

Mr. Joseph Ruggier
Hahn Equipment Company
1625 North Garvin Street
Evansville, Indiana 47711

Re: **163-11982**
First Significant Source Modification to:
Part 70 Permit No.: T163-7624-00007

Dear Mr. Ruggier:

Hahn Equipment Company was issued a Part 70 Permit on July 13, 1999 for the operation of their multi-purpose golf course grounds-keeping equipment and consumer products plant which includes product surface coating, assembly, and shipment. A letter requesting changes to this permit was received on March 7, 2000. Pursuant to the provisions of 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) one (1) spray paint booth, identified as SB-1, using a maximum of 0.24 gallons of applied primer or 0.40 gallons of applied top coat per hour, utilizing either airless electrostatic or high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausting through one (1) stack identified as P-01.

(Note: This facility replaces existing spray paint booth SB-1 which had one (1) spray paint booth, identified as SB-1, equipped with an overhead conveyor and closing doors at both ends, with a maximum capacity of coating one (1) metal frame per hour, utilizing airless electrostatic application with dry filters for particulate control, and exhausted through one (1) stack (S/V ID P-01)).

- (b) one (1) prime coat spray painting facility, coating a maximum of 3,000 pounds of metal parts per hour using a maximum of 9.38 gallons of applied coating per hour, consisting of:
 - (1) one (1) spray paint booth, identified as SB-4, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-04; and
 - (2) one (1) spray paint booth, identified as SB-5, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-05.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are listed below. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

1. Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings delivered to the applicators shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried and forced warm air dried coatings.

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.

2. Particulate Matter (PM) [326 IAC 6-3-2(c)]
Pursuant to 326 IAC 6-3-2 (c) the PM overspray from the surface coating facilities shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

3. New Source Toxics Control [326 IAC 2-4.1-1]
The hazardous air pollutant (HAP) usage at the prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5, shall be limited such that single HAP usage is limited to less than 10 tons per twelve (12) consecutive month period, and total combined HAP usage is limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply to the facility.
4. PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]
The potential emissions of volatile organic compounds (VOC) attributable to the modification are less than 250 tons per twelve (12) consecutive month period. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply. Any change or modification which may increase VOC usage to 250 tons per twelve (12) consecutive month, or greater, shall require OAM's prior approval before such change can take place.
5. Preventive Maintenance Plan [326 IAC 2-7-5(13)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each facility and any control devices.
6. Testing Requirements [326 IAC 2-7-6(1),(6)]
The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit in Operating Condition 1, or the PM limits in Operating Condition 2, or the HAP limits in Operating Condition 3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.
7. Volatile Organic Compounds (VOC)
Compliance with the VOC usage limitations contained in Operating Condition 1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
8. Particulate Matter (PM)
The dry filters for PM control shall be in operation at all times when the surface coating facilities are in operation.
9. Monitoring
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (P-01, P-04, P-05) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
10. Record Keeping Requirements
- (a) To document compliance with Operating Condition 1 and 3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and/or the VOC and HAP emission limits established in Operating Condition 1 and 3.
 - (1) The amount, and the VOC and individual HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) 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 month(s) of use;
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC, individual HAP, and combined HAPs usage for each month; and
 - (6) The weight of VOCs, individual HAP, and combined HAPs emitted for each compliance period.
 - (b) To document compliance with Operating Condition 8 and 9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
 - (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

11. Reporting Requirements

A quarterly summary of the information to document compliance with Operating Condition 3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Operation of the equipment listed in this Significant Source Modification 163-11982 cannot commence until the Administrative Amendment No. 163-12149-00007, which will incorporate these limitations into the Part 70 operating permit, has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Michael Hirtler at (973) 575-2555, extension 3229.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

MH / EVP

c: File - Vanderburgh County
Evansville Environmental Protection Agency
U.S. EPA, Region V
Vanderburgh County Health Department
Air Compliance Section Inspector - Dave Holder
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION
 and the
 EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

Part 70 Quarterly Report

Source Name: Hahn Equipment Company
 Source Address: 1625 N. Garvin Street, Evansville, Indiana 47711
 Mailing Address: 1625 N. Garvin Street, Evansville, Indiana 47711
 Part 70 Permit No.: T163-7624-00007
 Facility: Prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5
 Parameter: Single and Combined Hazardous Air Pollutants (HAPs)
 Limit: The hazardous air pollutant (HAP) usage shall be limited such that single HAP usage is limited to less than 10 tons per twelve (12) consecutive month period, and total combined HAP usage is limited to less than 25 tons per twelve (12) consecutive month period.

