



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: March 11, 2008
RE: Sky Cylinder Testing / 163-18902-00156
FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, 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
FNPER.dot12/03/07



Mitchell E. Daniels, Jr.
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100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
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**New Source Review and Minor Source Operating
Permit
OFFICE OF AIR QUALITY
AND EVANSVILLE EPA**

**Sky Cylinder Testing
2220 Lexington Rd.
Evansville, Indiana 47720**

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 MSOP under 326 IAC 2-6.1.

Operation Permit No.: M163-18902-00156	
Original signed by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 11, 2008 Expiration Date: March 11, 2013

TABLE OF CONTENTS

A. SOURCE SUMMARY	4
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
B. GENERAL CONDITIONS	5
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]	
B.3 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.4 Term of Conditions [326 IAC 2-1.1-9.5]	
B.5 Enforceability	
B.6 Severability	
B.7 Property Rights or Exclusive Privilege	
B.8 Duty to Provide Information	
B.9 Certification	
B.10 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.11 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.13 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.14 Permit Renewal [326 IAC 2-6.1-7]	
B.15 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.16 Source Modification Requirement	
B.17 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.18 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.19 Annual Fee Payment [326 IAC 2-1.1-7]	
B.20 Credible Evidence [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	11
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]	
C.1 Permit Revocation [326 IAC 2-1.1-9]	
C.2 Opacity [326 IAC 5-1]	
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5 Fugitive Dust Emissions [326 IAC 6-4]	
C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-6.1-5(a)(2)]	
C.7 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.8 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.9 Compliance Monitoring [326 IAC 2-1.1-11]	
C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.11 Instrument Specifications [326 IAC 2-1.1-11]	
Corrective Actions and Response Steps	
C.12 Response to Excursions or Exceedances	
C.13 Actions Related to Noncompliance Demonstrated by a Stack Test	
Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]	
C.14 Malfunctions Report [326 IAC 1-6-2]	

- C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2]
[IC 13-14-1-13]

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 17

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.1.1 Volatile Organic Compounds (VOC) Limit [326 IAC 8-2-9]
- D.1.2 Preventive Maintenance Plan

Compliance Determination Requirements

- D.1.3 Volatile Organic Compounds

Record Keeping and Reporting Requirements

- D.1.4 Record Keeping Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS..... 19

- D.2.1 Particulate [326 IAC 6-3-2(d)]
- D.2.2 Preventive Maintenance Plan

Compliance Determination Requirements

- D.2.3 Particulate Control

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

- D.2.4 Visible Emission Notations
- D.2.5 Broken or Failed Bag Detection
- D.2.6 Parametric Monitoring

Record Keeping and Reporting Requirements

- D.2.7 Record Keeping Requirement

Annual Notification 21
Malfunction Report 22

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary compressed gas cylinder testing and refurbishing facility.

Source Address:	2220 Lexington Rd., Evansville, Indiana 47720
Mailing Address:	P. O. Box 18116, Evansville, IN 47719
General Source Phone Number:	812-423-1759
SIC Code:	8113
County Location:	Vanderburgh
Source Location Status:	Non Attainment for PM2.5 Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) paint booth with automatic arm, constructed in 2002, using one (1) HVLP spray gun equipped with dry filters, capable of painting forty (40) industrial gas steel cylinders per hour, and venting outside the building.
- (b) One (1) robotic paint booth, constructed in 2002, using one (1) HVLP spray gun equipped with dry filter, capable of painting twenty five (25) industrial gas steel cylinders per hour, and venting outside the building.
- (c) One (1) touch up spray paint booth 3'x3', constructed in 2008, using one (1) HVLP spray gun equipped with dry filter, capable of painting 100 small medical cylinders a day maximum, and vents outside. The paint usage and emissions are included in the existing paint booths indicated in A.2(a) and A.2(b).
- (d) One (1) touch up spray paint booth 8'x8', constructed in 2008, using one (1) HVLP spray gun equipped with dry filter, capable of painting 3 cylinder cart frames per day maximum, and vents outside. The paint usage and emissions are included in the existing booths indicated in A.2(a) and A.2(b).
- (e) Three (3) abrasive blasting units, constructed in 2002, propelling steel shot, with a maximum capacity of 6,621 pounds of shot blast including steel cylinders per hour, equipped with a dust collector consisting of nine (9) cartridge filters, and venting outside the building.

