

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

Gal Fab Inc
612 W. 11th Street
Winamac, Indiana 46996

is hereby authorized to construct

Two (2) spray rooms used for the application of coating to steel solid waste containers by an airless spray application system, at a capacity of 0.5 units per hour, controlled by fiberglass filters.

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-131-6353	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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.
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 discontinued for a 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).
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 is postmarked or delivered to IDEM. 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.
 - (b) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

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

That 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

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.
3. 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.
4. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), Gal Fab 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.
5. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of these two (2) spray rooms used for the application of coating to steel waste containers by an airless spray application system is changed, Gal Fab, Inc., 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 Gal Fab, Inc., to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.
6. 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).
7. That a copy of this permit shall be available on the premises of the source.
8. 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 250 tons per year from the equipment covered in this permit shall obtain a Prevention of Significant Deterioration (PSD) permit pursuant to 326 IAC 2-2 before such change may occur.
9. That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to solid waste containers shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Air Dried Coat	3.5

In addition, pursuant to subpart (f) of 326 IAC 8-2-9, 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.

10. 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]

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

- (a) The fiberglass filters for particulate matter overspray control shall be in operation at all times when the two (2) spray rooms are in operation.
- (b) The two (2) spray rooms 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.
- (c) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters (or water curtain).
- (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

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:

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

Technical Support Document (TSD) for New Construction and Operation

**Gal Fab, Inc.
P.O. Box 39
612 W. 11th Street
Winamac, Indiana 46996**

The Office of Air Management (OAM) has reviewed an application from Gal Fab, Inc., relating to the construction and operation of two (2) spray rooms used for the application of coating to steel solid waste containers by an airless spray application system, at a capacity of 0.5 units per hour, controlled by fiberglass filters.

Gal Fab, Inc., manufactures steel solid waste containers.

The control efficiency of the fiberglass filters are rated by the manufacturer at 95% efficiency and the transfer efficiency of the paint applicator is rated at 75%.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1 (North Paint Room)	Spray Booth	19	4	9,000	75
2 (South Paint Room)	Spray Booth	20	4	10,000	75

Enforcement Issue

IDEM is aware that these two spray booths have been constructed and 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:

An incomplete application for the purposes of this review was received on August 1, 1996. Additional information received on October 17, 1996, makes the application administratively complete.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations.

Total 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	Emissions (tons/year)
PM	142.2
SO ₂	0
VOC	30.66
CO	0
NO _x	0
Total HAPs	2.98

Allowable emissions of Volatile Organic Compounds (VOCs) 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

Pulaski County has been classified as attainment or unclassifiable for the 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.

Source Status

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.

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 (ton/yr)
PM	7.11
PM10	7.11
SO ₂	0.0
VOC	30.66
CO	0.0
NO _x	0.0

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) applicable to this facility.

State Rule Applicability

326 IAC 5-1-2 (Visible Emission Limitations)

This facility is subject to 326 IAC 5-1-2 (Visible Emission Limitations), because it is located in an attainment area for particulate matter. Pursuant to this rule, the owner/operator of this facility must not allow visible emissions from the stacks to exceed 40% opacity in twenty-four consecutive readings, or 60% opacity for more than a cumulative total of 15 minutes in a six hour period (60 periods).

326 IAC 6-3 (Process Operations):

- (a) The fiberglass filters for particulate matter overspray control shall be in operation at all times when the two (2) spray rooms are in operation.
- (b) The two (2) spray rooms 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.
- (c) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters (or water curtain).
- (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

326 IAC 8-2-9 (Surface coating emission limitations: miscellaneous metal coating operations)

This facility is subject to 326 IAC 8-2-9(d)(2), due to its Standard Industrial Classification major group number of 3444 categorizing it as a surface coating facility of metal parts. Pursuant to this rule, no owner or operator may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to ninety degrees Celsius (90E C) (194E F). According to the attached spreadsheet, the VOC content for each coatings is less than 3.5 pounds per gallon of coating and is, therefore, in compliance with this regulation.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 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) These two (2) spray rooms 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 spreadsheets for detailed air toxic calculations.

Conclusion

The construction of these two spray rooms will be subject to the conditions of the attached proposed Construction Permit No. CP-131-6353, Plt ID No. 131-00018.

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

**Company Name: Gal Fab, INC
Address City IN Zip: 612 W. 11th Street, Winamac IN 46996
CP: 131-6353
Plt ID: 085-00002
Reviewer: Thomas A. Frankiewicz, KERAMIDA
Date: 10/18/96**

Material	Density (Lb/Gal)	Weight % Volatile (H2O& 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	Particulate Actual pounds per hour	lb VOC /gal solids	Transfer Efficiency	Control Efficiency
Black WR Air Dry Enamel	9.6	66.30%	54.4%	11.9%	60.5%	24.30%	4.00000	0.500	2.79	1.25	2.50	60.00	10.95	7.11	0.36	4.72	75%	95%
Gray WR Air Dry Enamel	8.4	58.10%	45.8%	12.3%	54.9%	28.40%	4.00000	0.500	0.27	1.23	2.46	59.04	10.77	7.71	0.39	3.64	75%	95%
Cocoa Brown WR Enamel	6.2	72.00%	58.3%	13.7%	61.3%	22.20%	4.00000	0.500	3.10	3.10	6.20	148.80	27.16	3.80	0.19	3.83	75%	95%
Dark Green WR Enamel	8.6	69.64%	54.7%	14.4%	56.2%	25.30%	4.00000	0.500	2.92	3.48	6.96	167.04	30.48	5.68	0.28	4.86	75%	95%

State Potential Emissions

Add worst case coating to all solvents

18.12

434.88

79.37

24.31

1.22

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)

Particulate Actual Pounds per Hour = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1- Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used