YEAR: _____

Month	HAP Usage This Month (tons)		HAP Usage Previous 11 Months (tons)		HAP Usage 12 Month Total (tons)	
	Single HAP	Combined HAPs	Single HAP	Combined HAPs	Single HAP	Combined HAPs
Month 1						
Month 2						
Month 3						

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

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

A certification is not required for this report.

**PART 70 OPERATING PERMIT
OFFICE OF AIR MANAGEMENT
and the
Evansville Environmental Protection Agency**

**Hahn Equipment Company
1625 N. Garvin Street
Evansville, IN 47711**

(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 in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T163-7624-00007	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 13, 1999

First Significant Source Modification 163-11982	Pages Affected: 3, 4, 4a, 30, 30a, 31, 32, 36a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

C.12 Monitoring Methods [326 IAC 3]

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

- C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

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

- C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-6] [326 IAC 2-7-19]
- C.17 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

Stratospheric Ozone Protection

- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - Three (3) Coating Facilities (SB-1, Top Coating Facility, Prime Coating Facility) 30

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

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.1.3 New Source Toxics Control [326 IAC 2-4.1-1]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.5 Testing Requirements [326 IAC 2-7-6(1)]
- D.1.6 Volatile Organic Compounds (VOC)

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

- D.1.7 Particulate Matter (PM)
- D.1.8 Monitoring

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

- D.1.9 Record Keeping Requirements
- D.1.10 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Insignificant Activities 33

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

- D.1.1 Particulate Matter (PM) [326 IAC 4-2]

Certification Form 34
Emergency/Deviation Occurrence Report 35
Quarterly Report - Prime Coating Facility 36a
Compliance Report Form 37

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and the Evansville Environmental Protection Agency. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates stationary source for the surface coating, assembly, and shipment of multi-purpose golf course grounds-keeping equipment and consumer products.

Responsible Official: Mr. Jon Grimmer
Source Address: 1625 N. Garvin St., Evansville, Indiana 47711
Mailing Address: 1625 N. Garvin St., Evansville, Indiana 47711
SIC Code: 3523
Source Location: Vanderburgh
Source Status: Attainment for all criteria pollutants;
Source Status: Part 70 Permit Program
Minor Source, under PSD;
Major Source, Section 112 of the Clean Air Act

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

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

- (a) one (1) spray paint booth, identified as SB-1, using a maximum of 0.24 gallons of applied primer or 0.40 gallons of applied top coat per hour, utilizing either airless electrostatic or high volume low pressure (HVLP) application with dry filters for particulate control, and exhausted through one (1) stack P-01;

(Note: This facility replaces existing spray paint booth SB-1, which has one (1) spray paint booth, identified as SB-1, equipped with an overhead conveyor and closing doors at both ends, with a maximum capacity of coating one (1) metal frame per hour, utilizing airless electrostatic application with dry filters for particulate control, and exhausted through one (1) stack (S/V ID P-01). As listed, the new booth will retain the same facility identification (i.e., SB-1) as the booth removed from service).

- (b) one (1) top coat spray painting facility, coating a maximum of 3,000 pounds of metal parts per hour using a maximum of 5.04 gallons of applied coating per hour, consisting of:
- (1) one (1) spray paint booth, identified as SB-2, utilizing electrostatic with air assist spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-02; and
- (2) one (1) spray paint booth, identified as SB-3, utilizing electrostatic with air assist spray application with waterwash for particulate control, and exhausted through one (1) stack identified as P-03.

- (c) one (1) prime coat spray painting facility, coating a maximum of 3,000 pounds of metal parts per hour using a maximum of 9.38 gallons of applied coating per hour, consisting of:
 - (1) one (1) spray paint booth, identified as SB-4, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-04; and
 - (2) one (1) spray paint booth, identified as SB-5, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-05.

