00136	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 7, 2009

## SECTION A

## SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

### A.1 General Information

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The Registrant owns and operates a stationary manufacturing of plastic rings and tin plating of metal rod rings.

Source Address:	2540 Centennial Blvd, Jeffersonville, Indiana 47130
Mailing Address:	2540 Centennial Blvd, Jeffersonville, Indiana 47130
General Source Phone Number:	502-515-6938
SIC Code:	3471
County Location:	Clark (Jeffersonville Township)
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Registration

### A.2 Emission Units and Pollution Control Equipment Summary

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

#### (a) Machining Operation:

(1) The one (1) plastic parts machining operation, identified as MS-01, approved for construction in 2009, consisting of cutting, sawing, drilling, and/or routing of plastic parts, to make plastic piston rings and rod rings, equipped with a cyclone to control particulates, with a process throughput of 21 lbs/hr. The machining operation consists of the following emission units:

- (1) Five (5) Lathes for cutting of plastic;
- (2) Five (5) Mills for cutting of plastic;
- (3) Three (3) saws for cutting of plastic;
- (4) Two (2) drills for cutting of plastic;
- (5) Six (6) sanders for cutting of plastic

(2) The one (1) plastic parts machining operation, identified as MS-02, approved for construction in 2009, consisting of cutting, sawing, drilling, and/or routing of plastic parts, to make plastic piston rings and rod rings, equipped with a cyclone to control particulates, with a process throughput of 21 lbs/hr. The machining operation consists of the following emission units:

- (a) Two (2) Lathes for cutting of plastic;
- (b) One (1) Mills for cutting of plastic;
- (c) Four (4) saws for cutting of plastic;
- (d) Three (3) drills for cutting of plastic;

- (e) Eleven (11) sanders for cutting of plastic
- (3) The one (1) cast iron wet machining operation where an aqueous cutting coolant continuously floods the machining interface, approved for construction in 2009, to make metal rod rings.
- (b) One (1) sodium stannate tin electroplating bath to electroplate metal rod rings, approved for construction in 2009, with a maximum rectifier capacity of 22.0 amperes, with no control, at a production rate of 750 metal rod rings per day and exhausting inside.
- (c) Natural Gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour each;
  - (1) One (1) natural gas-fired Rooftop furnace, identified as 6, installed in 2001, rated at 1.1 million British thermal units per hour, exhausting outside.
  - (2) Four (4) natural gas-fired AC furnace, identified as 10, 11, 12 and 15, installed in 2001, rated at 0.25 million British thermal units per hour each, exhausting outside.
  - (3) One (1) natural gas-fired AC furnace, identified as 18, installed in 2001, rated at 0.075 million British thermal units per hour, exhausting outside.
  - (4) Three (3) natural gas-fired AC furnace, identified as 1, 8, and 4, installed in 2001, rated at 0.125 million British thermal units per hour each, exhausting outside.
  - (5) Three (3) natural gas-fired AC furnace, identified as 19, 20, and 21, installed in 2001, rated at 0.25 million British thermal units per hour each, exhausting outside.

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-1.1-1]

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

### B.2 Effective Date of Registration [IC 13-15-5-3]

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Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

### B.3 Registration Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

### B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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- (a) All terms and conditions of permits established prior to Registration No. 019-28568-00136 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

### B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

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Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003

Indianapolis, IN 46204-2251

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

**B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]**

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Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

**B.7 Registrations [326 IAC 2-5.1-2(i)]**

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Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

**Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

**C.1 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 registration:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.2 Fugitive Dust Emissions [326 IAC 6-4]**

The Registrant 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).

