CONSTRUCTION AND MINOR SOURCE OPERATION PERMIT
OFFICE OF AIR MANAGEMENT

TMF Center, Inc.
300 West Washington Street
Williamsport, Indiana 47993

is hereby authorized to construct

(a) One (1) swing table shot blaster, known as SB-1, installed in 1994, equipped with a baghouse, known as BH-1, exhausted inside the building, capacity: 252 metal parts per hour.

(b) One (1) tumbler shot blaster, known as SB-2, installed in 1994, equipped with a baghouse, known as BH-2, exhausted inside the building, capacity: 246 metal parts per hour.

(c) One (1) WCRC-4 shot blaster, known as SB-3, installed in 1994, equipped with internal filters, capacity: 252 metal parts per hour.

(d) One (1) paint booth, known as PB-1, installed in 1994, equipped with three layers of dry filters, exhausted to three (3) general ventilation wall fans, capacity: 400 metal parts per hour.

(e) Five (5) welding units, known as W-1 through W-5, installed in 1998, capacity: 100 metal parts per hour total.

(f) One (1) cutting unit, known as C-1, installed in 1994, capacity: 25 parts per hour.

(g) Six (6) natural gas-fired space heaters, known as S-1 through S-6, installed in 1994, exhausted to stack S-1 through S-6, rated at 0.3 million British thermal units per hour each.

(h) One (1) natural gas-fired space heater, known as S-7, installed in 1994, exhausted to stack S-7, rated at 0.25 million British thermal units per hour.

(i) One (1) natural gas-fired space heater, known as S-8, installed in 1994, exhausted to stack S-8, rated at 0.2 million British thermal units per hour.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP 171-10420-00012	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).

2. That this permit 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.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

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

5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

   (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

   (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

   (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

   (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).

   (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for a minor source operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.

Operation Conditions

General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).

2. That the permittee shall 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.

Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:

   (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.

   (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.

   (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

   The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):

   (a) In the event that ownership of this metal construction machinery source is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.

   (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.

   (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

   (a) Violation of any conditions of this permit.

   (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

   (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

Malfunction Condition

7. That 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 Management (OAM) 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 OAM, 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]

Opacity Limitations

8. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 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.

Particulate Matter (PM) Limitation

9. That pursuant to 326 IAC 6-3 (Process Operations), the baghouses and/or internal filters, BH-1, BH-2 and SB-3, shall be in operation at all times when the shot blasting operations are being performed, and shall not exceed the allowable particulate matter (PM) emission rates of 4.19, 4.10 and 4.19 pounds per hour for BH-1, BH-2 and SB-3, respectively.

Baghouse Operating Condition

10. That the baghouses and internal filters, BH-1, BH-2 and SB-3, shall be operated at all times when the shot blasting operations, SB-1, SB-2 and WCRC-4 are being performed.

(a) The permittee shall take readings of the total static pressure drop across the baghouses, at least once per day. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 3 and 6 inches of water. The Preventive Maintenance Plan for these baghouses shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of this range for any one reading.

(b) The instrument used for determining the pressure shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

(c) The gauge employed to take the pressure drop across the baghouses or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within ± 2 percent of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

(d) In the event that bag failure has been observed:

(i) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(ii) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Visible Emission Notations

11. That visible emission notations of all exhaust to the atmosphere from BH-1and BH-2 shall be performed once per day. A trained employee will record whether emissions are normal or abnormal.

(a) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting start up or shut down time.

(b) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.

(c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal and abnormal visible emissions for that specific process.

(d) The Preventive Maintenance Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Fugitive Dust Emissions

12. That pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

Particulate Matter (PM) Limitation

13. That pursuant to 326 IAC 6-3 (Process Operations):

(a) The dry filters for particulate matter overspray control shall be in operation at all times when the paint booth, PB-1 is in operation.

(b) The paint booth, PB-1 shall comply with 326 IAC 6-3-2(c) using the following equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour,

(if P is equal to or less than 60,000 pounds per hour (30 tons per hour)).

