CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT

Tenax Corporation, ICC Division
310 East 3rd Street
Rushville, Indiana 46173

is hereby authorized to construct

(a) One (1) Paint Booth:
This paint booth is equipped with one (1) air atomization spray gun, capable of coating one (1) industrial metal cab per hour, with a dry filter for overspray control;

(b) One (1) Shot Blaster:
This shot blaster has a maximum capacity of 12 pounds of steel per hour, and is located in a totally enclosed area;

(c) Four (4) MIG Welding Stations:
Each station has a capacity of 1.8 pounds of tin wire per hour;

(d) Plasma Metal Cutting:
This plasma cutting operation has a capacity to cut 148 pounds of metal per hour; and

(e) Combustion Units:
Fourteen (14) 0.1 mmBtu/hr radiant heating units.

This permit will supercede Construction Permit CP139-6868-00016, issued on August 19, 1997.

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-139-9348-00016	
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 modification 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 an 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.

7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

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 industrial cab manufacturing operation 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, (local agency if applicable) 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]

8. Visible Emissions Notations

Visible emission notations of all exhaust to the atmosphere form the paint booth and the shot blaster shall be performed when the paint booth and the shot blaster are not complying with the requirements of Operation Conditions No. 11. A trained employee will record whether the emissions are normal or abnormal.

(a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation specified in the facility's 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 unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(e) The records of the visible emission notations shall be maintained for a minimum period of 36 months and made available upon request of the Office of Air Management (OAM).

Opacity Limitations

9. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

(a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.

(b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

Fugitive Dust Emissions

10. 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)].

11. That pursuant to 326 IAC 6-3 (Process Operations),

(a) The particulate matter (PM) from the shot blasting shall be limited to 20.9 pounds/hour.

(b) The particulate matter (PM) from the one (1) paint booth shall be limited by the following equation.

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

(2) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters.

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

These limitations were established by the following equation:

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:

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

Volatile Organic Compound (VOC) Limitations

12. (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the one (1) paint booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings.

(b) The VOC content shall be calculated by using the following equation:

(i) VOC content = Density (lb/gal) * Weight % Organics / (1 - Volume % Water)

Emission Minimization

13. 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.

Volatile Organic Compounds (VOC)

14. Compliance with the VOC content and usage limitations contained in Operation Condition No. 12 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) 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.

Reporting Requirements

15. That a log of information necessary to document compliance with operation permit condition no. 12 shall be maintained. These records shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM).

(a) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:

(i) Postmarked on or before the date it is due; or

(ii) Delivered by any other method if it is received and stamped by IDEM, OAM on or before the date it is due.

(b) All instances of deviations from any requirements of this permit must be clearly identified in such reports.

(c) Any corrective actions taken as a result of an exeedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.

(d) The first report shall cover the period commencing the postmarked submission date of the Affidavit of Modification.

Open Burning

16. The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

Permit Change or Modification

17. Any change or modification which may increase potential hazardous air pollutant (HAP) emissions to 10 tons per twelve (12) consecutive month period for any single HAP or 25 tons per twelve (12) consecutive month period for all HAPs, from the equipment covered in this permit, shall require IDEM, OAM approval pursuant to 326 IAC 2-1, before such change may occur.

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:_____PHONE NO. ( )_____

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

DATE/TIME MALFUNCTION STARTED: _____/_____/ 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:_____

PAGE 1 OF 2

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

326 IAC 1-6-1 Applicability of rule

Sec. 1. 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:

_____

_____

_____

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Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for
Modified Operation of Emission Units

Source Background and Description

Source Name:	Tenax Corporation, ICC Division
Source Location:	310 East 3rd Street, Rushville, Indiana 46173
County:	Rush
Construction Permit No.:	CP-139-9348-00016
SIC Code:	3537
Permit Reviewer:	Cathie Moore

The Office of Air Management (OAM) has reviewed an application from Tenax Corporation, ICC Division requesting a modification to the one (1) paint booth permitted under Construction Permit CP139-6868-00016, issued on August 19, 1997. The paint booth was originally permitted to use coatings that were not in compliance with 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) by taking a limit of fourteen (14) pounds per day. This modification to the one (1) paint booth is to allow for the use of coatings that are in compliance with 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and subsequently, take away the limit to stay under the applicability requirements for this rule. This permit will supercede Construction Permit CP139-6868-00016, issued on August 19, 1997, consisting of the following equipment:

(a) One (1) Paint Booth:
This paint booth is equipped with one (1) air atomization spray gun, capable of coating one (1) industrial metal cab per hour, with a dry filter for overspray control;

(b) One (1) Shot Blaster:
This shot blaster has a maximum capacity of 12 pounds of steel per hour, and is located in a totally enclosed area;

(c) Four (4) MIG Welding Stations:
Each station has a capacity of 1.8 pounds of tin wire per hour;