SECTION B GENERAL CONDITIONS

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

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

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

-
- (a) This permit, M163-18902-00156, 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 of this permit.
- (b) If IDEM, OAQ and EEPA, upon receiving a timely and complete renewal 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, until the renewal permit has been issued or denied.

B.4 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.5 Enforceability

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

B.6 Severability

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.7 Property Rights or Exclusive Privilege

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

B.8 Duty to Provide Information

-
- (a) The Permittee shall furnish to IDEM, OAQ and EEPA, within a reasonable time, any information that IDEM, OAQ and EEPA 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon

request, the Permittee shall also furnish to IDEM, OAQ and EEPA 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.9 Certification

- (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 an "authorized individual" 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. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.10 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (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 permit.
- (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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

- (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 and EEPA on or before the date it is due

B.11 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ and EEPA upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and EEPA. IDEM, OAQ and EEPA 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 PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) 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.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M163-18902-00156 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 permit.

B.13 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.14 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and EEPA and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

- (b) A timely renewal application is one that is:
- (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
 - (2) 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 and EEPA on or before the date it is due.
- (c) 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 2-6.1 until IDEM, OAQ and EEPA 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 and EEPA any additional information identified as being needed to process the application.

B.15 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.16 Source Modification Requirement

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

B.17 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

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

B.18 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

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

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.19 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to either IDEM, OAQ or EEPa within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), or EEPa telephone number 812-435-6145, to determine the appropriate permit fee.

B.20 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Permit Revocation [326 IAC 2-1.1-9]

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

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

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 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.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.

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.

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).

C.6 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
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-6.1-5(a)(2)]

C.7 Performance Testing [326 IAC 3-6]

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ, and EEPA 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and EEPA not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and EEPA if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.10 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.11 Instrument Specifications [326 IAC 2-1.1-11]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (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 and EEPA, 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 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.14 Malfunctions Report [326 IAC 1-6-2]

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

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

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Evansville EPA
C.K. Newsome Community Center
100 E. Walnut St., Suite 100
Evansville, Indiana 47713

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and EEPA on or before the date it is due.
- (c) 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) paint booth with automatic arm, constructed in 2002, using one (1) HVLP spray gun equipped with dry filters, capable of painting forty (40) industrial gas steel cylinders per hour, and venting outside the building.
- (b) One (1) robotic paint booth, constructed in 2002, using one (1) HVLP spray gun equipped with dry filter, capable of painting twenty five (25) industrial gas steel cylinders per hour, and venting outside the building.
- (c) One (1) touch up spray paint booth 3'x3', constructed in 2008, using one (1) HVLP spray gun equipped with dry filter, capable of painting 100 small medical cylinders a day maximum, and vents outside. The paint usage and emissions are included in the existing paint booths indicated in A.2(a) and A.2(b).
- (d) One (1) touch up spray paint booth 8'x8', constructed in 2008, using one (1) HVLP spray gun equipped with dry filter, capable of painting 3 cylinder cart frames per day maximum, and vents outside. The paint usage and emissions are included in the existing booths indicated in A.2(a) and A.2(b).

(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 2-6.1-5(a)(1)]

D.1.1 Volatile Organic Compounds (VOC) Limit [326 IAC 8-2-9]

- (a) 326 IAC 8-2-9 (Volatile Organic Compounds, Miscellaneous Metal Coating Operations) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), when coating metal parts, the volatile organic compound (VOC) content of the coating delivered to the applicator at the surface coating operations shall be limited to 3.0 pounds per gallon of coating, excluding water, for coating application systems.
- (b) Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from application equipment of paint booths during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.1.3 Volatile Organic Compounds

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

Record Keeping and Reporting Requirements

D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be

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

- (1) The VOC content of each coating material and solvent used.
- (2) The amount of coating material and solvent less water 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.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (e) Three (3) abrasive blaster units, constructed in 2002, propelling steel shots, with a maximum capacity of 6,621 pounds of shot blasts including steel cylinders per hour, equipped with a dust collector consisting of nine (9) cartridge filters, and venting outside the building.