$E = 55.0P^{0.11} - 40$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour,

(if P is greater than 60,000 pounds per hour (30 tons per hour)).

(c) 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 general ventilation the booth is 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.

(d) 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.

(e) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Particulate Matter (PM) Limitation

14. That pursuant to 326 IAC 6-3 (Process Operations):

The welding and cutting operations, W-1 through W-5 and C-1 shall comply with 326 IAC 6-3-2(c) using the following equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour,

(if P is equal to or less than 60,000 pounds per hour (30 tons per hour)).

$E = 55.0P^{0.11} - 40$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour,

(if P is greater than 60,000 pounds per hour (30 tons per hour)).

Volatile Organic Compound

15. That pursuant to 326 IAC 2-1-3(i)(8), records of surface coating quantities and organic solvent contents shall be maintained for a minimum period of 36 months and made available upon request of the Office of Air Management (OAM). Any change or modification which may increase potential emissions to 100 tons per year from the equipment covered in this permit shall obtain a Title V permit pursuant to 326 IAC 2-7 before such change may occur.

Volatile Organic Compound (VOC) Limitations

16. That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal construction machinery shall be limited to:

Coatings	**Limit** (pounds of VOC/gallon of coating less water delivered to the applicator)
Extreme Performance Coat	3.5

Emission Minimization

17. That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up 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.

Open Burning

18. That 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.

Hazardous Air Pollutants (HAPs)

19. Any change or modification to these facilities which may increase potential emissions from the total of one (1) swing table shot blaster, one (1) tumbler shot blaster, one (1) WCRC-4 shot blaster, one (1) paint booth, five (5) welding units, one (1) cutting unit, six (6) natural gas-fired space heaters and two (2) natural gas-fired space heaters to greater than ten (10) tons per year of a single HAP or greater than twenty-five (25) tons per year of any combination of HAPS shall cause the facilities to be subject to 326 IAC 2-1-3.4 and shall require prior IDEM, OAM, approval.

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

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 LBS/HR PARTICULATES ?_____, 100 LBS/HR VOC ?_____, 100 LBS/HR SULFUR DIOXIDE ?_____ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ?_____ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

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

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

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

COMPANY: TMF Center, Inc. PHONE NO. 765-762-1000

LOCATION: (CITY AND COUNTY) Williamsport / Warren

PERMIT NO. CP 171-10420 AFS PLANT ID: 171-00012 AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ 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: _____

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. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO2, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

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. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2373)

***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 Management

Technical Support Document (TSD) for New Construction and Minor Source Operation

Source Background and Description

Source Name:	**TMF Center, Inc.**
Source Location:	**300 West Washington Street, Williamsport, Indiana 47993**
County:	**Warren**
Construction Permit No.:	**CP 171-10420-00012**
SIC Code:	**3531**
Permit Reviewer:	**Paula M. Miano/MES**

The Office of Air Management (OAM) has reviewed an application from TMF Center, Inc. relating to the construction and operation of a metal construction machinery source, consisting of the following equipment:

(a) One (1) swing table shot blaster, known as SB-1, installed in 1994, equipped with a baghouse, known as BH-1, exhausted inside the building, capacity: 252 metal parts per hour.

(b) One (1) tumbler shot blaster, known as SB-2, installed in 1994, equipped with a baghouse, known as BH-2, exhausted inside the building, capacity: 246 metal parts per hour.

(c) One (1) WCRC-4 shot blaster, known as SB-3, installed in 1994, equipped with internal filters, capacity: 252 metal parts per hour.

(d) One (1) paint booth, known as PB-1, installed in 1994, equipped with three layers of dry filters, exhausted to three (3) general ventilation wall fans, capacity: 400 metal parts per hour.

(e) Five (5) welding units, known as W-1 through W-5, installed in 1998, capacity: 100 metal parts per hour total.

(f) One (1) cutting unit, known as C-1, installed in 1994, capacity: 25 parts per hour.

