



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: September 12, 2007
RE: Tuthill Drive Systems / 181-24759-00031
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06



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100 North Senate Avenue
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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Tuthill Drive Systems
9098 West 800 South
Brookston, Indiana 47923**

(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.: M181-24759-00031	
Issued by: <i>Original document signed by</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 12, 2007 Expiration Date: September 12, 2012

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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 hydraulic axle assembly and painting.

Source Address:	9098 West 800 South, Brookston, Indiana 47923
Mailing Address:	PO Box 600, Brookston, Indiana 47923
General Source Phone Number:	219-279-2801
SIC Code:	7692
County Location:	White
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) auxiliary paint booth, identified as AUX1, equipped with air assisted airless spray guns and dry panel filters for particulate matter control, exhausted through stack 5S1A in Building 5, with a capacity of four (4) metal hydraulic axle assemblies per hour.
- (b) One (1) paint booth main, identified as PBM, formerly identified as main paint booth (MB), equipped with air assisted airless spray guns and dry panel filters for particulate matter control, exhausted through stack 4S3A in Building 4, with a capacity of two (2) metal hydraulic axle assemblies per hour.
- (c) One (1) propane-fired paint booth prime coat curing oven, identified as PBPCCO, formerly identified as main booth curing oven (MBCO), exhausted through stack 4S4A in Building 4 with a heat input capacity of 0.8 MMBtu/hr.
- (d) One (1) propane-fired evaporator, identified as EVAP1, exhausted through stack 4S6A in Building 4 with a heat input capacity of 0.395 MMBtu/hr.
- (e) One (1) propane-fired space heater, identified as SH1, exhausted through stack 2S3A in Building 2 with a heat input capacity of 0.130 MMBtu/hr.
- (f) One (1) propane-fired dry off oven, identified as DO1, exhausted through stack 4S1A in Building 4 with a heat input capacity of 0.8 MMBtu/hr.
- (g) Seven (7) propane-fired space heaters, identified as CRVT2:#1 - #7, exhausted through stack 5S2A in Building 5 with a heat input capacity of 0.42 MMBtu/hr each.
- (h) Eight (8) propane-fired space heaters, identified as CRVT3:#1 - #8, exhausted through stack 5S3A in Building 5 with a heat input capacity of 0.48 MMBtu/hr each.
- (i) Eight (8) propane-fired space heaters, identified as CRVT4:#1 - #8, exhausting to stack 5S4A in Building 5 with a heat input capacity of 0.48 MMBtu/hr each.
- (j) Two (2) propane-fired space heaters, identified as MSH1 and MSH2, exhausted through

stacks 2S1A and 2S2A in Building 5 with a heat input capacity of 0.13 MMBtu each.

- (k) One (1) propane-fired space heater, identified as REZ1, exhausted through stack 4S4A in Building 4 with a heat input capacity of 0.40 MMBtu/hr.
- (l) One (1) propane-fired space heater, identified as REZ2, exhausted through stack 5S8A in Building 5 with a heat input capacity of 0.40 MMBtu/hr.
- (m) One (1) propane-fired space heater, identified as REZ3, exhausted through stack 5S5A in Building 5 with a heat input capacity of 0.40 MMBtu/hr.
- (n) One (1) propane-fired immersion tube heater, identified as WTS1B, exhausted through stack 4S1A in Building 4 with a heat input capacity of 1.50 MMBtu/hr.
- (o) One (1) wash tank washer entrance and exit, identified as WTEN and WTEX, exhausted through stacks 4S1B and 4S1C, respectively, in Building 4 with a capacity of 8.68 lbs/hr of washing solution, total.
- (p) One (1) cold cleaner degreaser for drive assemblies, identified as PWCD1, constructed after July 1, 1990, exhausted through stack 5S7A in Building 5 with a capacity of 4.91 gal/day of mineral spirits.
- (q) One (1) cold cleaner degreaser for hose assemblies, identified as HACD1, constructed before July 1, 1990, but after January 1, 1980, exhausted through stack 5S6A in Building 5 with a capacity of 1.68 gal/day of mineral spirits.
- (r) Twenty-nine (29) Metal Inert Gas (MIG) welding stations:
 - (1) Twenty-three (23) MIG welding stations, identified as MIG1 - MIG16, MIG20, MIG23 - MIG26, and MIG29 - MIG30, located in Building 5 with a capacity of 5 lbs/hr of welding wire;
 - (2) Four (4) MIG welding stations, identified as MIG31 - MIG34, located in Building 5 with a capacity of 3.5 lbs/hr of welding wire; and
 - (3) Two (2) MIG welding stations, identified as MIG18 and MIG19, located in Building 2 with a capacity of 5 lbs/hr of welding wire.
- (s) One (1) stick welding station, identified as SW1 located in Building 2 with a capacity of 0.53 lbs/hr of welding rod.
- (t) One (1) oxyacetylene flame cutting table, identified as FC1, located in Building 5, with a rate of thirty-six (36) inches per minute at a three (3) inch thickness.
- (u) One (1) laser cutting station, identified as LC1, located in Building 5, with a rate of one hundred (100) inches per minute at a five tenths (0.5) inch thickness.
- (v) One (1) propane-fired paint booth main curing oven, identified as PBMCO, exhausted through stack 4S8A in Building 4 with a heat input capacity of 1.5 MMBtu/hr.
- (w) One (1) paint booth for prime coat, identified as PBPC, equipped with air assisted airless spray guns and dry panel filters particulate matter control, exhausted through stack 4S7A in Building 4 with a capacity of two (2) metal hydraulic axle assemblies per hour.
- (x) One (1) propane-fired radiant space heater, identified as 2S4A, exhausted through stack 2S4A in Building 4; heat input capacity of 25,000 Btu/hr.

