



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

TO: Interested Parties / Applicant

DATE: September 5, 2012

RE: D&S Industries, Inc. / 039 - 31878 - 00667

FROM: Matthew Stuckey, 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



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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**D&S Industries, Inc.
207 East St. Joseph St.
Bristol, Indiana 46507**

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

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

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.: M039-31878-00667	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 5, 2012 Expiration Date: September 5, 2022

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary metal parts coating plant.

Source Address:	207 East St. Joseph St., Bristol, Indiana 46507
General Source Phone Number:	(574) 848-7144
SIC Code:	3499 (Fabricated Metal Products, Not Elsewhere Classified)
County Location:	Elkhart
Source Location Status:	Attainment for all 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 permitted emission units:

- (a) Four (4) high volume low pressure (HVLP) surface coating booths; identified as SB-1, SB-2, SB-3, and SB-4, respectively; constructed in 2006; applying coatings to metal screws with a maximum combined production rate of 125,000 screws per hour; with particulate emissions from each booth controlled by a dry filter system. Emissions from SB-1 and SB-2 exhaust through stack SBV-1. Emissions from SB-3 and SB-4 exhaust through stack SBV-2.
- (b) One (1) high volume low pressure (HVLP) surface coating booth; identified as SB-5; constructed in 2006; applying coatings to miscellaneous metal parts; with particulate emissions controlled by a dry filter system; and emissions exhausting through stack SBV-3.
- (c) One (1) powder coating line; identified as PCL1; constructed in 2006; with a maximum throughput of 100,000 screws per hour (400 lbs per hour) and a maximum powder coating capacity of 3.75 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.
- (d) One (1) powder coating line; identified as PCL2; constructed in 2007; with a maximum throughput of 80,000 screws per hour (320 lbs per hour) and a maximum powder coating capacity of 14.98 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.

- (e) One (1) powder coating line; identified as PCL3; constructed in 2007; with a maximum throughput of 60,000 screws per hour (240 lbs per hour) and a maximum powder coating capacity 19.84 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.

Note: Each powder coating line (PCL1 to 3) has its own recovery system.

- (f) One (1) 0.35 MMBtu/hr natural gas-fired burn-off oven.
- (g) Various natural gas-fired drying/curing ovens, aqueous iron phosphate wash tank heating units, and heaters with a total heat input capacity of less than 10 MMBtu/hr.
- (h) Manual clean-up operations of the surface coating booths.
- (i) Paved and unpaved roads and parking lots with public access.

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 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, M039-31878-00667, is issued for a fixed term of ten (10) 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, 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.3 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.4 Enforceability

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

B.5 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.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 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.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (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.The Permittee shall implement the PMPs.
- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M039-31878-00667 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.11 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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 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 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 an affirmation that the statements in the application are true and complete 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) 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 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 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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 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, 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.16 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete 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.17 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

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

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

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

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 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.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 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.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

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.

- (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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the 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.9 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.10 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.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

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to 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 excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning 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 normal or usual manner of operation.
- (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 record the reasonable response steps 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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.

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) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) 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) Four (4) high volume low pressure (HVLP) surface coating booths; identified as SB-1, SB-2, SB-3, and SB-4, respectively; constructed in 2006; applying coatings to metal screws with a maximum combined production rate of 125,000 screws per hour; with particulate emissions from each booth controlled by a dry filter system. Emissions from SB-1 and SB-2 exhaust through stack SBV-1. Emissions from SB-3 and SB-4 exhaust through stack SBV-2.
- (b) One (1) high volume low pressure (HVLP) surface coating booth; identified as SB-5; constructed in 2006; applying coatings to miscellaneous metal parts; with particulate emissions controlled by a dry filter system; and emissions exhausting through stack SBV-3.
- (c) One (1) powder coating line; identified as PCL1; constructed in 2006; with a maximum throughput of 100,000 screws per hour (400 lbs per hour) and a maximum powder coating capacity of 3.75 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.
- (d) One (1) powder coating line; identified as PCL2; constructed in 2007; with a maximum throughput of 80,000 screws per hour (320 lbs per hour) and a maximum powder coating capacity of 14.98 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.
- (e) One (1) powder coating line; identified as PCL3; constructed in 2007; with a maximum throughput of 60,000 screws per hour (240 lbs per hour) and a maximum powder coating capacity 19.84 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.

