

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Matcor Metal Fabrication  
Attn: Evelyn Becker  
1021 West Birchwood Street  
Morton, Illinois 61550

Application No.: 05070016

I.D. No.: 179050AAN

Applicant's Designation:

Date Received: March 5, 2012

Subject: Metal Parts Manufacturing

Date Issued:

Expiration Date:

Location: 1021 West Birchwood Street, 844 W. Birchwood, and 400 Detroit Avenue, Morton, Tazewell County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Two (2) Powder Paint Booths with Dry Filters;

One (1) Powder Paint Booth (ColorMaxFC) with Cyclone Separator;

One (1) liquid coating operation with filters comprised of:

One (1) Liquid paint room with One (1) electrostatic sprayer;

One (1) Liquid Paint Mix Room;

One (1) touch-up fixed air filtration booth with bag and roll media type exhaust filter;

Natural gas-fired equipment that including:

Two (2) washer line heaters;

Two (2) drying ovens;

Two (2) curing ovens;

Two (2) bake ovens;

One (1) 2 mmBtu/hr Detroit Bake Oven;

One (1) 1.35 mmBtu/hr infrared oven with cool down tunnel;

Two (2) alkaline strip tanks (W. Birchwood Avenue);

One (1) alkaline strip tank (Detroit Avenue);

Two (2) wash systems with scrubber; and

One (1) Welding Operation

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued:

- i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM), 10 tons/year for any single Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such

HAPs). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

- ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM.
  - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes all operating permit(s) for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
    - b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
    - c. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
  3. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
  4. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35

Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception:  
If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K (Use of Organic Material) shall apply only to photochemically reactive material.

- 5a. This permit is issued based upon the source not being subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs.
  - b. This permit is issued based on the paint mixing room not being subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Paints and Allied Products Manufacturing, 40 CFR 63, Subpart CCCCCC. The paint mixing room will not process, use, or generate materials containing HAP, as defined in 40 CFR 63.11607.
  - c. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63 Subpart HHHHHH, because the source is not involved in the spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
6. Pursuant to 35 Ill. Adm. Code 215.206(a)(1), the limitations of 35 Ill. Adm. Code 215 Subpart F (Coating Operations) shall not apply to coating plants in which emissions of volatile organic material as limited by the operating permit will not exceed 22.7 Mg/year (25 tons/year), in the absence of air pollution control equipment.
- 7a. Pursuant to 35 Ill. Adm. Code 215.182(a), no person shall operate a cold cleaning degreaser unless:
- i. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20 percent of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
  - ii. The cover of the degreaser is closed when parts are not being handled; and
  - iii. Parts are drained until dripping ceases.
- b. Pursuant to 35 Ill. Adm. Code 215.182(b), no person shall operate a cold cleaning degreaser unless:

- i. The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counterweights, or a powered system if:
    - A. The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F);
    - B. The solvent is agitated; or
    - C. The solvent is heated above ambient room temperature.
  - ii. The degreaser is equipped with a facility for draining cleaned parts. The drainage facility shall be constructed so that parts are enclosed under the cover while draining unless:
    - A. The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or
    - B. An internal drainage facility cannot be fitted into the cleaning system, in which case the drainage facility may be external.
  - iii. The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:
    - A. A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or
    - B. Any other equipment or system of equivalent emission control as approved by the Agency. Such a system may include a water cover, refrigerated chiller or carbon adsorber.
  - iv. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and
  - v. If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.
- 8a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the filters and cyclone separator associated with the powder coating operations and the scrubber associated with the wash systems such that the filters,

cyclone separator, and the scrubber are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

- c. The washer line heaters, drying ovens, curing ovens, bake ovens, and infrared oven shall only be operated with natural gas as the fuel. The use of any other fuel in the washer line heaters, drying ovens, curing ovens, bake ovens, or infrared oven requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 9a. Emissions and operation of the coating lines (including touch-up fixed air filtration booth, liquid paint mix room, and the ColorMaxFC powder paint booth) shall not exceed the following limits:

- i. VOM Emissions shall not exceed the following:

<u>Material</u>	<u>Volatile Organic Material Usage</u>		<u>Volatile Organic Material Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
VOM Containing Materials	2.29	18.30	2.29	<u>18.30</u>
			Total:	<u>18.30</u>

- ii. Particulate Matter emissions shall not exceed the following:

<u>Operation</u>	<u>Particulate Matter Emissions</u>	
	<u>(Lbs/Hour)</u>	<u>(Tons/Year)</u>
Liquid Coating	0.3	0.2
Powder Coating	1.2	5.3

- iii. These limits are based on the maximum usage and VOM content of each material as provided in the permit application. Usage shall be defined as the amount of VOM purchased, minus the amount of VOM shipped off-site verified by physical analysis. Particulate matter emissions are based on the maximum coating usage, transfer and collection efficiency.