- (y) One (1) propane-fired make up air unit for the primer booth, identified as 4V3A, exhausted through vent 4V3A; heat input capacity of 2 MMBtu/hr.

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, M181-24759-00031, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, 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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251
- (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.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M181-24759-00031 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.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ 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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

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

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

B.15 Source Modification Requirement

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

B.16 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

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

B.19 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 5-1-3 (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 or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 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. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

- (f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ 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 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 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.13 Response to Excursions or Exceedances

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

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

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

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

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.15 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.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) 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.
- (e) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) auxiliary paint booth, identified as AUX1, equipped with air assisted airless spray guns and dry panel filters for particulate matter control, exhausted through stack 5S1A in Building 5, with a capacity of four (4) metal hydraulic axle assemblies per hour.
- (b) One (1) paint booth main, identified as PBM, formerly identified as main paint booth (MB), equipped with air assisted airless spray guns and dry panel filters for particulate matter control, exhausted through stack 4S3A in Building 4, with a capacity of two (2) metal hydraulic axle assemblies per hour.
- (c) One (1) paint booth for prime coat, identified as PBPC, equipped with air assisted airless spray guns and dry panel filters particulate matter control, exhausted through stack 4S7A in Building 4 with a capacity of two (2) metal hydraulic axle assemblies per hour.

(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]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the following conditions are applicable to the three (3) surface coating facilities, identified as paint booth main (PBM), paint booth prime coat (PBPC), and auxiliary paint booth (AUX1):

- (a) The volatile organic compound (VOC) content of the coating delivered to the applicator at the surface coating facilities shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried and forced warm air dried coatings.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate from the surface coating processes, identified as paint booth main (PBM), paint booth prime coat (PBPC), and auxiliary paint booth (AUX1), shall be controlled by dry particulate filters and the Permittee shall operate the control device in accordance with manufacturer's specifications.

The dry particulate filters shall be in operation at all times the paint booths are in operation, in order to comply with this rule.

If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the dry particulate filters and do either of the following no later than four (4) hours after such observation:

- (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

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 of the control device, or change in the operations, so that the overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.3 Particulate Matter (PM)

The dry particulate filters shall be in operation at all times the surface coating facilities are in operation, in order to comply with Condition D.1.2.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these emissions units and any control devices.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds [326 IAC 8-1-2]

Compliance with the VOC content limit in condition D.1.1 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = \frac{\sum C \times U}{\sum U}$$

Where: A is the volume weighted average in pounds VOC per gallon less water as applied;
C is the VOC content of the coating in pounds VOC per gallon less water as applied; and
U is the usage rate of the coating in gallons per day.

IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.1.6 Record Keeping Requirement

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) of "as applied" coatings as necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coating used for each day.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with Condition D.1.2.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) cold cleaner degreaser for drive assemblies, identified as PWCD1, constructed after July 1, 1990, exhausted through stack 5S7A in Building 5 with a capacity of 4.91 gal/day of mineral spirits.
- (b) One (1) cold cleaner degreaser for hose assemblies, identified as HACD1, constructed before July 1, 1990, but after January 1, 1980, exhausted through stack 5S6A in Building 5 with a capacity of 1.68 gal/day of mineral spirits.