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

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

- (a) one (1) natural gas fired heat cleaning oven rated at 515,000 Btu per hour, equipped with an afterburner and exhausted through one (1) stack.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - The following surface coating operations

- (a) one (1) spray paint booth, identified as SB-1, using a maximum of 0.24 gallons of applied primer or 0.40 gallons of applied top coat per hour, utilizing either airless electrostatic or high volume low pressure (HVLP) application with dry filters for particulate control, and exhausted through one (1) stack P-01;
- (b) one (1) top coat spray painting facility, coating a maximum of 3,000 pounds of metal parts per hour using a maximum of 5.04 gallons of applied coating per hour, consisting of:
 - (1) one (1) spray paint booth, identified as SB-2, utilizing electrostatic with air assist spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-02; and
 - (2) one (1) spray paint booth, identified as SB-3, utilizing electrostatic with air assist spray application with waterwash for particulate control, and exhausted through one (1) stack identified as P-03.
- (c) one (1) prime coat spray painting facility, coating a maximum of 3,000 pounds of metal parts per hour using a maximum of 9.38 gallons of applied coating per hour, consisting of:
 - (1) one (1) spray paint booth, identified as SB-4, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-04; and
 - (2) one (1) spray paint booth, identified as SB-5, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-05.

Emission Limitations and Standards [326 IAC 2-7-5(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 volatile organic compound (VOC) content of coatings delivered to the applicators at spray paint booth SB-1, the top coat spray painting facility, which includes spray paint booths SB-2 and SB-3, and the prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5, shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried and forced warm air dried coatings.

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(c)]

Pursuant to 326 IAC 6-3-2 (c) the PM overspray from the three (3) surface coating facilities (spray paint booth SB-1, the top coat spray painting facility, which includes spray paint booths SB-2 and SB-3, and the prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5), shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

D.1.3 New Source Toxics Control [326 IAC 2-4.1-1]

The hazardous air pollutant (HAP) usage at the prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5, shall be limited such that single HAP usage is limited to less than 10 tons per twelve (12) consecutive month period, and total combined HAP usage is limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply to the facility.

D.1.4 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

The potential emissions of volatile organic compounds (VOC) attributable to the modification are less than 250 tons per twelve (12) consecutive month period. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply. Any change or modification which may increase VOC usage to 250 tons per twelve (12) consecutive month, or greater, shall require OAM's prior approval before such change can take place.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit in D.1.1, the PM limits in D.1.2, or the HAP limits in D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.1.8 Particulate Matter (PM)

The waterwash and dry filters for PM control shall be in operation at all times when the three (3) surface coating facilities (spray paint booth SB-1, the top coat spray painting facility, which includes spray paint booths SB-2 and SB-3, and the prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5), are in operation.

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (P-01, P-02, P-03, P-04, P-05) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1 and D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and/or the VOC and HAP emission limits established in Condition D.1.1 and Condition D.1.3.
 - (1) The amount, and the VOC and individual HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) 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 month(s) of use;
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The cleanup solvent usage for each month;

- (5) The total VOC, individual HAP, and combined HAPs usage for each month; and
 - (6) The weight of VOCs, individual HAP, and combined HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.8 and D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION
 and the
 EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

Part 70 Quarterly Report

Source Name: Hahn Equipment Company
 Source Address: 1625 N. Garvin Street, Evansville, Indiana 47711
 Mailing Address: 1625 N. Garvin Street, Evansville, Indiana 47711
 Part 70 Permit No.: T163-7624-00007
 Facility: Prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5
 Parameter: Single and Combined Hazardous Air Pollutants (HAPs)
 Limit: The hazardous air pollutant (HAP) usage shall be limited such that single HAP usage is limited to less than 10 tons per twelve (12) consecutive month period, and total combined HAP usage is limited to less than 25 tons per twelve (12) consecutive month period.