## SECTION D.1

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

(a) Machining Operation:

(1) The one (1) plastic parts machining operation, identified as MS-01, approved for construction in 2009, consisting of cutting, sawing, drilling, and/or routing of plastic parts, to make plastic piston rings and rod rings, equipped with a cyclone to control particulates, with a process throughput of 21 lbs/hr. The machining operation consists of the following emission units:

- (1) Five (5) Lathes for cutting of plastic;
- (2) Five (5) Mills for cutting of plastic;
- (3) Three (3) saws for cutting of plastic;
- (4) Two (2) drills for cutting of plastic;
- (5) Six (6) sanders for cutting of plastic

(2) The one (1) plastic parts machining operation, identified as MS-02, approved for construction in 2009, consisting of cutting, sawing, drilling, and/or routing of plastic parts, to make plastic piston rings and rod rings, equipped with a cyclone to control particulates, with a process throughput of 21 lbs/hr. The machining operation consists of the following emission units:

- (a) Two (2) Lathes for cutting of plastic;
- (b) One (1) Mills for cutting of plastic;
- (c) Four (4) saws for cutting of plastic;
- (d) Three (3) drills for cutting of plastic;
- (e) Eleven (11) sanders for cutting of plastic

(3) The one (1) cast iron wet machining operation where an aqueous cutting coolant continuously floods the machining interface, approved for construction in 2009, to make metal rod rings.

(b) One (1) sodium stannate tin electroplating bath to electroplate metal rod rings, approved for construction in 2009, with a maximum rectifier capacity of 22.0 amperes, with no control, at a production rate of 750 metal rod rings per day and exhausting inside.

(c) Natural Gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour each;

- (1) One (1) natural gas-fired Rooftop furnace, identified as 6, installed in 2001, rated at 1.1 million British thermal units per hour, exhausting outside.
- (2) Four (4) natural gas-fired AC furnace, identified as 10, 11, 12 and 15, installed in 2001, rated at 0.25 million British thermal units per hour each, exhausting outside.

- (3) One (1) natural gas-fired AC furnace, identified as 18, installed in 2001, rated at 0.075 million British thermal units per hour, exhausting outside.
- (4) Three (3) natural gas-fired AC furnace, identified as 1, 8, and 4, installed in 2001, rated at 0.125 million British thermal units per hour each, exhausting outside.
- (5) Three (3) natural gas-fired AC furnace, identified as 19, 20, and 21, installed in 2001, rated at 0.25 million British thermal units per hour each, exhausting outside.

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

#### **Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]**

##### **D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions shall not exceed 0.551 pounds per hour, for a maximum process throughput of 100 pounds per hour.

#### **Compliance Determination Requirements**

##### **D.2.3 Particulate Control**

In order to comply with condition D.1.1, the cyclones for particulate control shall be in operation and control emissions from the machining at all times that the machining is in operation.

#### **Compliance Monitoring Requirements [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]**

##### **D.2.6 Cyclone Failure Detection**

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH**

**REGISTRATION  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	Cook Compression
<b>Address:</b>	2540 Centennial Blvd, IN
<b>City:</b>	Jeffersonville, Indiana 47130
<b>Phone Number:</b>	502-515-6938
<b>Registration No.:</b>	019-28568-00136

I hereby certify that Cook Compression is :

- still in operation.
- no longer in operation.
- in compliance with the requirements of Registration No. 019-28568-00136.
- not in compliance with the requirements of Registration No. 019-28568-00136.

I hereby certify that Cook Compression is :

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Phone Number:</b>
<b>Date:</b>

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

<b>Noncompliance:</b>

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

Technical Support Document (TSD) for a Registration

**Source Description and Location**

**Source Name:** Cook Compression  
**Source Location:** 2540 Centennial Blvd, Jeffersonville, IN 47130  
**County:** Clark  
**SIC Code:** 3471  
**Registration No.:** 019-28568-00136  
**Permit Reviewer:** Swarna Prabha

On October 13, 2009, the Office of Air Quality (OAQ) received an application from Cook Compression related to the construction and operation of a new plant.

**Existing Approvals**

There have been no previous approvals issued to this source.

**County Attainment Status**

The source is located in Clark County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Clark County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X\*. The 1-hour standard was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Clark County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Clark County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants  
Clark County has been classified as nonattainment in Indiana for PM<sub>2.5</sub>. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

### Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

### Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Cook Compression on October 13, 2009, related to the construction and manufacturing of plastic rings and tin plating of metal rod rings.