(g) Six (6) natural gas-fired space heaters, known as S-1 through S-6, installed in 1994, exhausted to stack S-1 through S-6, rated at 0.3 million British thermal units per hour each.

(h) One (1) natural gas-fired space heater, known as S-7, installed in 1994, exhausted to stack S-7, rated at 0.25 million British thermal units per hour.

(i) One (1) natural gas-fired space heater, known as S-8, installed in 1994, exhausted to stack S-8, rated at 0.2 million British thermal units per hour.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
BH-1	Baghouse with swing table shoot blaster	n/a	n/a	2,442	n/a
BH-2	Baghouse with tumbler shot blaster	n/a	n/a	1,432	n/a
PB-1	Paint Booth (3 wall fans)	n/a	n/a	7,277	Ambient
S1-S6	Space Heaters	28	0.33	Nat Draft	100
S7-S8	Space Heaters	20	0.33	Nat draft	100

Enforcement Issue

IDEM is aware that this metal construction machinery source has been operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, 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 November 24, 1998 with additional information received on January 11, 1999.

Emissions Calculations

See pages 1 through 6 of 6 Appendix A (Emissions Calculation Spreadsheets) for detailed calculations.

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/yr)	Potential Emissions (tons/yr)
Particulate Matter (PM)	58.7	88.7
Particulate Matter (PM_{10})	58.7	88.7
Sulfur Dioxide (SO_2)	0.006	0.006
Volatile Organic Compounds (VOC)	7.65	7.65
Carbon Monoxide (CO)	0.828	0.828
Nitrogen Oxides (NO_X)	0.986	0.986
Single Hazardous Air Pollutant (HAP)	3.24	3.24
Combination of HAPS	4.91	4.91

(a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3-2 for the three (3) shot blasting operations. See attached spreadsheets for detailed calculations.

(b) The allowable emissions based on the rules cited are less than the potential emissions, therefore, the allowable emissions are used for the permitting determination.

(c) Allowable emissions (as defined in the Indiana Rule) of Particulate Matter (PM) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

(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. Warren County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Warren County has been classified as attainment or unclassifiable for the remaining criteria 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 and Emission Offset applicability.

Source Status

New 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 (tons/yr)
PM	4.89
PM_{10}	4.89
SO_2	0.006
VOC	7.65
CO	0.828
NO_X	0.986
Single HAP	3.24
Combination HAPS	4.91

This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater 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.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPS is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 63 applicable to this facility.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This facility is not subject to 326 IAC 2-6 (Emission Reporting), because the source does not have the potential to emit greater than 100 tons per year of any of the criteria pollutants.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 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.

326 IAC 6-3 (Process Operations)

(a) The spray operations shall comply with 326 IAC 6-3-2(c). The 326 IAC 6-3-2 equations are as follows: $E = 4.10\ P^{0.67}$, where P equals process weight in tons per hour for process weights up to and including sixty thousand (60,000) pounds per hour and E equals the allowable emission rate in pounds per hour. For process weights in excess of sixty thousand (60,000) pounds per hour, $E = 55.0^{P0.11} - 40$. Compliance is shown by the use of dry filters as control.

(b) Pursuant to this rule the particulate matter (PM) emissions from the swing table shot blaster, SB-1shall be limited to 4.19 pounds per hour. This was determined from the following equation for a process rate of 1.03 tons per hour (2,063 pounds per hour).

Interpolation and extrapolation 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:

$$E = 4.10\ P^{0.67} = 4.19 \text{lbs/hr}$$

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

Since the total controlled PM emissions from the swing table shot blaster are 0.088 pounds per hour (0.39 tons per year), this process complies with the rule.

(c) Pursuant to this rule the particulate matter (PM) emissions from the tumbler shot blaster, SB-2 shall be limited to 4.10 pounds per hour. This was determined from the following equation for a process rate of 1.00 tons per hour (2000 pounds per hour).