(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) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9(c)(2), the volatile organic compound (VOC) content of the coating utilized in each surface coating booth (SB-1 through SB-5), shall be limited to three and five tenths (3.5) pounds of VOCs per gallon of coating less water, for air dried or forced warm air dried coatings.
- (b) Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, the following:

- (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
- (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
- (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
- (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (5) Minimize VOC emissions from the cleaning application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

D.1.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating booths identified as SB-1 through SB-5 shall each be controlled by dry particulate filters, waterwash, or an equivalent control device, and the Permittee shall operate each control device in accordance with manufacturer's specifications.
 - (1) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.
- (b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the powder coating lines shall not exceed the pounds per hour limit listed in the table below:

Unit Description	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
Powder Coating Line (PCL 1)	0.202	1.403
Powder Coating Line (PCL 2)	0.167	1.238
Powder Coating Line (PCL 3)	0.130	1.045

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

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

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

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

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.5 Particulate Control

In order to comply with Condition D.1.2(b), the cartridge filter recovery systems shall be in operation at all times when the powder coating lines (PCL 1-3) are in operation.

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

D.1.6 Dust Collector Inspections

An inspection shall be performed semi-annually on the cartridge filter recovery systems associated with the powder coating lines, identified as Powder Coating Lines 1-3, at all times these units are in operation.

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

D.1.7 Record Keeping Requirements

(a) To document the compliance status 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 content limits established in Condition D.1.1. Records necessary to demonstrate compliance shall be available no later than 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) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	D&S Industries, Inc.
Address:	207 East St. Joseph St.
City:	Bristol, Indiana 46507
Phone #:	(574) 848-7144
MSOP #:	M039-31878-00667

I hereby certify that D&S Industries, Inc. is:

still in operation.

no longer in operation.

I hereby certify that D&S Industries, Inc. is:

in compliance with the requirements of MSOP M039-31878-00667.

not in compliance with the requirements of MSOP M039-31878-00667.

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
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865

**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

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

Source Background and Description

Source Name:	D&S Industries, Inc.
Source Location:	207 East St. Joseph St., Bristol, IN 46507
County:	Elkhart
SIC Code:	3499 (Fabricated Metal Products, Not Elsewhere Classified)
Permit Renewal No.:	M039-31878-00667
Permit Reviewer:	Joshua Levering

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from D&S Industries, Inc. relating to the operation of a stationary metal parts coating plant. On May 14, 2012, D&S Industries, Inc. submitted an application to the OAQ requesting to renew its operating permit. D&S Industries, Inc. was issued its first New Source Construction and MSOP (039-24546-00667) on September 21, 2007.

Permitted Emission Units and Pollution Control Equipment

This stationary source consists of the following permitted emission units:

- (a) Four (4) high volume low pressure (HVLP) surface coating booths; identified as SB-1, SB-2, SB-3, and SB-4, respectively; constructed in 2006; applying coatings to metal screws with a maximum combined production rate of 125,000 screws per hour; with particulate emissions from each booth controlled by a dry filter system. Emissions from SB-1 and SB-2 exhaust through stack SBV-1. Emissions from SB-3 and SB-4 exhaust through stack SBV-2.
- (b) One (1) high volume low pressure (HVLP) surface coating booth; identified as SB-5; constructed in 2006; applying coatings to miscellaneous metal parts; with particulate emissions controlled by a dry filter system; and emissions exhausting through stack SBV-3.
- (c) One (1) powder coating line; identified as PCL1; constructed in 2006; with a maximum throughput of 100,000 screws per hour (400 lbs per hour) and a maximum powder coating capacity of 3.75 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.
- (d) One (1) powder coating line; identified as PCL2; constructed in 2007; with a maximum throughput of 80,000 screws per hour (320 lbs per hour) and a maximum powder coating capacity of 14.98 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.

- (e) One (1) powder coating line; identified as PCL3; constructed in 2007; with a maximum throughput of 60,000 screws per hour (240 lbs per hour) and a maximum powder coating capacity 19.84 lb/hr; applying coatings to metal parts using an electrostatic air atomization spray application system. Particulate emissions (waste powder) are collected for reuse by an integral cartridge filter powder recovery system that exhausts indoors.

Note: Each powder coating line (PCL1 to 3) has its own recovery system.