YEAR: _____

Month	HAP Usage This Month (tons)		HAP Usage Previous 11 Months (tons)		HAP Usage 12 Month Total (tons)	
	Single HAP	Combined HAPs	Single HAP	Combined HAPs	Single HAP	Combined HAPs
Month 1						
Month 2						
Month 3						

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

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

A certification is not required for this report.

**Indiana Department of Environmental Management
Office of Air Management
and
Evansville Environmental Protection Agency**

**Technical Support Document (TSD) for a
Significant Source Modification to a Part 70 Operating Permit**

Source Background and Description

Source Name:	Hahn Equipment Company
Source Location:	1625 North Garvin Street, Evansville, Indiana 47711
County:	Vanderburgh
SIC Code:	3523
Operation Permit No.:	T163-7624-00007
Operation Permit Issuance Date:	July 13, 1999
Source Modification No.:	SSM 163-11982-00007
Permit Reviewer:	Michael Hirtler / EVP

The Office of Air Management (OAM) has reviewed a modification application from Hahn Equipment Company relating to the construction of the following equipment pursuant to 326 IAC 2-7-10.5:

- (a) one (1) spray paint booth, identified as SB-1, using a maximum of 0.24 gallons of applied primer or 0.40 gallons of applied top coat per hour, utilizing either airless electrostatic or high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausting through one (1) stack identified as P-01.

(Note: This facility replaces existing spray paint booth SB-1, which has one (1) spray paint booth, identified as SB-1, equipped with an overhead conveyor and closing doors at both ends, with a maximum capacity of coating one (1) metal frame per hour, utilizing airless electrostatic application with dry filters for particulate control, and exhausted through one (1) stack (S/V ID P-01). As listed, the new booth will retain the same facility identification (i.e., SB-1) as the booth removed from service).

- (b) one (1) prime coat spray painting facility, coating a maximum of 3,000 pounds of metal parts per hour using a maximum of 9.38 gallons of applied coating per hour, consisting of:
- (1) one (1) spray paint booth, identified as SB-4, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-04; and
 - (2) one (1) spray paint booth, identified as SB-5, utilizing high volume low pressure (HVLP) spray application with dry filters for particulate control, and exhausted through one (1) stack identified as P-05.

Note: In addition to the new equipment, the source has requested that existing spray paint booths SB-2 and SB-3 be re-designated as a single facility dedicated solely to the application of top coat painting (i.e., the top coat spray painting facility). The Part 70 permit will be revised to reflect the new descriptive language for this facility. Additionally, the source has proposed to use a new top coat formulation in this facility. Since this existing coating operation will continue to comply with the Part 70 permit conditions, and since no physical change is occurring to the booths, the coating formula change is not considered as part of the proposed modification.

History

On March 7, 2000, Hahn Equipment Company submitted an application to the OAM requesting a source modification. This first significant source modification will include the installation of two (2) new spray booths that will be considered a single facility dedicated solely to prime coating, plus the replacement and relocation of existing spray paint booth SB-1. The replacement facility will retain the SB-1 identification and will continue to apply either primer or a new top coat formulation. Hahn Equipment Company was issued its Part 70 operating permit on July 14, 1999.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

The source was issued a Part 70 Operating Permit (T163-7624-00007) on July 13, 1999. Since this date, the source has received no additional approvals.

Equipment removed from source covered under Part 70 Operating Permit (T163-7624-00007), issued July 13, 1999:

- (a) Spray paint booth SB-1, equipped with an overhead conveyor and closing doors at both ends, with a maximum capacity of coating one (1) metal frame per hour, utilizing airless electrostatic application with dry filters for particulate control, and exhausted through one (1) stack (S/V ID P-01)

(Note: This facility is being replaced by one (1) spray paint booth with the same facility identification number (SB-1), as listed under **New Emission Units and Pollution Control Equipment**).

This facility will be removed from service by April 18, 2000.

The source applied for a Part 70 Operating Permit on December 13, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 163-3330-00007, issued on October 26, 1994.
- (b) 007-SPB-001, issued on July 7, 1995 by the Evansville EPA.
- (c) 007-SPB-002, issued on July 7, 1995 by the Evansville EPA.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
P-01 (replacement booth)	SB-1 (painting)	25	2.83	16,800	80
P-04 (new booth)	SB-4 (painting)	25	2.83	12,000	80
P-05 (new booth)	SB-5 (painting)	25	2.83	12,000	80

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification 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 March 7, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (two (2) pages) for the proposed modification.