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

- (a) Machining Operation:
- (1) The one (1) plastic parts machining operation, identified as MS-01, approved for construction in 2009, consisting of cutting, sawing, drilling, and/or routing of plastic parts, to make plastic piston rings and rod rings, equipped with a cyclone to control particulates, with a process throughput of 21 lbs/hr. The machining operation consists of the following emission units:
    - (1) Five (5) Lathes for cutting of plastic;
    - (2) Five (5) Mills for cutting of plastic;
    - (3) Three (3) saws for cutting of plastic;
    - (4) Two (2) drills for cutting of plastic;
    - (5) Six (6) sanders for cutting of plastic
  - (2) The one (1) plastic parts machining operation, identified as MS-02, approved for construction in 2009, consisting of cutting, sawing, drilling, and/or routing of plastic parts, to make plastic piston rings and rod rings, equipped with a cyclone to control particulates, with a process throughput of 21 lbs/hr. The machining operation consists of the following emission units:
    - (a) Two (2) Lathes for cutting of plastic;
    - (b) One (1) Mills for cutting of plastic;
    - (c) Four (4) saws for cutting of plastic;
    - (d) Three (3) drills for cutting of plastic;
    - (e) Eleven (11) sanders for cutting of plastic
- NOTE: The maximum plastic throughput through both machines is 42 lbs/hr combined. The metal shavings from the cutting and grinding operations are sold.
- (3) The one (1) cast iron wet machining operation where an aqueous cutting coolant continuously floods the machining interface, approved for construction in 2009, to make metal rod rings.

NOTE: There are no emissions from this operation because of aqueous cutting coolant continuously floods the machining interface.

- (b) One (1) sodium stannate tin electroplating bath to electroplate metal rod rings, approved for construction in 2009, with a maximum rectifier capacity of 22.0 amperes, with no control, at a production rate of 750 metal rod rings per day and exhausting inside.

NOTE: There are two water rinse tanks, with capacity of 125 gallons and 50 gallons of water. There are no emissions from rinsing or tin plating operations.

- (c) Natural Gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour each;
- (1) One (1) natural gas-fired Rooftop furnace, identified as 6, installed in 2001, rated at 1.1 million British thermal units per hour, exhausting outside.
  - (2) Four (4) natural gas-fired AC furnace, identified as 10, 11, 12 and 15, installed in 2001, rated at 0.25 million British thermal units per hour each, exhausting outside.
  - (3) One (1) natural gas-fired AC furnace, identified as 18, installed in 2001, rated at 0.075 million British thermal units per hour, exhausting outside.
  - (4) Three (3) natural gas-fired AC furnace, identified as 1, 8, and 4, installed in 2001, rated at 0.125 million British thermal units per hour each, exhausting outside.
  - (5) Three (3) natural gas-fired AC furnace, identified as 19, 20, and 21, installed in 2001, rated at 0.25 million British thermal units per hour each, exhausting outside.

<b>Unpermitted Emission Units and Pollution Control Equipment</b>
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There are no unpermitted emission units.

<b>Enforcement Issues</b>
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There are no pending enforcement actions related to this source.

<b>Emission Calculations</b>
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See Appendix A of this TSD for detailed emission calculations.

**Permit Level Determination –Registration**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Machining MS-01 and MS-02	5.96	5.96	5.96	0	0	0	0	negl.	negl.
Natural gas combustion	0.03	0.11	0.11	0.01	1.44	0.08	1.21	negl.	negl.
<b>Total PTE of Entire Source</b>	<b>5.98</b>	<b>6.07</b>	<b>6.07</b>	<b>0.01</b>	<b>1.44</b>	<b>0.08</b>	<b>1.21</b>	<b>negl.</b>	<b>negl.</b>
Registrations Levels	5	5	5	10	10	5 or 10	25	25	10
Registration Levels	25	25	25	25	25	25	100	25	10
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". There are no emissions for PM2.5 in AP42, PM10 = PM2.5									

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

**Federal Rule Applicability Determination**

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) The requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) 40 CFR Part 60, Subpart WWWW (National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production) are not included in the permit, because the source does not use reinforced and/or nonreinforced plastic composites or plastic molding compounds to manufacture using thermoset resins and/or gel coats that contain styrene to produce plastic composites.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 63.11514, Subpart XXXXXX (National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories )

are not included in the permit, because this source do not have the potential to emit metals, defined to be the compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), in the amounts greater than or equal to 0.1 percent by weight (of the metal), and materials that contain manganese in amounts greater than or equal to 1.0 percent by weight (of the metal).

- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Subpart W 40 CFR 63.11504-63.11513, are not included in the permit, since this source is not a minor or major source of HAPs. Plating or polishing processes that use materials with less than 0.1% by weight of Cd, Cr, Pb, or Ni, and less than 1.0% by weight of Mn, as reported on the Material Safety Data Sheet (MSDS) for that material are not subject to the Rule.
- (e) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

#### Compliance Assurance Monitoring (CAM)

- (f) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Registrations)  
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)  
The source is located in Jefferson Township. 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:
  - (1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (2) 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.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5, because the Cook Compression have potential fugitive particulate emissions less than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (g) 326 IAC 6.5 (Particulate Matter Limitations except Lake County)  
The source is not subject to the requirements of 326 IAC 6.5, because source is not specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10, potential particulate emissions are less than 100 tons per year, and actual particulate emissions are less than 10 tons per year.

State Rule Applicability - Machining Operations MS-01, MS-02

- (h) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(14), the particulate emissions from each plastic machining operation shall not exceed 0.551 pounds per hour each when operating at a process throughput of 100 pounds per hour or less each.

The cyclones shall be in operation at all times the plastic machining operation is in operation, in order to comply with this limit. The uncontrolled particulate emissions are 0.68 pounds per hour before control from each machining operation.

State Rule Applicability - Natural Gas Space heaters

- (i) 326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)  
The natural gas-fired space heaters are not subject to 326 IAC 6-2 as they are not sources of indirect heating.
- (j) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(14), each of the natural gas-fired rooftop furnaces, air make-up unit, and heaters are exempt from the requirements of 326 IAC 6-3, because they each have a potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.
- (k) 326 IAC 12 (New Source Performance Standards)  
See Federal Rule Applicability Section of this TSD.
- (l) 326 IAC 20 (Hazardous Air Pollutants)  
See Federal Rule Applicability Section of this TSD.

**Conclusion and Recommendation**

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on October 13, 2009, and additional information received on October 21, and November 3, 2009.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. 019-28568-00136. The staff recommends to the Commissioner that this Registration be approved.

**IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Swarna Prabha at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5376) or toll free at 1-800-451-6027 extension 45376.

- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
  
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emissions Calculations  
Emission Summary**

**Company Name: Cook Compression**  
**Address City IN Zip: 2540 Centennial Blvd,**  
**Registration No: 019-28568-00136**  
**Reviewer: Swarna Prabha**

Uncontrolled Potential Emissions (tons/year)				
Emissions Generating Activity				
Category	Pollutant	Plastic Machining MS-01, MS-02	Natural gas Combustion	TOTAL
	*PM10	5.96	0.11	6.07
	PM2.5	5.96	0.11	6.07
	SO2	0.0	0.01	0.01
	NOx	0.0	1.44	1.44
	VOC	0.0	0.08	0.08
	CO	0.0	1.21	1.21
Hazardous Air Pollutants	Chromium	0	2.0E-05	2.0E-05
	Manganese	0	5.5E-06	5.5E-06
	Nickel	0	3.0E-05	3.0E-05
	n-Hexane	0	0.03	2.6E-02
	Toluene	0	4.9E-05	4.9E-05
	Dichlorobenzene	0	1.7E-05	1.7E-05
	Formaldehyde	0	1.1E-03	1.1E-03
	Lead	0	7.2E-06	7.2E-06
	Cadmium	0	1.6E-05	1.6E-05
		<b>Totals</b>	<b>0.0</b>	<b>1.12E-03</b>