Interpolation and extrapolation 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:

$$E = 4.10\ P^{0.67} = 4.10 \text{ lbs/hr}$$

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

Since the total controlled PM emissions from the swing table shot blaster are 0.044 pounds per hour (0.19 tons per year), this process complies with the rule.

(d) Pursuant to this rule the particulate matter (PM) emissions from the WCRC-4shot blaster, SB-3 shall be limited to 4.19 pounds per hour. This was determined from the following equation for a process rate of 1.03 tons per hour (2,063 pounds per hour).

Interpolation and extrapolation 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:

$$E = 4.10\ P^{0.67} = 4.19 \text{ lbs/hr}$$

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

Since the total controlled PM emissions from the swing table shot blaster are 0.044 pounds per hour (0.19 tons per year), this process complies with the rule.

(e) The welding and cutting operations shall comply with 326 IAC 6-3-2(c). The 326 IAC 6-3-2 equations are as follows: $E = 4.10P^{0.67}$, where P equals process weight in tons per hour for process weights up to and including sixty thousand (60,000) pounds per hour and E equals the allowable emission rate in pounds per hour. For process weights in excess of sixty thousand (60,000) pounds per hour, $E = 55.0^{P0.11} - 40$.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), visible emissions shall not cross the property line of the source at or near ground level.

326 IAC 8-2-9 (Miscellaneous metal coating operations)

Pursuant to 326 IAC 8-2-1(a) (4) the surface coating operations performed on metal are subject to the VOC content requirements of 326 IAC 8-2-9. This rule limits the as applied volatile organic compound (VOC) content of extreme performance coatings to 3.5 pounds per gallon less water. All coatings comply (see page 1 of Appendix A) with this VOC content limit.

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.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants 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) Construction Permit Application Form Y.

(a) This metal construction machinery source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to the Clean Air Act.

(b) See attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of this metal construction machinery source will be subject to the conditions of the attached proposed **Construction Permit and Minor Source Operation Permit No. CP 171-10420-00012.**

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

Company Name: TMF Center, Inc.
Address City IN Zip: 300 West Washington Street, Williamsport, Indiana 47993
CP: 171-10420
Plt ID: 171-00012
Reviewer: Paula M Miano
Date Received: November 24, 1998

