

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Matcor Metal Fabrication
Attn: Jessica Rivera
1021 West Birchwood Street
Morton, Illinois 61550

Application No.: 05070016

I.D. No.: 179050AAN

Applicant's Designation:

Date Received: May 3, 2007

Subject: Metal Parts Manufacturing

Date Issued: March 8, 2011

Expiration Date: February 1, 2012

Location: 1021 West Birchwood Street, 400 Detroit Avenue, and 231 North
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 powder coating operations, with dry filters, one liquid coating operations with filters, natural gas-fired equipment, two alkaline strip tanks, two wash systems, and welding operations 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., volatile organic material (VOM) less than 25 tons per year, 10 tons/year for any individual 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. 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 consequence 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, being established prior to the Compliance Date for existing sources listed in 40 CFR 63.3883(b).
- b. Prior to initial issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.

- 2a. 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 the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
- b. Pursuant to 35 Ill. Adm. Code 212.321(a), 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 subsection (c) of 35 Ill. Adm. Code 212.321.
- 3a. Pursuant to 35 Ill. Adm. Code 215.206(a)(1), the limitations of 35 Ill. Adm. Code 215 Subpart F 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.
- b. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) 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.
- c. 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.
- 4a. 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.
- 5a. Emissions and operation of the coating operations shall not exceed the following limits:

- i. VOM Emissions shall not exceed the following:

<u>Material</u>	Volatile Organic Material			
	Usage		Emissions	
	(Tons/Mo)	(Tons/Yr)	(Tons/Mo)	(Tons/Yr)
VOM Containing Materials	2.3	18.3	2.3	<u>18.3</u>
			Total:	<u>18.3</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 two alkaline strip tanks. For this purpose, emissions of each shall not exceed nominal emission rates of 0.1 lb/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>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/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 lb/hour and 0.44 tons/year.

d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. 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.

e. Emissions and operations of all natural gas combustion units (including washer line, heaters, drying ovens, curing ovens, 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 (Lbs/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	3.51	35.11
Nitrogen Oxides (NO _x)	100.0	4.18	41.80
Particulate Matter (PM)	7.6	0.32	3.18
Sulfur Dioxide (SO ₂)	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).

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

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

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

- g. This permit is issued based on negligible emissions of particulate matter from grinding, drilling, machining, sawing, buffing, and maintenance/janitorial cleaning. For this purpose, emissions of each emission unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- h. 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).
- 6a. 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.

- b. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
 - i. Natural Gas Usage of the source (mmscf/month and mmscf/year);
 - ii. The name and identification number of each VOM containing material;
 - iii. The amount of VOM containing materials used (tons/month and tons/year);
 - iv. The VOM and HAP contents of each material used (percent by weight);
 - v. Weld wire used by type (tons/month and tons/year);
 - vi. PM and HAP emission factors for each weld wire type with supporting information; and
 - vii. Monthly and annual CO, NO_x, PM, SO₂, VOM and HAP emissions 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).
7. 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) 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.

8. If there is an exceedance of or 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/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.

9. 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
5415 North University Avenue
Peoria, Illinois 61614

It should be noted that this permit has been revised so as to include the operation of equipment described in Construction Permits #03050035 and #07060050.

If you have any questions on this permit, please call German Barria at 217/782-2113.

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

Date Signed: _____

ECB:GB:psj

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/Year)					Single	Total
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	<u>HAP</u>	<u>HAPs</u>
Liquid Coating	----	----	0.20	----	18.3		
Powder Coating	----	----	5.30	----	----		
Wash System	----	----	0.88	----	3.90		
Alkaline Strip Tanks	----	----	0.88	----	----		
Natural Gas-fired Combustion	35.11	41.80	3.18	0.25	2.23		
Welding	----	----	43.30	----	----		
Grinding/drilling/machining/ sawing/buffing/cleaning	-----	-----	0.44	-----	-----	-----	-----
Totals:	35.11	41.80	54.18	0.25	24.43	<10	<25

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