Controlled Potential Emissions (tons/year)				
Emissions Generating Activity				
Category	Pollutant	Plastic Machining MS-01, MS-02	Natural gas Combustion	TOTAL
	*PM10	5.96	0.11	6.07
	PM2.5	5.96	0.11	6.07
	SO2	0.0	0.01	0.01
	NOx	0.0	1.44	1.44
	VOC	0.0	0.08	0.08
	CO	0.0	1.21	1.21
Hazardous Air Pollutants	Chromium	0	2.0E-05	2.0E-05
	Manganese	0	5.5E-06	5.5E-06
	Nickel	0	3.0E-05	3.0E-05
	n-Hexane	0	0.03	2.6E-02
	Toluene	0	4.9E-05	4.9E-05
	Dichlorobenzene	0	1.7E-05	1.7E-05
	Formaldehyde	0	1.1E-03	1.1E-03
	Lead	0	7.2E-06	7.2E-06
	Cadmium	0	1.6E-05	1.6E-05
		<b>Totals</b>	<b>0.0</b>	<b>1.12E-03</b>

Total emissions based on rated capacity at 8,760 hours/year.

\* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  
 There are no emissions for PM2.5 in AP42, PM10 = PM2.5

**Appendix A: Plastic Grinding Process Particulate Emissions**

**Company Name:** Cook Compression  
**Address City IN Zip:** 2540 Centennial Blvd, Jeffersonville, In  
**Registration No:** R019-28568-00136  
**Reviewer:** Swarna Prabha

Particulate Emissions Before Control			
Emission Unit	PM/PM10 Emission Rate (lb/hr)	PM/PM10 emissions (tons/yr)	Control Efficiency
MS-01	0.680	2.978	99.00%
MS-02	0.680	2.978	99.00%
<b>Total =</b>		<b>5.957</b>	

Particulate Emissions After Control		
Emission Unit	PM/PM10 emission Rate (lb/hr)	PM/PM10 emissions (tons/yr)
MS-01	0.0068	0.030
MS-02	0.0068	0.030
<b>Total =</b>		<b>0.060</b>

There are no emission factors in AP42 for PM2.5, PM10 = PM2.5

**NOTE:**

Each cyclone @ 99 % control efficiency collects two barrels of dust and shavings. Each barrel weighs 600 pounds based on **2080 hrs of operation at a process throughput of 36 lbs/hr of raw material.**

Particulates collected by two barrels @ 99% collection efficiency = 600 lbs/ barrel \*2 barrels = 1200 lbs @ 2080 hours of operation.  
 Total Particulates exhausted outside = (1200 \*.01) lbs = 12.00 lbs @ 2080 hours of operation.  
 Total Particulates before control lbs/hr = [(1200 + 12.00) /2080] lbs/hr = (1212 /2080) lbs/hr

**To Pro-rate particulates @ 42 lbs/hr of process throughput:**

Total particulate generated before control (lbs/hr) = [(1212\* 42/36)/2080] lbs/hr = [1414/2080] lbs/ hr = 0.68 lbs/hr.

Methodology:

Uncontrolled Emissions:

Uncontrolled Emissions (tons/yr) = Particulate Emission Rate (lb/hr)\* 8760 hr/yr \* 1 ton/2,000 lbs  
 Uncontrolled emission rate based on particulate collected by the cyclones.

Controlled Emissions :

Controlled Emissions (lb/hr) = PM/PM10 emission Rate (lb/hr)\* (1-Control Efficiency)

Controlled Emissions (tons/yr) = PM/PM10 Emission Rate (tons/yr)\* (1-Control Efficiency)

**Appendix A: Emissions Calculations**  
**VOCs, Particulate, HAPs**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**

Page 3 of 3 TSD App A

**Company Name: Cook Compression**  
**Address City IN Zip: 2540 Centennial Blvd, Jeffersonville, IN**  
**Registration No: R019-28568-00136**  
**Reviewer: Swarna Prabha**

Pollutant	PM*	PM10*	SO2	NOx**	VOC	CO	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor (lb/MMCF)	1.9	7.6	0.6	100	5.5	84.0	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03