(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 2-6.1-5(a)(1)]

D.2.1 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the abrasive blaster operation shall not exceed 9.14 pounds per hour when operating at a process weight rate of 3.31 tons per hour.

The pound per hour limitation was calculated with the following equation:

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

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

Baghouse shall be in operation at all times that the shot blasting operation is in operation in order to comply with this limit.

D.2.2 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for shot blasting operation), and their control devices.

Compliance Determination Requirements

D.2.3 Particulate Control

- (a) In order to comply with Condition D.2.1, the dust collector for particulate control shall be in operation at all times the shot blast facility is in operation.
- (b) In the event that bag failure is observed in a multi-compartment dust collector, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.4 Visible Emissions Notations

- (a) Daily visible emission notations of the shot blast facility stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.5 Broken or Failed Dust Collector Detection

- (a) For a single compartment dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (b) For a single compartment dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has 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

Bag failure can be indicated by a significant drop in the dust collector pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.2.6 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector used in conjunction with the shot blasting operation, at least once per day when the shot blasting process is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and Evansville EPA and shall be calibrated at least once every six (6) months.

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

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain daily records of the visible emission notations of the stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g., the process did not operate that day).
- (b) Daily records of the pressure drop across the dust collector controlling the shot blast process. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g., the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Sky Cylinder Testing
Address:	2220 Lexington Rd.
City:	Evansville, Indiana 47720
Phone #:	812-423-1759
MSOP #:	M163-18902-00156

I hereby certify that Sky Cylinder Testing is :

still in operation.

no longer in operation.

I hereby certify that Sky Cylinder Testing is :

in compliance with the requirements of MSOP 163-18902-00156.

not in compliance with the requirements of MSOP 163-18902-00156.

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

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

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865
EVANSVILLE EPA FAX NUMBER - 812-435-6155**

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

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

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

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

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

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ ____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ ____ AM/PM

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

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

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a New Source Review and a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name:	Sky Cylinder Testing
Source Location	2220 Lexington Road, Evansville, IN 47719
County:	Vanderburgh County
SIC Code:	8113
MSOP No.:	M 163-18902-00156
Permit Reviewer:	Swarna Prabha

On January 26, 2007, the Office of Air Quality (OAQ) had a notice published in Evansville Courier, Evansville, Indiana, stating that Sky Cylinder Testing had applied for a New Source Review Permit and a Minor Source Operating Permit (MSOP) to continue to operate stationary compressed gas cylinder testing and refurbishing facility, located at 2220 Lexington Road, Evansville, Indiana, 47719. The notice also stated that the OAQ proposed to issue a MSOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

NOTE: The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes.

On March 5, 2008, Jon Grimmer of Sky Cylinder Testing submitted comments to IDEM, OAQ on the draft MSOP. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Sky Cylinder Testing would like to add two touch up paint booths to our MSOP application for M163-18902-00156. The 3' x3' booth would use a dry filter the ones we currently use and would use HVLP spray gun like we currently use. The new booth would be used for touch up for paint used on small medical cylinders. We would process 100 cylinders a day maximum. Their size is 4" diameter x 24" tall.

The 8' x 8' booth would be used for touch up paint booth, also use a dry filter and HVLP equipment and we would process 3 cylinder cart frames per day maximum. The cylinders carts size is approx 4' x 4' x 6' tall and are used by our customers to hold banks of cylinders.

Both booths would use the same waterborne paint as we presently use and be vented to the exterior of the building.

Response to Comment1:

The two touch up paint booths have been added to the list of units below. There are no changes in the applicable requirements due to this addition. See Appendix A of the ATSD.