- (f) One (1) 0.35 MMBtu/hr natural gas-fired burn-off oven.
- (g) Various natural gas-fired drying/curing ovens, aqueous iron phosphate wash tank heating units, and heaters with a total heat input capacity of less than 10 MMBtu/hr.
- (h) Manual clean-up operations of the surface coating booths.
- (i) Paved and unpaved roads and parking lots with public access.

Existing Approvals

There have been no further approvals since the issuance of MSOP 039-24546-00667 on September 21, 2007.

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

Air Pollution Control Justification as an Integral Part of the Process

On April 2, 2007, the source submitted information requesting that the three (3) cartridge filter powder recovery systems be considered integral to the process for the powder coating line operations. IDEM, OAQ evaluated the justifications and agreed that all three (3) of the cartridge filter powder recovery systems will be considered integral to the process. This evaluation and approval was discussed in New Source Construction and Minor Source Operating Permit, M039-24546-00667, issued on September 21, 2007.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Elkhart County.

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

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

(a) Ozone Standards

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. Elkhart 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) PM_{2.5}

Elkhart County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011.. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Elkhart 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

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.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	29.26
PM ₁₀	29.43
PM _{2.5}	29.40
SO ₂	0.03
VOC	48.67
CO	3.59
NO _x	4.27
GHGs as CO ₂ e	5,156
Single HAP (Toluene)	3.13
Total HAP	3.30

Potential to emit for the powder coating is after control because the powder coat reclamation systems are integral to the process.

HAPs	tons/year
Toluene	3.127
Hexane	0.077
All other HAPs	0.101
Total	3.304

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all regulated pollutants, excluding GHGs, is less than 100 tons per year. However, PM, PM₁₀, PM_{2.5}, and VOC are equal to or greater than twenty-five (25) tons per year, each. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this MSOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VOC	CO	GHGs	Total HAPs	Worst Single HAP
Booths SB-1 to SB-4	23.64	23.64	23.64	0	0	34.03	0	0	3.22	3.127 (Toluene)
Booth SB-5	5.35	5.35	5.35	0	0	14.40	0	0	0	0.00
Powder Coating Line (PCL) 1***	0.01	0.01	0.01	0	0	0	0	0	0	0.00
Powder Coating Line (PCL) 2***	0.03	0.03	0.03	0	0	0	0	0	0	0.00
Powder Coating Line (PCL) 3***	0.04	0.04	0.04	0	0	0	0	0	0	0.00
Natural Gas Combustion	0.08	0.32	0.32	0.03	4.27	0.23	3.59	5,156	0.08	0.077 (Hexane)
Fugitive Dust Emissions – Paved Roads	0.02	0.004	0.001	0	0	0	0	0	0	0.00
Fugitive Dust Emissions – Unpaved Roads	0.08	0.023	0.002	0	0	0	0	0	0	0.00
Total PTE of Entire Source	29.26	29.43	29.40	0.03	4.27	48.67	3.59	5,156	3.30	3.13 (Toluene)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO ₂ e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO ₂ e	NA	NA

*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".
 **PM_{2.5} listed is direct PM_{2.5}.
 ***Potential to emit after control because the cartridge filter powder recovery systems are integral to the process.

- (a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, emissions of GHGs are less than one hundred thousand (<100,000) tons of CO₂ equivalent emissions (CO₂e) per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001, 40 CFR 60, Subpart CCCC (326 IAC 12), are not included in the

permit, since the burn-off oven meets the definition of a rack, part, or drum reclamation unit. Pursuant to 40 CFR 60.2020(k) rack, part, and drum reclamation units are exempt from the requirements of this subpart.

- (b) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this 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 MMMM (326 IAC 20-80), are not included in the permit, since this source's potential to emit 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.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning (326 IAC 20-6 and 40 CFR Part 63, Subpart T) are not included in this permit for the spray gun clean-up operations. Those operations do not use a solvent containing methylene chloride, perchlorethylene, trichlorethylene, 1,1,1-trichlorethane, carbon tetrachloride, chloroform or any combination of these halogenated HAP solvents in a total concentration greater than five percent (5%) by weight as a cleaning or drying agent.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH, are not included in the permit because the source does not have paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), does not perform autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations, and does not perform spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
- (d) 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)

- (a) 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 - Entire 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 criteria pollutants before control is 113.82 tons per year of Particulate Matter; which is less than 250 tons per year. The potential to emit greenhouse gases (GHGs) is less than 100,000 tons of CO₂e 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 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.
- (f) 326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).
- (g) 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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the potential fugitive particulate emissions from paved and unpaved roads are less than 25 tons per year.