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

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

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

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), the Permittee shall adhere to the following requirements for the operation of the two (2) cold cleaner degreasers, identified as PWCD1 and HACD1:

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

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

Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure the following control equipment requirements are met for the one (1) cold cleaner degreaser for drive assemblies, identified as PWCD1:

- (a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (1) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (2) the solvent is agitated; or
 - (3) the solvent is heated.
- (b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury

or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (1) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (2) A water cover when solvent used is insoluble in, and heavier than, water.
 - (3) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

The Permittee shall ensure that the following operating requirements are met:

- (f) Close the cover whenever articles are not being handled in the degreaser.
- (g) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (h) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Twenty-nine (29) Metal Inert Gas (MIG) welding stations:
 - (1) Twenty-three (23) MIG welding stations, identified as MIG1 - MIG16, MIG20, MIG23 - MIG26, and MIG29 - MIG30, located in Building 5 with a capacity of 5 lbs/hr of welding wire;
 - (2) Four (4) MIG welding stations, identified as MIG31 - MIG34, located in Building 5 with a capacity of 3.5 lbs/hr of welding wire; and
 - (3) Two (2) MIG welding stations, identified as MIG18 and MIG19, located in Building 2 with a capacity of 5 lbs/hr of welding wire.
- (b) One (1) stick welding station, identified as SW1 located in Building 2 with a capacity of 0.53 lbs/hr of welding rod.
- (c) One (1) oxyacetylene flame cutting table, identified as FC1, located in Building 5, with a rate of thirty-six (36) inches per minute at a three (3) inch thickness.
- (d) One (1) laser cutting station, identified as LC1, located in Building 5, with a rate of one hundred (100) inches per minute at a five tenths (0.5) inch thickness.

(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.3.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the welding and metal cutting operations shall not exceed the allowable particulate emission rate based on 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:

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

Where E = rate of emissions in pounds per hour and
 P = process weight rate in tons per hour.

- (1) The allowable PM emission rate for the twenty-nine (29) MIG welding stations, known as MIG1 - MIG16, MIG18 - MIG20, MIG23 - MIG26, and MIG29 - MIG34, shall not exceed 17.4 pounds of PM per hour when operating at a process weight rate of 8.68 tons per hour, total.
- (2) The allowable PM emission rate for the one (1) stick welder, known as SW1, shall not exceed 4.40 pounds of PM per hour when operating at a process weight rate of 1.11 tons per hour.

- (b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the welding and metal cutting operations shall not exceed the allowable particulate emission rate based on the following equation:

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

$$E = 55.0P^{0.11} - 40$$

Where E = rate of emissions in pounds per hour and
 P = process weight rate in tons per hour.

- (1) The allowable PM emission rate for the one (1) laser cutting station, known as LC1, shall not exceed 42.7 pounds of PM per hour when operating at a process weight rate of 40.8 tons per hour.
- (2) The allowable PM emission rate for the one (1) flame cutting station, known as FC1, shall not exceed 50.0 pounds of PM per hour when operating at a process weight rate of 88.0 tons per hour.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Tuthill Drive Systems
Address:	9098 West 800 South
City:	Brookston, Indiana 47923
Phone #:	219-279-2801
MSOP #:	M181-24759-00031

I hereby certify that Tuthill Drive Systems is :

still in operation.

no longer in operation.

I hereby certify that Tuthill Drive Systems is :

in compliance with the requirements of MSOP M181-24759-00031.

not in compliance with the requirements of MSOP M181-24759-00031.

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

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

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865**

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

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

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

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

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

COMPANY: _____ 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**

**MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION**

Source Name: Tuthill Drive Systems
Source Address: 9098 West 800 South, Brookston, IN 47923
Mailing Address: PO Box 600, Brookston, IN 47923
MSOP No.: M181-24759-00031

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

Please check what document is being certified:

- Annual Compliance Notification
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

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

Addendum to the
Technical Support Document for a Part 70 Operating Permit Renewal

Source Name: Tuthill Drive Systems
Source Location: 9098 West 800 South, Brookston, Indiana 47923
County: White
SIC Code: 7692
Operation Permit No.: M181-24759-00031
Permit Reviewer: Stephanie Wilkerson

On August 3, 2007, the Office of Air Quality (OAQ) had a notice published in the Monticello Herald Journal in Monticello, Indiana, stating that Tuthill Drive Systems had applied for a Minor Source Operating Permit renewal for a stationary metal hydraulic axle assembly and painting source. The notice also stated that OAQ proposed to issue a permit renewal for this operation and provided information on how the public could review the proposed permit renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit renewal should be issued as proposed.