Material	Density (lb/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	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 tons per year	lb VOC /gal solids	Transfer Efficiency
PB-1																
B59-400 High Heat Black	11.1	29.7%	0.0%	29.7%	0.0%	54.0%	0.00005	400	3.31	3.31	0.07	1.59	0.29	0.34	6.13	50%
F85RC3 Red Top Coat	8.1	42.0%	0.0%	42.0%	0.0%	51.1%	0.00004	400	3.41	3.41	0.05	1.31	0.24	0.00	6.67	100%
Z039625 Urethane Catalyst B	9.42	10.0%	0.0%	10.0%	0.0%	87.7%	0.00018	400	0.94	0.94	0.07	1.66	0.30	1.37	1.07	50%
AXY0224 Polyurethane Primer	12.68	27.5%	0.0%	27.5%	0.0%	48.5%	0.00074	400	3.49	3.49	1.03	24.64	4.50	5.93	7.19	50%
Ready to Spray (R-T-S)*	**12.03**	**24.8%**	**0.0%**	**24.8%**	**0.0%**	**56.3%**	**0.00092**	**400**	**2.98**	**2.98**	**1.10**	**26.30**	**4.80**	**7.29**	**5.29**	**50%**
W40348 Yellow Dip Primer	10.7	53.0%	35.5%	17.5%	0.0%	29.7%	0.00028	400	1.87	1.87	0.21	5.03	0.92	0.00	6.30	100%
Water	8.34	100.0%	100.0%	0.0%	100.0%	0.0%	0.00007	400	n/a	0.00	0.00	0.00	0.00	0.00	n/a	100%
Ready to Dip (R-T-D)*	**10.23**	**60.7%**	**46.0%**	**14.6%**	**0.0%**	**23.8%**	**0.00035**	**400**	**1.50**	**1.50**	**0.21**	**5.03**	**0.92**	**0.00**	**6.30**	**100%**
F63B60 Polyurethane Black	8.09	34.4%	0.0%	34.4%	0.0%	59.1%	0.00009	400	2.78	2.78	0.10	2.38	0.43	0.00	4.71	100%
Xylene	7.26	100.0%	0.0%	100.0%	0.0%	0.0%	0.00001	400	7.26	7.26	0.03	0.77	0.14	0.00	0.00	100%
Ready to Dip (R-T-D)*	**8.00**	**41.0%**	**0.0%**	**41.0%**	**0.0%**	**52.5%**	**0.00010**	**400**	**3.28**	**3.28**	**0.13**	**3.15**	**0.57**	**0.00**	**6.24**	**100%**
F63YC23 Caterpillar Yellow	9.80	27.5%	0.0%	27.5%	0.0%	60.5%	0.00063	400	2.70	2.70	0.68	16.33	2.98	3.93	4.45	50%
Xylene	7.26	100.0%	0.0%	100.0%	0.0%	0.0%	0.00008	400	7.26	7.26	0.23	5.49	1.00	0.00	0.00	50%
Ready to Spray (R-T-S)*	**9.52**	**33.6%**	**0.0%**	**33.6%**	**0.0%**	**53.8%**	**0.00071**	**400**	**3.20**	**3.20**	**0.91**	**21.82**	**3.98**	**3.93**	**5.95**	**50%**
Xylene (clean-up)	7.26	100.0%	0.0%	100.0%	0.0%	0.0%	0.00022	400	7.26	7.26	0.64	15.33	2.80	0.00	0.00	100%
								Control	VOC	PM						
								Efficiency	0.00	99.7%						
State Potential Emissions			**Add worst case coating to all solvents and both machines on oil**							**Uncontrolled**	**1.73**	**41.63**	**7.60**	**7.29**		
										Controlled	**1.73**	**41.63**	**7.60**	**0.02**		

*** R-T-S and R-T-D maximum potential is used for summing of all VOC, not individual components**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used
RTS Density (lbs/gal) = ((Density(lb/gal)a * Gal of Material (gal/unit)a) + (Density(lb/gal)b * Gal of Material (gal/unit)b)) / (Gal of material (gal/unit)a + Gal of Material (gal/unit)b)
RTS Weight % H2O + Organics = ((Weight % Organics + H2O)a * Density (lb/gal)a * Gal of Material (gal/unit)a) + ((Weight % Organics + H2O)b * Density (lb/gal)b * Gal of Material (gal/unit)b) / ((Density (lb/gal)a * Gal of Material (gal/unit)a)+(Density (lb/gal)b * Gal of Material (gal/unit)b))

Appendix A: Potential Emissions Calculations
HAP Emission Calculations
From Surface Coating Operations

Company Name: **TMF Center, Inc.**
Address City IN Zip: **300 West Washington Street, Williamsport, Indiana 47993**
CP: **171-10420**
Plt ID: **171-00012**
Reviewer: **Paula M Miano**
Date Received: **November 24, 1998**