Potential To Emit Before Controls for the Modification

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

This table reflects the potential to emit (PTE) before controls for the modification. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	37.8
PM-10	37.8
SO ₂	0.0
VOC	78.6
CO	0.0
NO _x	0.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
xylene	greater than 10
glycol ethers	greater than 10
ethylbenzene	less than 10
hexamethylene-diisocyanate	less than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter (PM), particulate matter with an aerodynamic diameter at or below 10 microns (PM-10), and volatile organic compounds (VOC) are equal to or greater than 25 tons per year. The source is subject to the provisions of 326 IAC 2-7, and a Part 70 permit was issued on July 13, 1999. Therefore, the source is subject to the provisions of 326 IAC 2-7-10.5 for this significant source modification.

- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single hazardous air pollutant (HAP) is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. The source is subject to the provisions of 326 IAC 2-7, and a Part 70 permit application was issued on July 13, 1999. Therefore, the source is subject to the provisions of 326 IAC 2-7-10.5 for this significant source modification.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	attainment or unclassifiable
SO ₂	attainment or unclassifiable
NO ₂	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as maintenance for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Vanderburgh County has been classified as attainment or unclassifiable for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 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 PM emissions are not counted toward determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	2.4
PM10	2.4
SO ₂	0.0
VOC	69.2
CO	1.0
NO _x	1.2

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Technical Support Document for Part 70 Operating Permit No. T163-7624-00007, issued on July 13, 1999.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the modification (based on 8,760 hours of operation per year at rated capacity including enforceable emissions control and/or production limits, where applicable):

Process/facility	Limited Potential to Emit (tons/year)							
	PM	PM-10	SO ₂	VOC	CO	NO _x	Single HAP	Total HAPs
Replacement Booth1 (SB-1)	0.1	0.1	0.0	4.7	0.0	0.0	1.96	3.58
New Prime Coat Facility (SB-4 & SB-5)	0.7	0.7	0.0	73.9	0.0	0.0	<10	<25
Total Modification Emissions	0.8	0.8	0.0	78.6	0.0	0.0	<11.96	<28.58
PSD Threshold Level	250	250	250	250	250	250	N/A	N/A

This modification to an existing PSD minor stationary source is not major because the emission increases due to the modification are less than the applicable PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply to the modification.

Potential to Emit After Controls for the Source

The table below revises the *Existing Source PSD Definition* presented above in **Source Status**, reflecting all limits, of the significant emission units for the source (based on 8,760 hours of operation per year at rated capacity including enforceable emissions control and/or production limits, where applicable):

Process/facility	Limited Potential to Emit (tons/year)							
	PM	PM-10	SO ₂	VOC	CO	NO _x	Single HAP	Total HAPs
Replacement Booth 1 (SB-1)	0.1	0.1	0.0	4.7	0.0	0.0	1.96	3.58
New Prime Coat Facility (SB-4 & SB-5)	0.7	0.7	0.0	73.9	0.0	0.0	<10	<25
Top Coat Facility * (Existing SB-2 & SB-3)	1.5	1.5	0.0	59.8	0.0	0.0	24.66	45.13
Total Significant Facility Emissions	2.2	2.2	0.0	138.4	0.0	0.0	<36.62	<73.71
PSD Threshold Level	250	250	250	250	250	250	N/A	N/A

* Reflects a new top coat formulation for the existing facility, which continues to comply with existing Part 70 permit conditions. No physical change is being made to the existing facility and it is therefore not included in the modification. The facility is presented herein to update the potential to emit for the source and affirm continuing source status as a minor PSD source after modification approval.

This existing minor PSD source is not a major stationary source after the modification because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply to the source.

Justification for Part 70 Source Modification

Part 70 Operating permit T163-7624-00007, issued July 13, 1999, is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(g).