No comments from the source or the public were received regarding the issuance of this permit renewal. However, one change will be made based on OAQ review.

Changes to the permit are noted as follows: ~~struck~~ language has been deleted; **bold** language has been added. The Table of Contents has been modified to reflect these changes.

OAQ Change:

After further review, the OAQ has determined that permit Section D.1.6(b) be changed as follows:

D.1.6 Record Keeping Requirement

...

- (b) To document compliance with Condition D.1.2, the Permittee shall ~~maintain a log of weekly overspray observations, daily and monthly inspections.~~ **maintain records in accordance with Condition D.1.2.**

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:	Tuthill Drive Systems
Source Location:	9098 West 800 South, Brookston, Indiana 47923
County:	White
SIC Code:	7692
Permit Renewal No.:	M181-24759-00031
Permit Reviewer:	Stephanie Wilkerson

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Tuthill Drive Systems relating to the operation of a metal hydraulic axle assembly and painting source.

History

On May 10, 2007, Tuthill Drive Systems submitted applications to the OAQ requesting to renew its operating permit. Tuthill Drive Systems was issued its first MSOP Renewal on August 12, 2002.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) auxiliary paint booth, identified as AUX1, equipped with air assisted airless spray guns and dry panel filters for particulate matter control, exhausted through stack 5S1A in Building 5, with a capacity of four (4) metal hydraulic axle assemblies per hour.
- (b) One (1) paint booth main, identified as PBM, formerly identified as main paint booth (MB), equipped with air assisted airless spray guns and dry panel filters for particulate matter control, exhausted through stack 4S3A in Building 4, with a capacity of two (2) metal hydraulic axle assemblies per hour.
- (c) One (1) propane-fired paint booth prime coat curing oven, identified as PBPCCO, formerly identified as main booth curing oven (MBCO), exhausted through stack 4S4A in Building 4 with a heat input capacity of 0.8 MMBtu/hr.
- (d) One (1) propane-fired evaporator, identified as EVAP1, exhausted through stack 4S6A in Building 4 with a heat input capacity of 0.395 MMBtu/hr.
- (e) One (1) propane-fired space heater, identified as SH1, exhausted through stack 2S3A in Building 2 with a heat input capacity of 0.130 MMBtu/hr.
- (f) One (1) propane-fired dry off oven, identified as DO1, exhausted through stack 4S1A in Building 4 with a heat input capacity of 0.8 MMBtu/hr.
- (g) Seven (7) propane-fired space heaters, identified as CRVT2:#1 - #7, exhausted through stack 5S2A in Building 5 with a heat input capacity of 0.42 MMBtu/hr each.
- (h) Eight (8) propane-fired space heaters, identified as CRVT3:#1 - #8, exhausted through stack 5S3A in Building 5 with a heat input capacity of 0.48 MMBtu/hr each.
- (i) Eight (8) propane-fired space heaters, identified as CRVT4:#1 - #8, exhausting to stack 5S4A in Building 5 with a heat input capacity of 0.48 MMBtu/hr each.
- (j) Two (2) propane-fired space heaters, identified as MSH1 and MSH2, exhausted through stacks 2S1A and 2S2A in Building 5 with a heat input capacity of 0.13 MMBtu each.