A.2 Emission Units and Pollution Control Equipment Summary

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

- (c) **One (1) touch up spray paint booth 3'x3', constructed in 2008, using one (1) HVLP spray gun equipped with dry filter, capable of painting 100 small medical cylinders a day maximum, and vents outside. The paint usage and emissions are included in the existing paint booths (a) and (b).**
- (d) **One (1) touch up spray paint booth 8'x8', constructed in 2008, using one (1) HVLP spray gun equipped with dry filter, capable of painting 3 cylinder cart frames per day maximum, and vents outside. The paint usage and emissions are included in the existing booths (a) and (b).**

On January 28, 2008, Dona J, Bergman, Director of Environmental Protection Agency, Evansville Environmental Protection Agency (EEPA), City Of Evansville, submitted following comments on the draft MSOP.

Comment 2:

Annual Fee Payment, Section B.19(a): The contract between IDEM and EEPA allows EEPA to collect annual fees from MSOP sources in our jurisdiction. Please change this Condition to read:

- (a) The Permittee shall pay annual fees to EEPA by the date specified on the invoice.
- (b) The permittee may call 812-435-6145 to determine the appropriate fee and due date.

Response to Comment 2:

As requested by EEPA, the MSOP permit, the annual fee to EEPA in Section B.19 (a) has been revised as follows:

B.19 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to either IDEM, OAQ **or EEPA** within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), **or EEPA telephone number 812-435-6145**, to determine the appropriate permit fee.

Comment 3:

Performance Testing, C.7(b): Please revise the first sentence to read, "The permittee shall notify IDEM, OAQ and EEPA of the actual test date..."

Response to Comment 3:

As requested by EEPA, the Section C.7(b) has been revised as follows:

C.7 Performance Testing [326 IAC 3-6]

- (b) The Permittee shall notify IDEM, OAQ, **and EEPA** 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Comment 4:

Malfunction Report, Section C.14: Please include the EEPA in subsections (a) and (b).

Response to Comment 4:

As requested by the Local Agency, the EEPA has been included in the Malfunction Report Section C.14 subsections (a) and (b). Also, the Annual Notification and Malfunction Reporting forms have been revised to include EEPA, as follows:

C.14 Malfunctions Report [326 IAC 1-6-2]

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

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), **and EEPA** or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to **IDEM** (OAQ), **and EEPA**, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

In Addition, IDEM, OAQ has also revised the Minor Source Operating Permit Annual Notification and Malfunction report as follows:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
AND
EVANSVILLE EPA

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

....

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865
EVANSVILLE EPA FAX NUMBER - 812-435-6155

...

**Indiana Department of Environmental Management
Office of Air Quality
Evansville Local Agency**

Technical Support Document (TSD) for a Registration Permit Transitioning
to a Minor Source Operating Permit (MSOP) with New Source Review
(NSR)

Source Description and Location

Source Name:	Sky Cylinder Testing
Source Location:	2220 Lexington Road, P.O. Box 18116 Evansville, IN 47719-1116
County:	Vanderburgh
SIC Code:	8113
MSOP No.:	M163-18902-00156
Permit Reviewer:	Swarna Prabha

On March 10, 2004, Office of Air Quality (OAQ) has received an application from Sky Cylinder Testing related to the construction and operation of three abrasive blasting wheels at the existing plant and to transition from a registration to a MSOP.

Existing Approvals

The source has been operating under Registration No. 163-15089-00156, issued on February 1, 2002.

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	Attainment
PM2.5	Non Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton,

Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) U.S. EPA, in Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Vanderburgh County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.
- (c) Vanderburgh County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed a Minor Source Operating Permit application, submitted by Sky Cylinder Testing on March 10, 2004, relating to the compressed cylinder testing and refurbishing facility. It consists of the construction and operation of three abrasive blasting wheels, at the existing plant.

The source consists of the following permitted emission units:

- (a) One (1) paint booth with automatic arm, constructed in 2002, using one (1) HVLP spray gun equipped with dry filters, capable of painting forty (40) industrial gas steel cylinders per hour, and venting outside the building.
- (b) One (1) robotic paint booth, constructed in 2002, using one (1) HVLP spray gun equipped with dry filter, capable of painting twenty five (25) industrial gas steel cylinders per hour, and venting outside the building.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission unit:

- (a) Three (3) abrasive blasting units, constructed in 2002, propelling steel shot, with a maximum capacity of 6,621 pounds of shot blast including steel cylinders per hour, equipped with a dust collector consisting of nine (9) cartridge filters, and venting outside the building.