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this proposed modification.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR Part 63) applicable to this source modification.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

Spray paint booth SB-1 will be constructed after the July 27, 1997 rule applicability date; however, SB-1 will not have a PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs. Therefore, the requirements of this rule do not apply to this facility. The prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5, will be constructed after the July 27, 1997 rule applicability date and the facility will have an uncontrolled PTE 10 tons per year of any single HAP and 25 tons per year of the combination of HAPs. However, the HAP usage at the prime coat spray painting facility, which includes spray paint booths SB-4 and SB-5, shall be limited such that single HAP usage is limited to less than 10 tons per twelve (12) consecutive month period, and total combined HAP usage is limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply to the prime coat spray painting facility.

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD), this proposed modification is not considered a major modification because the source is an existing PSD minor stationary source and the proposed modification has the potential to emit less than applicable PSD threshold emission levels for any regulated pollutant. Therefore, the PSD rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply to the modification.

This existing minor PSD source is not a major stationary source after the modification because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply to the source.

326 IAC 2-6 (Emission Reporting)

Pursuant to the requirements of Part 70 Permit T163-7624-00007, issued July 13, 1999, this source is subject to 326 IAC 2-6 (Emission Reporting). The source will continue to be subject to this requirement, inclusive of the emissions attributable to the proposed modification.

Pursuant to Part 70 Permit T163-7624-00007, issued July 13, 1999, other state rules applicable to the entire source remain in effect and will apply to the modification upon approval.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (c) the PM overspray from the surface coating facilities shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

The particulate matter emissions from each coating station shall comply with 326 IAC 6-3-2 by using dry filters for overspray control at all times when the coating stations are in operation.

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

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings delivered to the applicators shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried and forced warm air dried coatings.

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 MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

Compliance Requirements

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

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

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

1. The proposed spray paint booth SB-1 and the prime coat painting facility, which includes spray paint booths SB-4 and SB-5, have applicable compliance monitoring conditions as specified below:
 - (a) The dry filters for PM control shall be in operation at all times when the surface coating facilities are in operation.

- (b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (P-01, P-04, P-05) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

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

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This modification will emit levels of air toxics greater than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments. In total, therefore, the source also emits levels of air toxics greater than those that constitutes major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

- (b) See attached calculations for detailed air toxic calculations (Appendix A, page 2 of 2).

Conclusion

The construction and operation of two (2) new spray paint booths SB-4 and SB-5 as one (1) prime coating facility and the replacement of one (1) existing spray booth SB-1, shall be subject to the conditions of the attached first Significant Source Modification No. 163-11982-00007 to Part 70 Permit No. T163-7624-00007.

Operation of equipment attributable to the modification may not commence until Administrative Amendment No. 163-12149-00007, which incorporates the new equipment into Part 70 Permit No. T163-7624-00007, is issued.

**Appendix A: Hazardous Air Pollutant (HAP)
Emission Calculations From Surface Coating Operations**

Company Name: Hahn Equipment Company
Address City IN Zip: 1625 N. Garvin Street, Evansville, IN 47711
Title V No.: T163-7624-00007
Significant Source Modification (SSM) No.: 163-11982-00007
Reviewer: Michael Hirtler / EVP
Date: March 10, 2000

Material (as applied)	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % xylene	Weight % glycol ethers	Weight % Ethyl Benzene	Weight % hexamethylene- diisocyanate	Weight %	Weight %	HAP EMISSION RATES (TONS PER YEAR)						Total All HAP
										xylene	glycol ethers	Ethyl Benzene	hexamethylene- diisocyanate			
<i>Top or Prime Coating (Booth 1) - As Applied</i>																
Black/Catalyst	9.28	0.40	gal/hour	12.04%	9.87%	0.00%	0.12%	0.00%	0.00%	1.96	1.60	0.00	0.02	0.00	0.00	
Gray Primer/Catalyst	8.43	0.20	gal/hour	5.73%	4.60%	0.86%	0.00%	0.00%	0.00%	0.42	0.34	0.06	0.00	0.00	0.00	
<i>Prime Coating (Combined Booths 4 & 5) - As Applied</i>																
Gray Primer/Catalyst	8.43	9.38	gal/hour	5.73%	4.60%	0.86%	0.00%	0.00%	0.00%	19.85	15.93	2.98	0.00	0.00	0.00	
Uncontrolled Potential to Emit (tons per year):										21.80	17.54	3.04	0.02	0.00	0.00	
Limited Potential to Emit - Top or Prime Coating (Booth 1) (tons per year):										1.96	1.60	0.06	0.02	0.00	0.00	
Limited Potential to Emit - Prime Coating Facility (Booths 4 & 5 combined) (tons per year):										<10	<10	2.98	0.00	0.00	0.00	
Limited Potential to Emit for the Modification (tons per year):										<11.96	<11.60	3.04	0.02	0.00	0.00	<