- (k) One (1) propane-fired space heater, identified as REZ1, exhausted through stack 4S4A in Building 4 with a heat input capacity of 0.40 MMBtu/hr.
- (l) One (1) propane-fired space heater, identified as REZ2, exhausted through stack 5S8A in Building 5 with a heat input capacity of 0.40 MMBtu/hr.
- (m) One (1) propane-fired space heater, identified as REZ3, exhausted through stack 5S5A in Building 5 with a heat input capacity of 0.40 MMBtu/hr.
- (n) One (1) propane-fired immersion tube heater, identified as WTS1B, exhausted through stack 4S1A in Building 4 with a heat input capacity of 1.50 MMBtu/hr.
- (o) One (1) wash tank washer entrance and exit, identified as WTEN and WTEX, exhausted through stacks 4S1B and 4S1C, respectively, in Building 4 with a capacity of 8.68 lbs/hr of washing solution, total.
- (p) One (1) cold cleaner degreaser for drive assemblies, identified as PWCD1, constructed after July 1, 1990, exhausted through stack 5S7A in Building 5 with a capacity of 4.91 gal/day of mineral spirits.
- (q) One (1) cold cleaner degreaser for hose assemblies, identified as HACD1, constructed before July 1, 1990, but after January 1, 1980, exhausted through stack 5S6A in Building 5 with a capacity of 1.68 gal/day of mineral spirits.
- (r) Twenty-nine (29) Metal Inert Gas (MIG) welding stations:
 - (1) Twenty-three (23) MIG welding stations, identified as MIG1 - MIG16, MIG20, MIG23 - MIG26, and MIG29 - MIG30, located in Building 5 with a capacity of 5 lbs/hr of welding wire;
 - (2) Four (4) MIG welding stations, identified as MIG31 - MIG34, located in Building 5 with a capacity of 3.5 lbs/hr of welding wire; and
 - (3) Two (2) MIG welding stations, identified as MIG18 and MIG19, located in Building 2 with a capacity of 5 lbs/hr of welding wire.
- (s) One (1) stick welding station, identified as SW1 located in Building 2 with a capacity of 0.53 lbs/hr of welding rod.
- (t) One (1) oxyacetylene flame cutting table, identified as FC1, located in Building 5, with a rate of thirty-six (36) inches per minute at a three (3) inch thickness.
- (u) One (1) laser cutting station, identified as LC1, located in Building 5, with a rate of one hundred (100) inches per minute at a five tenths (0.5) inch thickness.
- (v) One (1) propane-fired paint booth main curing oven, identified as PBMCO, exhausted through stack 4S8A in Building 4 with a heat input capacity of 1.5 MMBtu/hr.
- (w) One (1) paint booth for prime coat, identified as PBPC, equipped with air assisted airless spray guns and dry panel filters particulate matter control, exhausted through stack 4S7A in Building 4 with a capacity of two (2) metal hydraulic axle assemblies per hour.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source also consists of the following emission units that were constructed and/or is operating without a permit:

- (a) One (1) propane-fired radiant space heater, identified as 2S4A, exhausted through stack 2S4A in Building 4; heat input capacity of 25,000 Btu/hr; and
- (b) One (1) propane-fired make up air unit for the primer booth, identified as 4V3A, exhausted through vent 4V3A; heat input capacity of 2 MMBtu/hr.

Emission Units and Pollution Control Equipment Removed From the Source

- (a) Three (3) metal inert gas (MIG) welding stations, identified as MIG17, MIG22, and MIG28, with a capacity of 5 lbs/hr of welding wire have been removed from the source since the issuance of the MSOP 181-16107-00031.

Existing Approvals

Tuthill Transport Technologies was issued an MSOP (181-16107-00031) on August 12, 2002. No amendments or modifications were made to the issued permit prior to this renewal.

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

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
2S1A	Modine Space Heater #1 (MSH 1)	16	0.5	23	100
2S2A	Modine Space Heater #2 (MSH 2)	16	0.5	23	100
2S3A	Space Heater (SH1)	16	0.5	23	100
2S4A	Space Heater (2S4A)				
4S1A	Wash Tank Stage I Burner (WTS1B)	27	0.67	616	714
4S1B	Wash Tank Entrance (WTEN)	27	2.0	4,766	85
4S1C	Wash Tank Washer Exit (WTEX)	27	2.0	4,869	85
4S2A	Dryoff Oven 1 (DO1)	27	0.5	348	165
4S3A	Paint Booth Main (PBM)	27	2.8	12,800	68
4S4A	Paint Booth Prime Coat Cure Oven (PBCCO)	30	0.5	307	160
4S5A	REZNOR Space Heater #1 (REZ 1)	27	0.83	71	100
4S6A	Evaporator (EVAP1)	27	0.42	374	100
4S7A	Paint Booth Prime Coat (PBPC)	27	2.8	12,800	68
4S8A	Paint Booth Main Cure Oven (PBMCO)	30	0.5	1,100	200
5S1A	Paint Booth Auxiliary (AUX)	30	2.8	7,040	72
5S2A	Space Heater Tube 2 Units 1 - 7 (CRVT2 #1 - #7)	16	0.83	522	100
5S3A	Space Heater Tube 3 Units 1 - 8 (CRVT3 #1 - #8)	16	0.83	682	100
5S4A	Space Heater Tube 4 Units 1 - 8 (CRVT4 #1 - #8)	16	0.83	682	100
5S5A	REZNOR Space Heater #3 (REZ 3)	30	0.83	71	100
5S6A	Hose Assembly Cold Degreaser (HACD1)	30	1.0	500	75
5S7A	Parts Washer Cold Degreaser (PWCD1)	30	1.0	1,000	75
5S8A	REZNOR Space Heater #2 (REZ 2)	16	0.83	71	100