Enforcement Issues

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt for the proper permit. Pursuant to 326 IAC 2-6.1-2, as revised December 1998, the source was required to apply for a Minor Source Operating Permit.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the operation permit rules.

Sky Cylinder Testing was issued an air registration no. 163-15089-00156 on February 1, 2002, for a stationary compressed gas cylinder testing and refurbishing plant. On June 3, 2002, IDEM, OAQ conducted an inspection of the source and determined that the source did not disclose additional blasting equipment on the initial application pursuant to 326 IAC 2-5.5-2(b), which required existing emission source with a valid air permit. On March 10, 2004, IDEM, OAQ received an application from Sky Cylinder Testing.

As part of this TSD, the potential to emit air pollutants was reevaluated (see Emission Calculations and Permit Level Determination – MSOP). Based on the updated emission calculations, the source has the potential to emit air pollutants greater than the Registration threshold levels under 326 IAC 2-6. The source will be issued a Minor Source Operating Permit (MSOP).

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP

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.

Pollutant	Potential To Emit (tons/year)
PM	79.12
PM10 ⁽¹⁾	79.12
SO ₂	0.00
NO _x	0.00
VOC	8.78
CO	0.00

(1) 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". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

HAPs	Potential To Emit (tons/year)
TOTAL HAPs	negligible

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM and PM10 are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) will be issued.
- (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) This requirements of 326 IAC 12 or 40 CFR 60, Subpart MM (60.390 through 60.398), Standards of Performance for the Automobile and Light Duty Truck surface Coating Operations are not included in the permit, because this source does not perform Automobile and Light Duty Truck surface coating.
- (b) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for surface coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart M (326 IAC 20-80-1) are not included in the permit, since this source is not a major source of HAPs as defined in 40 CFR 63.
- (b) 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)

- (c) 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.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) 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.

- (d) 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.
- (e) 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:
- (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 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
 - (3) This source is located in the city of Evansville referenced in 326 IAC 5-1-1(c)(7).
- (f) 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.
- (g) 326 IAC 6.5 (Particulate Matter Limitations)
This source is located in Vanderburgh County. However, this source is not specifically listed in 326-IAC 6.5-8 and:
- (1) potential to emit of PM is less than 100 tons per year, and
 - (2) actual emissions are less than 10 tons per year.

Therefore, the requirements of 326 IAC 6.5 do not apply.

State Rule Applicability - Surface Coating Operations

- (h) 326 IAC 8-2-9 (Volatile Organic Compounds, Surface Coating emissions limitations: miscellaneous metal coating operations)
This source performs miscellaneous metal coating operations as described in 326 IAC 8-2-1(a)(4) and has actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls and is therefore subject to 326 IAC 8-2-9. The source shall use coatings that comply with the VOC content limitations as described in 326 IAC 8-2-9(d). when coating metal parts, the volatile organic compound (VOC) content of the coating delivered to the applicator at the surface coating operations shall be limited to 3.0 pounds per gallon of coating, excluding water, for coating application systems.
- (i) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The requirements of 326 IAC 8-1-6 do not apply, because 326 IAC 8-2-9 already applies to the coating process.

Based on information provided by the source and the calculations, (see TSD, Appendix A, page 1) the Permittee is able to comply with the VOC limits.

- (j) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(14), particulate emissions from surface coating booths are each exempt from the requirements of 326 IAC 6-3, because the potential particulate emissions are less than five hundred fifty one thousandths (0.551) pound per hour.

State Rule Applicability - Abrasive Blaster

- (k) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the abrasive blaster operation shall not exceed 9.14 pounds per hour when operating at a process weight rate of 3.31 tons per hour.

The pound per hour limitation was calculated with the following equation:

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

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

Baghouse shall be in operation at all times that the shot blasting operation is in operation in order to comply with this limit.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant on December 20, 2007. An application for the purposes of this review was received on March 10, 2004.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Review and MSOP No. 163-18902-00156. The staff recommends to the Commissioner that this New Source Review and MSOP 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: www.in.gov/idem/permits/air/pending.html.
- (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.in.gov/idem/permits/guide/.