(d) Plasma Metal Cutting:
This plasma cutting operation has a capacity to cut 148 pounds of metal per hour; and

(e) Combustion Units:
Fourteen (14) 0.1 mmBtu/hr radiant heating units.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
A	Welding	30	2	3000	150
C	Shot Blasting	25	2	500	Ambient
D	Painting	25	2	500	Ambient

Enforcement Issue

(a) IDEM is aware that the coating usage in the one (1) paint booth exceeded the VOC limit of fourteen (14) pounds per day and used coatings that had VOC content greater than 2.9 pounds per gallon, less water. Therefore, the one (1) paint booth is not in compliance with the following emission limitation:

(1) That the input VOC including clean up solvent, minus the VOC solvent shipped out, delivered to the applicators of the paint booth used to coat industrial metal cabs shall be limited to 14 pounds per day. Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), 326 IAC 2-1-3.3 (Maximum Achievable Control Technology) and 326 IAC 2-7 (Part 70 Permit Program) will not apply.

(b) IDEM is reviewing this matter and has taken appropriate action. The compliance schedule in this proposed permit will satisfy the requirements of the above stated requirement.

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 December 23, 1997, with additional information received on March 5, 1998.

Emissions Calculations

(a) Painting:

(i) Potential Emissions:
VOC = 37.92 tons/year (See Appendix A for detailed calculations)
HAP(single worst case) = 9.23 tons Xylene/year (See Appendix A for detailed calculations)
HAP (combination) = 20.04 tons/year (See Appendix A for detailed calculations)
PM = 7.99 tons/year (before the dry filters)
PM = (7.99 tons/year) * (1-0.95) = 0.40 tons/year (after the dry filters at 95% efficiency)

(ii) Allowable Emissions:
No calculation was performed to determine PM allowable emissions, since P, the process weight rate, is variable depending on the weight of the metal cabs and coatings used. The use of dry filters will show compliance with the 326 IAC 6-3 (Process Operations) requirements. For the permit level determination, it will be assumed that the PM allowable emissions are equal to the PM potential emissions of 7.99 tons/year.

(b) Shot blasting:

(i) PM Potential Emissions:
Approximately 3.744 tons of steel per year blast is recycled and reused in the blasting operation. It is estimated that only 10% of the steel shot is considered particulate matter.

PM = (12 lbs/hr) * (10%) * (8760 hr/yr) * (1 ton/2000 lb)
PM = 5.26 tons/year

(ii) PM Allowable Emissions (326 IAC 6-3):
$PM = 4.10\ P^{0.67}$ where: P = process weight rate = 22,782 lbs/hr
$PM = 4.10\ (11.4^{0.67})$ = 11.4 tons/hr
PM = 91.5 tons/yr

The PM potential emissions are less than the PM allowable emissions, therefore, the shotblasting operation complies with the rule.

(c) MIG Welding:
PM emissions are negligible.

(d) Plasma Cutting:
Due to the density of the metal, particulate matter emissions in this cutting operation are negligible.

Total Potential and Allowable Emissions

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

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	-	13.25
Particulate Matter (PM10)	-	13.25
Sulfur Dioxide (SO_2)	-	-
Volatile Organic Compounds (VOC)	-	37.92
Carbon Monoxide (CO)	-	-
Nitrogen Oxides (NO_x)	-	-
Single Hazardous Air Pollutant (HAP)	-	9.23
Combination of HAPs	-	20.04

(a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3 (for PM).

(b) The potential emissions before control are less than the allowable emissions, therefore, the potential emissions before control are used for the permitting determination.

(c) Potential emissions of volatile organic compound (VOC) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

(d) Potential emissions of any combination of the HAPs are greater than 25 tons per year.

Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

County Attainment Status

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Rush County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Rush County has been classified as attainment or unclassifiable for all other criterial 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, Part 70 or FESOP 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[(b)]	5.66
PM10[(b)]	5.66
SO_2	--
VOC	37.92
CO	--
NO_x	–
Single HAP	9.23
Combination HAPs	20.04

(a) This new 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 in one of the 28 listed source categories.

(b) PM = PM10 = 5.26 tons/yr (shot blasting) + 0.4 tons/yr (paint booth) = 5.66 tons/yr

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

(b) any combination of HAPs is less than 25 tons/year.

Federal Rule Applicability

(a) There are no New Source Performance Standards (326 IAC 12), 40 CFR 60 applicable to this source.

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

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because the source emits less than 100 tons/yr of VOC.

326 IAC 2-1-3.4 (New Source Toxics Rule)

The paint line is not subject to the requirements of 326 IAC 2-1-3.4 (New Source Toxics Rule) because is was constructed prior to the applicability date of June 27, 1997.