Material	Density (lb/gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethyl Benzene	Weight % MIBK	Weight % MEK	Weight % Ethylene Glycol	Weight % Glycol Ethers	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	MIBK Emissions Emissions (tons/yr)	MEK Glycol Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Glycol Ethers Emissions (tons/yr)
PB-1																	
B59-400 High Heat Black	11.1	0.00005	400	0.00%	24.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.23	0.00	0.00	0.00	0.00	0.00
F85RC3 Red Top Coat	8.1	0.00004	400	0.00%	0.00%	0.00%	17.00%	3.00%	0.00%	0.00%	0.00	0.00	0.00	0.10	0.02	0.00	0.00
Z039625 Urethane Catalyst B	9.42	0.00018	400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXY0224 Polyurethane Primer	12.68	0.00074	400	0.00%	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.03	0.00	0.00	0.00	0.00
W40348 Yellow Dip Primer	10.7	0.00028	400	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	5.00%	0.00	0.00	0.00	0.00	0.00	0.26	0.26
Water	8.34	0.00007	400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F63B60 Polyurethane Black	8.09	0.00009	400	0.00%	4.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.05	0.00	0.00	0.00	0.00	0.00
Xylene	7.26	0.00001	400	85.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.11	0.00	0.02	0.00	0.00	0.00	0.00
F63YC23 Caterpillar Yellow	9.80	0.00063	400	0.00%	4.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.43	0.00	0.00	0.00	0.00	0.00
Xylene	7.26	0.00008	400	85.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.86	0.00	0.15	0.00	0.00	0.00	0.00
Xylene (clean-up)	7.26	0.00022	400	85.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	2.38	0.00	0.42	0.00	0.00	0.00	0.00

TOTALS:		**(tons/yr):**	**3.24**	**0.433**	**0.572**	**0.097**	**0.017**	**0.262**	**0.262**
		(lb/hr):	**0.741**	**0.099**	**0.131**	**0.022**	**0.004**	**0.060**	**0.060**
		(g/sec):	**0.093**	**0.012**	**0.016**	**0.003**	**0.000**	**0.008**	**0.008**

State Potential Emissions **Add worst case coating to all solvents and both machines on oil**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
Baghouse Operations

Company Name: TMF Center, Inc.
Address City IN Zip: 300 West Washington Street, Williamsport, Indiana 47993
CP : 171-10420
Plt ID: 171-00012
Reviewer: Paula M Miano
Date: November 24, 1998

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
BH-1	99.0%	0.0042	2442.0	8.8	38.51	0.088	0.39
BH-2	99.0%	0.0036	1432.0	4.4	19.35	0.044	0.19
SB-3	99.0%	0.0056	923.0	4.4	19.41	0.044	0.19

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Allowable Rate of Emissions

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Allowable Emissions (tons/yr)
2063	1.03	4.19	18.3
2000	1.00	4.10	18.0
2063	1.03	4.19	18.3

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67

Company Name: **TMF Center, Inc.**
Address City IN Zip: **300 West Washington Street, Williamsport, Indiana 47993**
Permit No./Plt ID: **CP 171-10420-00012**
Reviewer: **Paula M. Miano**
Date: **November 14, 1998**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Metal Inert Gas (MIG)(ER5154)	5	6.4		0.0241	0.00003		0.00001	0.771	0.001088	0.000	0.00032	0.001
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)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxymethane	1	2.5	12	0.0815	0.0002		0.0002	0.147	0.000	0.000	0.000	0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								0.92	0.001	0.000	0.000	0.001
Potential Emissions lbs/day								22.03	0.027	0.000	0.008	0.034
Potential Emissions tons/year								**4.02**	0.005	0.000	0.001	0.006

METHODOLGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
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" thick)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.
Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).
Welding and other flame cutting emission factors are from an internal training session document.
See AP-42, Chapter 12.19 for additional emission factors for welding.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **TMF Center, Inc.**
Address City IN Zip: **300 West Washington Street, Williamsport, Indiana 47993**
CP: **171-10420**
Plt ID: **171-00012**
Reviewer: **Paula M. Miano**
Date: **November 24, 1998**

Six (6) space heaters rated at 0.3 MMBtu/hr each, Two (2) space heaters rated at 0.2 and 0.25 MMBtu/hr.

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.25	19.7

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.075	0.075	0.006	0.986	0.054	0.828

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
PM emission factors are condensable and filterable.

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: TMF Center, Inc.
Address City IN Zip: 300 West Washington Street, Williamsport, Indiana 47993
CP: 171-10420
Plt ID: 171-00012
Reviewer: Paula M. Miano
Date: November 24, 1998

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	0.000	0.000	0.001	0.018	0.000

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	0.000	0.000	0.000	0.000	0.000

Methodology is the same as page 1.

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