**Appendix A: Emissions Calculations
Emission Summary**

**Company Name: Sky Cylinder Testing
Address City IN Zip: 2220 Lexington Road, Evansville, IN 47719
MSOP Number: M163-18902-00156
Reviewer: Swarna Prabha**

Uncontrolled Potential Emissions (tons/year)				
Category	Pollutant	Shotblasting	Paint Booth	TOTAL
Criteria Pollutants	PM	76.08	3.04	79.12
	PM10	76.08	3.04	79.12
	SO2			0.00
	NOx			0.00
	VOC		8.78	8.78
	CO			0.00
Hazardous Air Pollutant	Chromium			0.0E+00
	Nickel			0.0E+00
	Toluene			0.0E+00
	Benzene			0.0E+00
	Formaldehyde			0.0E+00
	Lead			0.0E+00
	Manganese			0.0E+00
	Totals	0.00	0.00E+00	0.0E+00

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

Controlled Potential Emissions (tons/year)				
Emissions Generating Activity				
Category	Pollutant	Shotblasting	Paint Booths	TOTAL
Criteria Pollutants	PM	0.30	3.04	3.34
	PM10	0.30	3.04	3.34
	SO2			0.00
	NOx			0.00
	VOC		8.78	8.78
	CO			0.00
Hazardous Air Pollutants	Chromium			0.00E+00
	Nickel			0.00E+00
	Toluene			0.00E+00
	Benzene			0.00E+00
	Formaldehyde			0.00E+00
	Lead			0.00E+00
	Manganese			0.00E+00
	Totals	0.00	0.00E+00	0.00E+00

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

**Company Name: Sky Cylinder Testing
Address City IN Zip: 2220 Lexington Road, Evansville, IN 47719
MSOP No. : M163-18902-00156
Reviewer: Swarna Prabha**

Automatic Arm Paint Booth

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
WSR 109 Paint	8.55	70.19%	59.05%	10.82%	60.62%	25.64%	0.03400	20.000	2.35	0.93	0.63	15.10	2.76	1.52	3.61	80%
WSR 312 Paint	9.04	71.86%	51.2%	16.29%	55.56	28.14%	0.03400	20.000	2.12	1.47	1.00	24.03	4.39	1.52	5.23	80%
WSR 360 Paint	9.00	73.45%	55.4%	13.62%	59.82	26.55%	0.03400	20.000	2.28	1.23	0.83	20.01	3.65	1.42	4.62	80%
WSR 367 Paint	9.10	72.79%	54.1%	13.67%	59.13	27.21%	0.03400	20.000	2.25	1.24	0.85	20.30	3.71	1.47	4.57	80%
WSR 625 Paint	8.83	73.64%	56.4%	13.88%	59.77	26.36%	0.03400	20.000	2.32	1.23	0.83	20.00	3.65	1.39	4.65	80%
WSR 723 Paint	9.03	73.06%	53.7%	14.86%	58.20	26.94%	0.03400	20.000	2.24	1.34	0.91	21.90	4.00	1.45	4.98	80%
WSR 1050 Paint	8.95	73.62%	55.76%	13.74%	59.88	26.38	0.03400	20.000	2.31	1.23	0.84	20.07	3.66	1.41	0.05	80%