State Rule Applicability – Individual Facilities

Surface coating booths (SB-1 to SB-5)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating booths identified as SB-1 through SB-5 shall each be controlled by dry particulate filters, waterwash, or an equivalent control device, and the source shall operate each control device in accordance with manufacturer's specifications.
 - (1) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The surface coating booths, identified as SB-1 through SB-5 are not subject to the requirements of 326 IAC 8-1-6, because each booth is subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).
- (c) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The surface coating booths, identified as SB-1 through SB-5 were constructed after July 1, 1990, are located in Elkhart County, have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls, each, and coats metal parts or products under the Standard Industrial Classification Code of major group #34.
 - (1) Pursuant to 326 IAC 8-2-9(c)(2), the volatile organic compound (VOC) content of the coating utilized in each surface coating booth (SB-1 through SB-5), shall be limited to three and five tenths (3.5) pounds of VOCs per gallon of coating less water, for air dried or forced warm air dried coatings.

Based on the information submitted by the source, each air dried or forced warm air dried coating delivered to the surface coating booths (SB-1 through SB-5) has a VOC content less than 3.5 pounds per gallon. The highest content for an individual coating is three and twenty-nine hundredths (3.29) pounds of VOCs per gallon less water. Therefore, compliance with 326 IAC 8-2-9 is expected.

- (2) Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, the following:
 - (i) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
 - (ii) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
 - (iii) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
 - (iv) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
 - (v) Minimize VOC emissions from the cleaning application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- (d) 326 IAC 8-3 (Degreasing)
The requirements of 326 IAC 8-3 are not applicable to the spray gun clean-up operations because these operations are not organic solvent degreasing operations performed in a degreasing facility regulated by this rule. The spray operators manually clean the spray applicators of the booths at the end of each shift using mineral spirits. Cleaning is also performed by pumping solvent through the spray lines and guns, and sprayed into a bucket. The exterior of the gun is cleaned with solvent, scraper, and a brush. Waste solvent is stored in sealed containers.

Powder Coating Lines (PCL1 to PCL3)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the powder coating lines shall not exceed the pounds per hour limit listed in the table below:

Unit Description	Max. Throughput Rate (tons/hr)*	Particulate Emission Limit (lbs/hr)
Powder Coating Line (PCL 1)	0.202	1.403
Powder Coating Line (PCL 2)	0.167	1.238
Powder Coating Line (PCL 3)	0.130	1.045

*Maximum throughput rate (tons/hr) = weight of screws + weight of coating

Note: For integral processes, the uncontrolled potential to emit is used to determine state rule applicability. As a result this is a new requirement in the permit.

The pounds per hour limitations were calculated with the following equation:

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

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

The integral cartridge filter powder recovery systems shall be in operation at all times when these facilities are in operation, in order to comply with these limits.

- (b) 326 IAC 8 (Volatile Organic Compound Rules)
 The powder coating lines do not have the potential to emit VOC, and are not subject to any of the rules identified in 326 IAC 8.

Natural Gas Combustion Units

- (a) 326 IAC 4-2 (Incinerators)
 The 0.35 MMBtu/hr burn-off oven is used to heat powder coating over-spray so that the powder can be shaken loose from the conveyor hangers. This oven does not burn the powder coating off of the hangers. Therefore, this oven is not defined as an incinerator (pursuant to 326 IAC 1-2-34) and is not subject to 326 IAC 4-2-2.
- (b) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
 The natural gas-fired heaters are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, these emission units do not meet the definition of an indirect heating unit.
- (c) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
 The natural gas-fired combustion units and burn-off oven are exempt from the requirements of 326 IAC 6-3-2, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.
- (d) 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)
 This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from each natural gas-fired combustion unit is less than twenty-five (25) tons per year and ten (10) pounds per hour.

- (e) 326 IAC 9-1-2 (Carbon Monoxide Emission Limits)
 - (1) The natural gas-fired combustion units are not subject to 326 IAC 9-1-1 (Carbon Monoxide Emission Limits) because there is no applicable emission limits for the source under 326 IAC 9-1-2.
 - (2) The 0.35 MMBtu/hr burn-off oven is used to heat powder coating over-spray so that the powder can be shaken loose from the conveyor hangers. This oven does not burn the powder coating off of the hangers. Therefore, this oven is not defined as an incinerator (pursuant to 326 IAC 1-2-34) and is not subject to 326 IAC 9-1-2.
- (f) 326 IAC 10-1-1 (Nitrogen Oxides Control)
The natural gas-fired combustion units are not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control) because the source is not located in Clark or Floyd counties.