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in White County

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Attainment
SO ₂	Attainment
NO _x	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) White County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.
- (b) 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 emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone. White County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_x 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) White 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. See the State Rule Applicability – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	18.14
PM-10	18.14
SO ₂	0.1
VOC	13.7
CO	3.0
NO _x	17.7

HAPs	tons/year
Manganese Compounds	0.39
Total	0.39

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an Minor Source Operating Permit.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is not subject to the provisions of 326 IAC 2-7.
- (c) The source has chosen to remain regulated pursuant to 326 IAC 6.1 (Minor Source Operating Permit Program), rather than by 326 IAC 5.5 (Registrations), for potential future growth.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

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 (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Surface Coating	0.14	0.14	-	4.64	-	-	-
Cold Cleaner Degreasing	-	-	-	8.66	-	-	-
Welding	10.78	10.78	-	-	-	-	0.39
Propane Space Heaters	0.4	0.4	0.1	0.3	1.9	11.3	-
Propane Ovens	0.1	0.1	-	0.1	0.5	2.8	-
Propane Make-Up Air Unit	0.1	0.1	-	-	0.3	1.8	-
Propane-Fired Evaporator	-	-	-	-	0.1	0.4	-
Propane Tube Heater	-	-	-	-	0.2	1.4	-
Total Emissions	11.52	11.52	0.1	13.7	3	17.7	0.39

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

The following federal rules are applicable to the source:

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (b) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart T, because this source does not use halogenated solvents in the two (2) cold cleaner degreasers, PWCD1 and HACD1.
- (c) The process heaters at this source are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart DDDD, because this source is not a major source of Hazardous Air Pollutants (HAPs).

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is located in White County (attainment area for all pollutants), and the potential to emit of each criteria pollutant is, and was at initial construction, less than 250 tons per year (not 1 of 28 source categories). Therefore, this source is not subject to the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration).

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

The operation of this source will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in White County, is not required to operate under a Part 70 permit, and has potential lead emissions less than five (5) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

State Rule Applicability – Individual Facilities

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate from the surface coating processes, identified as paint booth main (PBM), paint booth prime coat (PBPC), and auxiliary paint booth (AUX1), shall be controlled by dry particulate filters and the Permittee shall operate the control device in accordance with manufacturer's specifications.

The dry particulate filters shall be in operation at all times the paint booths are in operation, in order to comply with this rule.

If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the dry particulate filters and do either of the following no later than four (4) hours after such observation:

- (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

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 of the control device, or change in the operations, so that the overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) The allowable PM emission rate for the twenty-nine (29) MIG welding stations, known as MIG1 - MIG16, MIG18 - MIG20, MIG23 - MIG26, and MIG29 - MIG34, shall not exceed 17.4 pounds of PM per hour when operating at a process weight rate of 8.68 tons per hour, total. The potential to emit of the twenty-nine (29) MIG welding stations is 1.39 pounds of PM per hour. Therefore, the twenty-nine (29) MIG welders are able to comply with this limit. This limit is based on 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:

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

Where E = rate of emissions in pounds per hour and
 P = process weight rate in tons per hour.

Pursuant to 326 IAC 6-3-1(b)(9), the twenty-nine (29) MIG welders are subject to this limit because the maximum daily consumption of welding material is greater than 625 pounds.

- (c) The allowable PM emission rate for the one (1) stick welder, known as SW1, shall not exceed 4.40 pounds of PM per hour when operating at a process weight rate of 1.11 tons per hour. The potential to emit of SW1 is 0.2 pounds of PM per hour. Therefore, SW1 is able to comply with this limit. This limit is based on 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:

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

Where E = rate of emissions in pounds per hour and
 P = process weight rate in tons per hour.

Pursuant to 326 IAC 6-3-1(b)(9), the one (1) stick welder is subject to this limit because the maximum daily consumption of welding material is greater than 625 pounds.