Emission Unit	Number of Units	Unit Heat Input Capacity MMBtu/hr	Combined Total Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission tons/yr															
					PM*	PM10*	SO2	NOx**	VOC	CO	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
(1) Roof Top furnace-6	1	1.100	1.100	9.64	0.009	0.04	0.003	0.5	0.026	0.4	1.0E-05	5.8E-06	3.6E-04	8.7E-03	1.6E-05	2.4E-06	5.3E-06	6.7E-06	1.8E-06	1.0E-05
(4) Furnace-10,11,12,15	4	0.250	1.000	8.76	0.008	0.03	0.003	0.4	0.024	0.4	9.2E-06	5.3E-06	3.3E-04	7.9E-03	1.5E-05	2.2E-06	4.8E-06	6.1E-06	1.7E-06	9.2E-06
(1) Furnace -18	1	0.070	0.070	0.61	0.001	0.00	0.000	0.0	0.002	0.0	6.4E-07	3.7E-07	2.3E-05	5.5E-04	1.0E-06	1.5E-07	3.4E-07	4.3E-07	1.2E-07	6.4E-07
(3) Furnace -1, 8,4	3	0.125	0.375	3.29	3.1E-03	1.2E-02	9.9E-04	1.6E-01	9.0E-03	1.4E-01	3.4E-06	2.0E-06	1.2E-04	3.0E-03	5.6E-06	8.2E-07	1.8E-06	2.3E-06	6.2E-07	3.4E-06
(3) Furnace -19,20,21	3	0.250	0.750	6.57	0.006	0.02	0.002	0.3	0.018	0.3	6.9E-06	3.9E-06	2.5E-04	5.9E-03	1.1E-05	1.6E-06	3.6E-06	4.6E-06	1.2E-06	6.9E-06
<b>Totals</b>	<b>12</b>	<b>1.795</b>	<b>3.3</b>		<b>0.03</b>	<b>0.11</b>	<b>0.01</b>	<b>1.44</b>	<b>0.08</b>	<b>1.21</b>	<b>3.0E-05</b>	<b>1.7E-05</b>	<b>1.1E-03</b>	<b>2.6E-02</b>	<b>4.9E-05</b>	<b>7.2E-06</b>	<b>1.6E-05</b>	<b>2.0E-05</b>	<b>5.5E-06</b>	<b>3.0E-05</b>

\*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 = 32

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

**Methodology**

Potential Throughput (MMCF) = Combined Total Heat Input Capacity (MMBtu/hr) \* 8,760 hrs/yr \* 1 MMCF/1,000 MMBtu

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

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)

**Abbreviations**

PM = Particulate Matter	NOx = Nitrous Oxides	DCB = Dichlorobenzene	Cr = Chromium
PM10 = Particulate Matter (<10 μVOC - Volatile Organic Compounds	Pb = Lead	Mn = Manganese	
SO2 = Sulfur Dioxide	CO = Carbon Monoxide	Cd = Cadmium	Ni = Nickel



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** John Saxon  
Cook Compression  
2540 Centennial blvd  
Jeffersonville, Indiana 47130

**DATE:** December 7, 2009

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Registration  
019-28568-00136

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Ernest McCurdy (Cook Compression)  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

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2		Ernest McCurdy GM Cook Compression 2540 Centennial Blvd Jeffersonville IN 47130-8535 (RO CAATS)									
3		Ms. Rhonda England 17213 Persimmon Run Rd Borden IN 47106-8604 (Affected Party)									
4		Ms. Betty Hislip Silver Lakes Trailer Pk 13131 Sunnybrook Dr Memphis IN 47143-9672 (Affected Party)									
5		Mrs. Sandy Banet 514 Haddox Rd Henryville IN 47126 (Affected Party)									
6		Jeffersonville City Council and Mayors Office 500 Quarter Master Jeffersonville IN 47130 (Local Official)									
7		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)									
8		Clark County Board of Commissioners 501 E. Court Avenue Jeffersonville IN 47130 (Local Official)									
9		Clark County Health Department 1320 Duncan Avenue Jeffersonville IN 47130-3723 (Health Department)									
10		Utica Town Council and Town Manager 217 North 4th Street Jeffersonville IN 47130 (Local Official)									
11		Amatrol, Inc. 2400 Centennial Blvd. Jeffersonville IN 47130 (Affected Party)									
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