- b. This permit is issued based on negligible emissions of particulate matter from the three alkaline strip tanks. For this purpose, emissions of each shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.

- c. Emissions and operation of the wash systems shall not exceed the following limits:

- i. VOM Emissions:

<u>Equipment</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Ton/Month)</u>	<u>(Tons/Year)</u>	<u>(Ton/Month)</u>	<u>(Tons/Year)</u>
Wash Systems	0.39	3.90	0.39	3.90

These limits are based on maximum material usage at 8760 hours per year operation.

- ii. This permit is issued based on negligible emissions of particulate matter from the wash systems. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
- d. Emissions and operations of all natural gas combustion units (including washer line, heaters, drying ovens, curing ovens, bake ovens, infrared oven, and heaters) shall not exceed the following limits:
  - i. Natural Gas Usage: 83.6 mmscf/month, 836 mmscf/year.
  - ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor</u> (lbs/mmscf)	<u>Emissions</u>	
		(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84	3.51	35.11
Nitrogen Oxides (NO <sub>x</sub> )	100.0	4.18	41.80
Particulate Matter (PM)	7.6	0.32	3.18
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.03	0.25
Volatile Organic Material (VOM)	5.5	0.22	2.23

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- e. Emissions and operations of welding operations shall not exceed the following limits:

<u>Weld Wire</u>		<u>Particulate Matter Emissions</u>	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
205	2,050	4.33	43.3

These limits are based on maximum emissions of 21.1 lbs/1000 lbs of weld wire.

- f. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA and the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart Mmmm.
- g. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

- 10a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 11 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
11. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 12a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential

to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

13. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 14a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the limits in this permit:
  - i. Records addressing use of good operating practices for the filters, cyclone separator, and scrubber:
    - A. Records for periodic inspection of the filters, cyclone separator, and scrubber with date, individual performing the inspection, and nature of inspection; and
    - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
  - ii. Amount of powder coating usage (tons/month and tons/year);
  - iii. Natural Gas Usage of the source (mmscf/month and mmscf/year);
  - iv. The name and identification number of each VOM containing material used;
  - v. The amount of VOM containing materials used (tons/month, tons/year);

- vi. The VOM and HAP contents of each material used (percent by weight);
  - vii. Weld wire used by type (tons/month, tons/year);
  - viii. PM and HAP emission factors for each weld wire type with supporting information; and
  - ix. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM and HAP from the source, with supporting calculations. Any credits for the amount of VOM and/or HAP shipped off-site shall be verified by physical analysis of the VOM and/or HAP to be credited. Otherwise, the emissions shall be calculated assuming 100 percent of the VOM and HAP used is emitted, (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
15. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 16a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:
- Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
- and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5407 North University Avenue  
Peoria, Illinois 61614

It should be noted that this permit has been revised so as to include the revisions and operation of equipment described in Construction permit 12030005.

It should also be noted that fuel burning emission unit other than those listed in 35 Ill. Adm. Code 201.146(c) for direct systems used for comfort heating purposes and indirect heating systems with a design heat input capacity of less than 2930 kW (10 mmBtu/hr) operations are exempt from permitting requirements, pursuant to 35 Ill. Adm. Code 201.146(d).

If you have any questions on this permit, please call German Barria at 217/785-1705.

Edwin C. Bakowski, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

Date Signed: \_\_\_\_\_

ECB: GB:

cc: Illinois EPA, FOS Region 2  
USEPA - Lotus Notes

Attachment A

This attachment provides a summary of the maximum emission from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the source. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for VOM, 10 tons per year for a single HAP, and 25 tons/year for any combination of such HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that control measures are more effective than required in this permit.

<u>Emission Source</u>	E M I S S I O N S (Tons/yr)					<u>Single HAP</u>	<u>Total HAPs</u>
	CO	NO <sub>x</sub>	PM	SO <sub>2</sub>	VOM		
Liquid Coating	----	----	0.20	----	18.30		
Powder Coating	----	----	5.30	----	----		
Wash System	----	----	0.88	----	3.90		
Alkaline Strip Tanks	----	----	1.32	----	----		
Natural Gas-fired Combustion	35.11	41.80	3.18	0.25	2.23		
Welding	----	----	43.30	----	----		
Grinding/drilling/machining/ sawing/buffing/cleaning	----	----	<u>0.44</u>	----	----	--	--
Totals:	35.11	41.80	54.62	0.25	24.43	9.0	22.5

GB: Type