- (d) The allowable PM emission rate for the one (1) laser cutting station, known as LC1, shall not exceed 42.7 pounds of PM per hour when operating at a process weight rate of 40.8 tons per hour. The potential to emit of LC1 is 0.487 pounds of PM per hour. Therefore, LC1 is able to comply with this limit. This limit is based on the following equation:

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

$$E = 55.0P^{0.11} - 40$$

Where E = rate of emissions in pounds per hour and
 P = process weight rate in tons per hour.

Pursuant to 326 IAC 6-3-1(b)(10), the one (1) laser cutting station is subject to this limit because the maximum daily cut rate of material is greater than 3,400 inches per hour of one (1) inch thick stock equivalent.

- (e) The allowable PM emission rate for the one (1) flame cutting station, known as FC1, shall not exceed 50.0 pounds of PM per hour when operating at a process weight rate of 88.0 tons per hour. The potential to emit of FC1 is 1.05 pounds of PM per hour. Therefore, FC1 is able to comply with this limit. This limit is based on the following equation:

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

$$E = 55.0P^{0.11} - 40$$

Where E = rate of emissions in pounds per hour and
 P = process weight rate in tons per hour.

Pursuant to 326 IAC 6-3-1(b)(10), the one (1) flame cutting station is subject to this limit because the maximum daily cut rate of material is greater than 3,400 inches per hour of one (1) inch thick stock equivalent.

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

The three (3) paint booths, known as paint booth main (PBM), paint booth prime coat (PBPC), and auxiliary paint booth (AUX1) are subject to 326 IAC 8-2-9 because the paint booths were constructed after July 1990, the potential to emit of VOC is greater than fifteen (15) pounds per day and the surface coating of metal hydraulic drive axle assemblies takes place at these booths.

Therefore, pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at the surface coating facilities, identified as paint booth main (PBM), paint booth prime coat (PBPC), and auxiliary paint booth (AUX1), shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried and forced warm air dried coatings.

The surface coating facilities, identified as paint booth main (PBM), paint booth prime coat (PBPC), and auxiliary paint booth (AUX1), has applicable compliance determination conditions as specified below:

- (a) Compliance with the VOC content limit in condition D.1.1 of this permit shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = \frac{\sum(C \times U)}{\sum U}$$

Where: A is the volume weighted average in pounds VOC per gallon less water as applied;
 C is the VOC content of the coating in pounds VOC per gallon less water as applied; and
 U is the usage rate of the coating in gallons per day.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the information submitted by the source and calculations made, the paint booths are able to comply with this requirement.

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

The two (2) cold cleaner degreasers, known as HACD1 and PWCD1, were constructed after January 1, 1980 in White County. Therefore, the requirements of 326 IAC 8-3-2 are applicable.

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operation), the owner or operator of a cold cleaning facility shall:

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

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

The hose assembly cold degreaser, identified as HACD1, was constructed before July 1, 1990 in White County. Therefore, the requirements of 326 IAC 8-3-5 do not apply.

The cold cleaner degreaser for drive assemblies, identified as PWCD1, was constructed after July 1, 1990 in White County. Therefore, the requirements of 326 IAC 8-3-5 are applicable.

- (a) Pursuant to 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

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

The Permittee shall ensure that the following operating requirements are met:

- (6) Close the cover whenever articles are not being handled in the degreaser.
- (7) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (8) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal 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 10, 2007. Additional information was received on May 30, 2007 and July 27, 2007.

Conclusion

The operation of this metal hydraulic axle assembly and painting source shall be subject to the conditions of the attached MSOP Renewal No. 181-24759-00031.

Appendix A: Emission Calculations

VOC Emission Calculations

Degreasing Operations

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Plt ID: 181-00031
Permit Reviewer: Stephanie Wilkerson
Date: May 31, 2007

Degreasing Operations	Solvent Used	Maximum Usage (lbs/year)	Weight % VOC	VOC Emissions (ton/yr)
Parts Wash Cold Degreaser	Mineral Spirits	13323.00	100.00%	6.66
Hose Assembly Cold Degreaser	Mineral Spirits	4000.00	100.00%	2.00

Total Potential Emissions

8.66

METHODOLOGY

VOC emission rate (tpy) = Material Usage (lbs/hr) * Weight % VOC * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Pit ID: 181-00031
Reviewer: Stephanie Wilkerson
Date: May 31, 2007