Compliance Determination and Monitoring Requirements

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
Cartridge filter powder recovery systems	Filter Check	Semi-annually	Normal-Abnormal	Response Steps

These monitoring conditions are necessary because the cartridge filter powder recovery systems for the three (3) Powder Coating Lines are an integral process and must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-6.1 (MSOP).

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal M039-31878-00667 be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 14, 2012. Additional information was received on June 28, 2012.

Conclusion

The operation of this metal parts coating plant shall be subject to the conditions of the attached MSOP Renewal No. M039-31878-00667.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.
- (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

**Appendix A: Emissions Calculations
Summary of Emissions**

Company Name: D&S Industries, Inc.
Address City IN Zip: 207 East St. Joseph Street, Bristol, Indiana 46507
Permit: M039-31878-00667
Reviewer: JL
Date: May 2012

Uncontrolled Potential to Emit (ton/yr)

Process	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Single HAP
Booths SB-1 to SB-4	23.64	23.64	23.64	0	0	34.03	0	0	3.224	3.127 Toluene
Booth SB-5	5.35	5.35	5.35	0	0	14.40	0	0	0.000	0.000
Powder Coating Line (PCL) 1*	0.01	0.01	0.01	0	0	0	0	0	0.000	0.000
Powder Coating Line (PCL) 2*	0.03	0.03	0.03	0	0	0	0	0	0.000	0.000
Powder Coating Line (PCL) 3*	0.04	0.04	0.04	0	0	0	0	0	0.000	0.000
Natural Gas Combustion	0.08	0.32	0.32	0.03	4.27	0.23	3.59	5,156	0.081	0.077 Hexane
Fugitive Dust Emissions - Paved	0.02	0.004	0.001	0	0	0	0	0	0.000	0.000
Fugitive Dust Emissions - Unpaved Roads	0.08	0.023	0.002	0	0	0	0	0	0.000	0.000
Totals	29.26	29.43	29.40	0.03	4.27	48.67	3.59	5,156	3.304	3.127 Toluene

*The cartridge filters are part of an integral powder recovery system. Therefore, the PTE of the units is determined after its impact.

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

Company Name: **D&S Industries, Inc.**
Address City IN Zip: **207 East St. Joseph Street, Bristol, Indiana 46507**
Permit: **M039-31878-00667**
Reviewer: **JL**
Date: **May 2012**

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
Booths SB-1 to SB-4																
F63B60 Black	8.1	34.00%	0.0%	34.0%	0.0%	65.60%	1.12500	1.000	2.75	2.75	3.09	74.25	13.55	5.26	4.19	80%
F63W66 White	11.5	22.30%	0.0%	22.3%	0.0%	77.60%	1.12500	1.000	2.57	2.57	2.89	69.39	12.66	8.82	3.31	80%
T-272 Activator	9.0	24.90%	0.0%	24.9%	0.0%	75.00%	0.01600	1.000	2.24	2.24	0.04	0.86	0.16	0.09	2.99	80%
I-1967 WB Black HS	8.8	34.00%	29.0%	5.0%	30.0%	57.00%	1.12500	1.000	0.49	0.49	0.55	13.23	2.41	5.74	0.77	80%
Rust Scat Semi-Gloss	10.4	63.52%	60.5%	3.0%	66.0%	34.00%	1.12500	1.000	0.91	0.91	1.02	24.57	4.48	3.72	0.91	80%
Clean Up Solvents																
Methyl Ethyl Ketone	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	0.01250	1.000	6.71	6.71	0.08	2.01	0.37	0.00	0.00	100%
Toluene	7.3	100.00%	0.0%	100.0%	0.0%	0.00%	0.01250	1.000	7.26	7.26	0.09	2.18	0.40	0.00	0.00	100%
								Subtotal =			7.77	186.49	34.03	23.64		
Booth SB-5																
9815-4542FC Epoxy	9.4	35.00%	0.0%	35.0%	0.0%	65.00%	0.08330	12.000	3.29	3.29	3.29	78.93	14.40	5.35	5.06	80%