Worst case coating

1.00 24.03 4.39 1.52 5.23

Robotic Paint Booth

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
WSR 109 Paint	8.55	70.19%	59.05%	10.82%	60.62%	25.64%	0.03400	20.000	2.35	0.93	0.63	15.10	2.76	1.52	3.61	80%
WSR 312 Paint	9.04	71.86%	51.2%	16.29%	55.56	28.14%	0.03400	20.000	2.12	1.47	1.00	24.03	4.39	1.52	5.23	80%
WSR 360 Paint	9.00	73.45%	55.4%	13.62%	59.82	26.55%	0.03400	20.000	2.28	1.23	0.83	20.01	3.65	1.42	4.62	80%
WSR 367 Paint	9.10	72.79%	54.1%	13.67%	59.13	27.21%	0.03400	20.000	2.25	1.24	0.85	20.30	3.71	1.47	4.57	80%
WSR 625 Paint	8.83	73.64%	56.4%	13.88%	59.77	26.36%	0.03400	20.000	2.32	1.23	0.83	20.00	3.65	1.39	4.65	80%
WSR 723 Paint	9.03	73.06%	53.7%	14.86%	58.20	26.94%	0.03400	20.000	2.24	1.34	0.91	21.90	4.00	1.45	4.98	80%
WSR 1050 Paint	8.95	73.62%	55.76%	13.74%	59.88	26.38	0.03400	20.000	2.31	1.23	0.84	20.07	3.66	1.41	0.05	80%

Worst Case Coating

1.00 24.03 4.39 1.52 5.23

*Automatic arm and Robotic paint booths include usage of touch up paint and the number of cylinders painted.

Combined PTE	8.78	3.04
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All water based paints. Source can paint only one color at a time in each booth

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

**Appendix A: Emission Calculations
Particulate Emissions From Shotblasting Operations**

TSD Appendix A: Page 3 of 3

Company Name: Sky Cylinder
Address: 2220 Lexington Road, Evansville, IN 47719
MSOP No.: M163-18902-00156
Reviewer: Swarna Prabha

Shotblasting Operations 1A

Shotblasting Operations 1A	Process Weight Rate (lbs/hour)	Shotblast dust Collected* (lbs/hour)	Collection/ Control Efficiency (%)	Uncontrolled PTE of PM/PM10 (tons/year)	Uncontrolled PTE of PM/PM10 (lbs/hour)	Controlled PTE of PM/PM10 (tons/year)	Controlled PTE of PM/PM10 (lbs/hour)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hour)
Dust Collector	6,621.00	17.30	99.6%	76.08	17.37	0.30	0.069	9.14
PTE TOTALS				76.08		0.30		
ACTUAL TOTALS**:				36.13		0.14		

Assume all PM is equal to PM10. Assume all shotblast dust collected is PM / PM10.
The dust collector exhausts inside the building.

Total number of Cylinders treated during shotblast = 3304 and each cylinder weighs 160 lbs
Dust collected from shot blastoperation =1050 lbs based on 5 days per week and two shifts (8 hrs each) per day
Raw throughput of shots including cylinders for the shotblast operations = 529,690 pounds for 5 days and 16 hrs per day =6,621 pounds per hour of throughput.
Based on reported amount of shotblast dust collected 1,384 pounds for 5 days and 16 hours per day of operation = 1384(1/16)*(1/5)=17.30 lbs/hr
Dust collected is based on reported operation of 5 days per week, two shifts (8 hours each) per day
**Actual Totals are based on 4160 hours per year.

Methodology

PTE of PM/PM10 Uncontrolled (tons/year) = Shotblast dust Collected (lbs/hour) / (Control Efficiency %) x 8760 (hours/year) x 1 ton/2000 lbs
PTE of PM/PM10 Uncontrolled (lbs/hour) =Shotblast dust Collected (lbs/hour) / (Control Efficiency %)
PTE of PM/PM10 Controlled (tons/year) = Shotblast dust Collected (lbs/hour) x (1 - Control Efficiency %) x 8760 (hours/year) x 1 ton/2000 lbs
PTE of PM/PM10 Controlled (lbs/hour) = Shotblast dust Collected (lbs/hour) x (1 - Control Efficiency %)
Actual Emissions of PM/PM10 Uncontrolled (tons/year) = Shotblast dust Collected (lbs/hour) / (Control Efficiency %) x 4160 (hours/year) x 1 ton/2000 lbs
Actual Emissions of PM/PM10 Controlled (tons/year) = Shotblast dust Collected (lbs/hour) x (1 - Control Efficiency %) x 4160 (hours/year) x 1 ton/2000 lbs
326 IAC 6-3-2 Allowable Emissions, E = 4.10 * P^{0.67} (for weight rates up to 60,000 lbs/hr)
P=(6,621/2000) tons per hour = 3.31 tons per hour