METHODOLOGY

Uncontrolled Potential HAP Emission Rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Limited Potential HAP Emission Rate (tons/yr) = Uncontrolled Potential HAP Emission Rate * HAP Usage Limit (such that single HAP emissions <10 tpy and total HAP emissions < 25 tpy for Prime Coating facility only)

HAP and total HAP usage at Prime Coating facility will be limited to less than 10 tons per year (tpy) and 25 tpy, respectively. Therefore, the requirements pursuant to 326 IAC 2-4.1-1 will not apply to the Prime Coating facility (i.e., Booths 4 & 5).

**Appendix A: Emission Calculations
VOC and Particulate
From Spray Painting Operations**

Company Name: Hahn Equipment Company
Address City IN Zip: 1625 N. Garvin Street, Evansville, IN 47711
Title V No.: T163-7624-00007
Significant Source Modification (SSM) No.: 163-11982-00007
Reviewer: Michael Hirtler / EVP
Date: March 10, 2000

Potential Uncontrolled Emissions:

Coating Material	Type of Product Being Coated	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water & non-VOC Organics	Weight % Organics	Volume % Water & non-VOC Organics	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transf Efficien	
<i>or Prime Coating (Booth 1) - As Supplied</i>																		
Black	metal parts	9.70	41.20%	6.31%	34.89%	9.27%	44.57%	0.32	gal/hour									
lyst		7.61	54.48%	54.48%	0.00%	62.85%	37.15%	0.08	gal/hour									
Gray Primer		8.75	58.74%	39.43%	19.31%	52.29%	25.07%	0.16	gal/hour									
lyst		7.16	60.37%	29.17%	31.20%	31.62%	35.09%	0.04	gal/hour									
<i>or Prime Coating (Booth 1) - As Applied</i>																		
Black/Catalyst		9.28	43.38%	14.21%	29.17%	19.99%	43.09%	0.40	gal/hour	3.38	2.71	1.08	25.99	4.74	2.30	8.38	75%	
Gray Primer/Catalyst		8.43	59.02%	37.69%	21.33%	48.16%	27.07%	0.20	gal/hour	3.47	1.80	0.36	8.63	1.58	0.76	8.86	75%	
<i>e Coating Facility (as Booths 4 & 5 Combined) - As Supplied</i>																		
Gray Primer	metal parts	8.75	58.74%	39.43%	19.31%	52.29%	25.07%	7.50	gal/hour									
lyst		7.16	60.37%	29.17%	31.20%	31.62%	35.09%	1.88	gal/hour									
<i>e Coating Facility (as Booths 4 & 5 Combined) - As Applied</i>																		
Gray Primer/Catalyst		8.43	59.02%	37.69%	21.33%	48.16%	27.07%	9.38	gal/hour	3.47	1.80	16.87	404.87	73.89	35.49	8.86	75%	
Uncontrolled Potential to Emit (tons per year):												17.95	430.87	78.63	37.80			

Controlled Potential to Emit (tons per year):	Input Usage Allowed VOC	Control Efficiency PM	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr	
	100.00%	95%-98%	17.95	430.87	78.63	0.76	0.7098

odology:

ids of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 ids of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 ntial VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 ntial VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 ntial VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 ulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 ids VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids * Transfer Efficiency)
 Uncontrolled Potential Emissions = Worst Case Coatings + all Solvents Applied
 rolled VOC Emission Rate = Uncontrolled Emission Rate * VOC Input Limitation
 rolled PM Emission Rate = Uncontrolled Emission Rate * VOC Input Limitation * (1 - PM Control Efficiency)