* 1 unit = 125,000 parts

** IDEM has conservatively assumed a dry filter control efficiency of 95%.

Uncontrolled PTE = 11.06 265.42 48.44 28.99
Controlled PTE ** = 48.44 1.45

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)

Controlled PTE = Uncontrolled PTE * (1-% of control efficiency)

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: D&S Industries, Inc.
Address City IN Zip: 207 East St. Joseph Street, Bristol, Indiana 46507
Permit: M039-31878-00667
Reviewer: JL
Date: May 2012

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Toluene Emissions (ton/yr)	Weight % Xylene	Xylene Emissions (ton/yr)	Weight % Ethyl Benzene	Ethyl Benzene Emissions (ton/yr)
Booths 1-4									
F63B60 Black	8.1	1.12500	1.000	4.00%	1.60	0.00%	0.00	0.00%	0.00
F63W66 White	11.5	1.12500	1.000	2.00%	1.13	0.00%	0.00	0.00%	0.00
T-272 Activator	9.0	0.01600	1.000	0.00%	0.00	15.00%	0.09	0.25%	0.002
Toluene	7.3	0.01250	1.000	100.00%	0.40	0.00%	0.00	0.00%	0.00

Total Potential to Emit (ton/yr)	3.13	0.09	0.002
Total Combined Potential to Emit (ton/yr)	3.22		

METHODOLOGY

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

*All other coatings do not contain HAPs

**Appendix A: Emissions Calculations
Particulate Emissions from Powder Coating**

**Company Name: D&S Industries, Inc.
Address City IN Zip: 207 East St. Joseph Street, Bristol, Indiana 46507
Permit: M039-31878-00667
Reviewer: JL
Date: May 2012**

Process	Maximum Coating Usage (lbs/hour)	Transfer Efficiency (%)	Uncontrolled Particulate (lbs/hr)	Uncontrolled Particulate (tons/yr)	Control Efficiency (%)	Potential Particulate (lbs/hr)*	Potential Particulate (tons/yr)*
Powder Coating Line (PCL) 1	3.75	50.00%	1.88	8.21	99.9%	0.002	0.008
Powder Coating Line (PCL) 2	14.98	50.00%	7.49	32.81	99.9%	0.007	0.033
Powder Coating Line (PCL) 3	19.84	50.00%	9.92	43.45	99.9%	0.010	0.043
Total				84.47			0.08

Each powder coating line operates independently and is considered a separate emission unit

*The cartridge filters operate with an efficiency of 99.9% and are part of an integral powder recovery system. Therefore, the PTE of the units is determined after its impact.

Methodology

Uncontrolled Particulate (lbs/hr) = Maximum Usage (lbs/hr) * Transfer Efficiency (%)

Uncontrolled Particulate (tons/yr) = Maximum Usage (lbs/hr) * Transfer Efficiency (%) * 8760 (hrs/yr) * 1/2000 (ton/lbs)

Potential Particulate (lbs/hr) = Uncontrolled Particulate (lbs/hr) * (1 - % Control Efficiency)

Potential Particulate (tons/yr) = Uncontrolled Particulate (lbs/hr) * (1 - % Control Efficiency) * 8760 (hrs/yr) * 1/2000 (ton/lbs)

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

**Company Name: D&S Industries, Inc.
Address City IN Zip: 207 East St. Joseph Street, Bristol, Indiana 46507
Permit: M039-31878-00667
Reviewer: JL
Date: May 2012**

Heat Input Capacity Potential Throughput
MMBtu/hr MMCF/yr

9.75

85.4

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.08	0.32	0.32	0.03	4.27	0.23	3.59

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable PM10 and PM2.5 combined, respectively.