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)(ER70S)	25	5		0.005	0.0003	0.000001	0.000001	0.625	0.038	0.000	0.000125	0.038
Metal Inert Gas (MIG)(EA3K)	25	5		0.005	0.0003	0.000001	0.000001	0.625	0.038	0.000	0.000125	0.038
Metal Inert Gas (MIG)(ER70S)	4	3.5		0.005	0.0003	0.000001	0.000001	0.070	0.004	0.000	0.000014	0.004
Metal Inert Gas (MIG)(EA3K)	4	3.5		0.005	0.0003	0.000001	0.000001	0.070	0.004	0.000	0.000014	0.004
Stick (E6011 electrode)	1	0.53		0.038	0.01	0.000005	0.000005	0.020	0.005	0.000	2.65E-06	0.005
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	1	3	36	0.1622	0.0005	0.0001	0.0003	1.051	0.001	0.000	0.000	0.001
Laser Cutting	1	0.5	100	0.1622	0.0005	0.0001	0.0003	0.487	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								2.46				0.09
Potential Emissions lbs/day								59.07				2.15
Potential Emissions tons/year								10.78				0.39

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" t

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lb

Appendix A: Emission Calculations
LPG-Propane - Ovens
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Plt ID: 181-00031
Reviewer: Stephanie Wilkerson
Date: May 31, 2007

Heat Input Capacity Potential Throughput SO2 Emission factor = 0.10 x S
MMBtu/hr kgals/year S = Sulfur Content = 1.50 grains/100ft³

3.10 296.79

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2 (0.10S)	NOx	VOC **TOC value	CO
Potential Emission in tons/yr	0.6	0.6	0.2	19.0	0.5	3.2
	0.1	0.1	0.0	2.8	0.1	0.5

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Ovens	Rating in MMBtu/hr
PBMCO	1.5
PBPCCO	0.8
DO1	0.8
Total	3.1

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

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

Appendix A: Emission Calculations

LPG-Propane - Space Heaters

(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Plt ID: 181-00031
Reviewer: Stephanie Wilkerson
Date: May 31, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO2 Emission factor = 0.10 x S
 S = Sulfur Content = 1.50 grains/100ft³

12.46

1192.89

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2 (0.10S)	NOx	VOC **TOC value	CO
	0.6	0.6	0.2	19.0	0.5	3.2
Potential Emission in tons/yr	0.4	0.4	0.1	11.3	0.3	1.9

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

<u>Space Heaters</u>	<u>Rating in MMBtu/hr</u>
REZ 1 -3	1.2
MSH1 and MSH2	0.26
CRVT2 #1 - #7	2.94
CRVT3 #1 - #8	3.84
CRVT4 #1 - #8	3.84
SH1	0.13
2S4A	0.25
Total	12.46

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

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

Appendix A: Emission Calculations

LPG-Propane - Make-Up Air Unit
 (Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Plt ID: 181-00031
Reviewer: Stephanie Wilkerson
Date: May 31, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO2 Emission factor = 0.10 x S
 S = Sulfur Content = 1.50 grains/100ft³

2.00

191.48

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2 (0.10S)	NOx	VOC **TOC value	CO
Potential Emission in tons/yr	0.6	0.6	0.2	19.0	0.5	3.2
	0.1	0.1	0.0	1.8	0.0	0.3

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

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

Appendix A: Emission Calculations

LPG-Propane - Tube Heater

(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Plt ID: 181-00031
Reviewer: Stephanie Wilkerson
Date: May 31, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO2 Emission factor = 0.10 x S
 S = Sulfur Content = 1.50 grains/100ft³

1.50

143.61

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2 (0.10S)	NOx	VOC **TOC value	CO
Potential Emission in tons/yr	0.0	0.0	0.0	1.4	0.0	0.2

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

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

Appendix A: Emission Calculations

LPG-Propane - Evaporator

(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: Tuthill Drive Systems
Address City IN Zip: 9098 West 800 South, Brookston, IN 47923
Permit Number: M181-24759-00031
Plt ID: 181-00031
Reviewer: Stephanie Wilkerson
Date: May 31, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO2 Emission factor = 0.10 x S
 S = Sulfur Content = 1.50 grains/100ft³

0.40

37.82

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2 0.2 (0.10S)	NOx 19.0	VOC 0.5 **TOC value	CO 3.2
Potential Emission in tons/yr	0.0	0.0	0.0	0.4	0.0	0.1

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

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