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

The one (1) paint booth is subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) because it was constructed after July 1, 1990 and have actual VOC emissions of fifteen (15) pounds per day before add-on controls.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the one (1) paint booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for 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 one (1) paint booth is in compliance with this requirement. See Appendix A for detailed calculations.

326 IAC 5-1 (Visible Emission Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-3 (Process Operations)

Pursuant to 326 IAC 6-3 (Process Operations),

(a) The particulate matter (PM) from the shot blasting shall be limited to 91.5 tons/year.

P = 22,782 lbs/hr = 11.4 tons/hr
E = 91.5 tons/yr = 20.9 lbs/hr

Based on the calculations of the PM potential emissions, the shot blasting operation complies with this rule.

(b) The particulate matter (PM) from the one (1) paint booth shall be limited by the following equation.

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

(2) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters.

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

These limitations were established by the following equation:

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:

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

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 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 new source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.

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

Conclusion

The construction of this industrial metal cabs manufacturing plant will be subject to the conditions of the attached proposed **Construction Permit No. CP-139-9348-00016.**

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

Company Name: Tenax Corporation, ICC Division
Address City IN Zip: 310 East 3rd Street, Rushville, Indiana 46173
CP: 139-9348-00016
Plt ID: 139-00016
Reviewer: Cathie Moore
Date: 3/11/98

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 ton/yr	lb VOC /gal solids	Transfer Efficiency
Yellow Oxide Primer	9.7	34.63%	0.0%	34.6%	0.0%	52.58%	0.50000	1.000	3.36	3.36	1.68	40.35	7.36	6.95	6.40	50%
Gray HS Phen-Epoxy Primer	10.8	32.40%	0.0%	32.4%	0.0%	41.14%	0.50000	1.000	3.50	3.50	1.75	41.99	7.66	7.99	8.51	50%
John Deere Yellow	8.7	39.90%	0.0%	39.9%	0.0%	51.42%	0.50000	1.000	3.48	3.48	1.74	41.80	7.63	5.75	6.77	50%
Yellow Impement	8.8	39.69%	0.0%	39.7%	0.0%	51.17%	0.50000	1.000	3.48	3.48	1.74	41.77	7.62	5.79	6.80	50%
Black Acry / Alk AD Enamel	9.2	38.11%	0.0%	38.1%	0.0%	49.39%	0.50000	1.000	3.49	3.49	1.75	41.89	7.65	6.21	7.07	50%
State Potential Emissions			**Add worst case coating to all solvents**								**8.66**	**207.80**	**37.92**	**32.69**		

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

HAP Emission Calculations

Company Name: Tenax Corporation, ICC Division
Plant Location: 310 East 3rd Street, Rushville, Indiana 46173
County: Rush
Permit Reviewer: Cathie Moore
Date: 3/11/98

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MEK	Weight % Ethylbenzene	Weight % MIBK	Weight % Toluene	Xylene Emissions (ton/yr)	MEK Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Toluene Emissions (ton/yr)
Yellow Oxide Primer	9.71	0.500000	1.00	18.04%	8.27%	4.40%	0.00%	0.00%	3.84	1.76	0.94	0.00	0.00
Gray HS Phen-Epoxy Primer	10.8	0.500000	1.00	0.00%	0.00%	0.00%	24.45%	0.00%	0.00	0.00	0.00	5.78	0.00
John Deere Yellow	8.73	0.500000	1.00	14.54%	4.37%	4.24%	0.00%	11.35%	2.78	0.84	0.81	0.00	2.17
Yellow Implement	8.77	0.500000	1.00	8.40%	6.61%	30.28%	0.00%	14.81%	1.61	1.27	5.82	0.00	2.84
Black Acry / Alk AD Enamel	9.16	0.500000	1.00	5.01%	0.00%	2.34%	12.46%	0.00%	1.01	0.00	0.47	2.50	0.00
Total State Potential Emissions									**9.23**	**3.86**	**8.03**	**8.28**	**5.01**
Total HAP Potential Emissions	**20.04**												

METHODOLOGY

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

Total HAP Potential Emissions = Worst Case HAP Emissions for each HAP because paint booth has only one gun.

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Tenax Corporation, ICC Division
310 East 3rd Street
Rushville, Indiana 46173

Affidavit of Modification

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____,I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that Tenax Corporation, ICC Division, 310 East 3rd Street, Rushville, Indiana, 46173, has modified the one (1) paint booth in conformity with the requirements and intent of the modification permit application received by the Office of Air Management on December 23, 1997 with additional information received on March 5, 1998 and as permitted pursuant to **Construction Permit No. CP-139-9348-00016** issued on _____

5. Additional (?operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)

Further Affidavit said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____
Signature

_____
Date

STATE OF INDIANA)
)SS
COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 19 _____ .

My Commission expires: _____

_____
Signature

_____
Name (typed or printed)