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

Emission Factor in lb/MMcf	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	1.9E+00
Potential Emission in tons/yr	8.968E-05	5.125E-05	3.203E-03	7.687E-02	1.452E-04	8.036E-02

Emission Factor in lb/MMcf	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	5.5E-03
Potential Emission in tons/yr	2.135E-05	4.698E-05	5.979E-05	1.623E-05	8.968E-05	2.340E-04

Total HAPs in tons/yr 8.059E-02

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	5,125	9.82E-02	9.40E-02
Summed Potential Emissions in tons/yr	5,125		
CO2e Total in tons/yr	5,156		

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

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 1-03-006-0:

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

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

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

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O

Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads**

Company Name: **D&S Industries, Inc.**
 Address City IN Zip: **207 East St. Joseph Street, Bristol, Indiana 46507**
 Permit: **M039-31878-00667**
 Reviewer: **JL**
 Date: **May 2012**

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Trucks and tractors (entering plant) (one-way trip)	12.0	1.0	12.0	15.0	180.0	18.5	0.004	0.042	15.35
Trucks and tractors (leaving plant) (one-way trip)	12.0	1.0	12.0	15.0	180.0	18.5	0.004	0.042	15.35
Totals			24.0		360.0			0.084	30.69

Average Vehicle Weight Per Trip = $\frac{15.0}{1}$ tons/trip
 Average Miles Per Trip = $\frac{0.0035}{1}$ miles/trip

Unmitigated Emission Factor, Ef = $[k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

where k =	PM	PM10	PM2.5	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	0.011	0.0022	0.00054	tons = average vehicle weight (provided by source)
sL =	15.0	15.0	15.0	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)
	9.7	9.7	9.7	

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = $E * [1 - (p/4N)]$
 where p = $\frac{125}{365}$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = 365 days per year

Unmitigated Emission Factor, Ef =	PM	PM10	PM2.5	lb/mile
Mitigated Emission Factor, Eext =	1.377	0.275	0.0676	lb/mile
	1.259	0.252	0.0618	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Trucks and tractors (entering plant) (one-way trip)	0.0106	0.0021	0.0005	0.0097	0.0019	0.0005
Trucks and tractors (leaving plant) (one-way trip)	0.0106	0.0021	0.0005	0.0097	0.0019	0.0005
Totals	0.0211	0.0042	0.0010	0.0193	0.0039	0.0009

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particulate Matter (<2.5 um)
 PTE = Potential to Emit

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads**

Company Name: D&S Industries, Inc.
Address City IN Zip: 207 East St. Joseph Street, Bristol, Indiana 46507
Permit: M039-31878-00667
Reviewer: JL
Date: May 2012

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Trucks and tractors (entering plant) (one-way trip)	12.0	1.0	12.0	15.0	180.0	18.5	0.004	0.042	15.35
Trucks and tractors (leaving plant) (one-way trip)	12.0	1.0	12.0	15.0	180.0	18.5	0.004	0.042	15.35
Totals			24.0		360.0			0.1	30.7

Average Vehicle Weight Per Trip = tons/trip
 Average Miles Per Trip = miles/trip

Unmitigated Emission Factor, Ef = $k \cdot (s/12)^a \cdot (W/3)^b$ (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	8.5	8.5	8.5	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	15.0	15.0	15.0	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E \cdot [(365 - P)/365]$ (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, Eext = $E \cdot [(365 - P)/365]$

where P = days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	7.94	2.27	0.23	lb/mile
Mitigated Emission Factor, Eext =	5.22	1.49	0.15	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Trucks and tractors (entering plant) (one-way trip)	0.06	0.02	0.00	0.04	0.01	0.00
Trucks and tractors (leaving plant) (one-way trip)	0.06	0.02	0.00	0.04	0.01	0.00
Totals	0.1219	0.0348	0.0035	0.0801	0.0229	0.0023

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particulate Matter (<2.5 um)
 PTE = Potential to Emit



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

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

TO: Derick Sipress
D&S Industries, Inc.
PO Box 870
Bristol, IN 46507

DATE: September 5, 2012

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

SUBJECT: Final Decision
MSOP - Renewal
039 - 31878 - 00667

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:
Tom Sipress, President
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.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Thomas W. Easterly
Commissioner

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September 5, 2012

TO: Bristol Washington Township Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: D&S Industries, Inc.
Permit Number: 039 - 31878 - 00667

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 9/5/2012 D & S Industries, Inc 039 - 31878 - 00667 final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Derick Sipress D & S Industries, Inc PO Box 870 Bristol IN 46507 (Source CAATS) Via confirmed delivery									
2		Tom Sipress President D & S Industries, Inc PO Box 870 Bristol IN 46507 (RO CAATS)									
3		Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 (Health Department)									
4		Bristol Town Council and Town Manager P.O. Box 122 Bristol IN 46507 (Local Official)									
5		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 (Local Official)									
6		Bristol Washington Township Public Library 505 West Vistula Street Bristol IN 46507-0789 (Library)									
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