

217/782-2113

REVISED
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

McLaughlin Body Company
Attn: Sandra Forsyth
2430 River Drive
Moline, Illinois 61265

Application No.: 95090178 I.D. No.: 161065AGJ
Applicant's Designation: PB113 Date Received: June 29, 2007
Subject: Paint Booths and Ovens
Date Issued: September 7, 2007 Expiration Date: June 11, 2012
Location: 350 - 44th Street, Rock Island, Rock Island County

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

7 Liquid Coating Booths
1 Urethane Coating Booth
2 Powder Coating Booths
1 Small Parts E-Coat System
1 Rust-Proofing Booth
6 Bake Ovens (Two 2.5, Two 3.9, 7.9, and 9.1 mmBtu/Hour)
1 Dry Off Oven (2.5 mmBtu/hour)
1 IR Oven
1 Heat Cleaning Oven (2.0 mmBtu/hour) with Afterburner
1 Electro-Deposition Dip Tank
1 Pickling Tank (Phosphoric Acid) with Scrubber
Clean-Up Operations
1 Central Liquid Coating Booth Oven (1.5 mmBtu/hour)
1 Small Parts E-Coat System Oven (1.5 mmBtu/hour)

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 to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for VOM). 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.
- 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) issued for this location.

2. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63 Subpart CCC. Pursuant to 40 CFR 63.1155(a)(3), the provisions of 40 CFR 63 Subpart CCC do not apply to facilities that pickle carbon steel without using hydrochloric acid.
- 3a. 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. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 Ill. Adm. Code 212.301 and 212.314.
- c. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

All normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.

- d. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

- iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program,
- e. 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.
4. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 5a. Pursuant to 35 Ill. Adm. Code 215.204(k)(2), no owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to this Part, delivered to the coating applicator:
- | Heavy Off-highway Vehicle Products | <u>kg/l</u> | <u>lb/gal</u> |
|--|-------------|---------------|
| In the remaining counties | | |
| Extreme performance prime coat | 0.42 | (3.5) |
| Extreme performance top coat-air dried | 0.52 | (4.3) |
| Final repair coat- air dried | 0.58 | (4.8) |
- b. Pursuant to 35 Ill. Adm. Code 215.209, no coating line subject to the limitations of 35 Ill. Adm. Code 215.204 is required to meet 35 Ill. Adm. Code 215.301 or 215.302 after the date by which the coating line is required to meet 35 Ill. Adm. Code 215.204.
- 6a. 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 shall apply only to photochemically reactive material.

- b. In the event that the operation of this emission unit 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.
- 7a. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to the heat cleaning oven.
- b. The afterburner combustion chamber of the heat cleaning oven shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation of the pyrolysis furnace.
- c. The Permittee shall follow good operating practices for the heat cleaning oven afterburner, including periodic inspection, routine maintenance and prompt repair of defects.
- d. The pickling lines shall not be operated with using hydrochloric acid.
- 8a. Emissions and operation of the 7 liquid coating booths (including central liquid coating booth (PB113)) shall not exceed the following limits:

Coating Usage		Pollutant	Emissions	
(Gallons/Month)	(Gallons/Year)		(Tons/Month)	(Tons/Year)
3,500	35,000	PM	0.28	2.81
		VOM	6.13	61.25

These limits are based on maximum coating usage, volatile organic material (VOM) content (3.5 lbs/gallon), coating density (12.34 lbs/gallon), particulate matter (PM) transfer efficiency (35%), and PM control efficiency (98%).

- b. Emissions and operation of the small parts E-coat system (PB114) shall not exceed the following limits:

Coating Usage		Pollutant	Emissions	
(Gallons/Month)	(Gallons/Year)		(Tons/Month)	(Tons/Year)
240	2,400	PM	0.02	0.19
		VOM	0.22	2.16

These limits are based on maximum coating usage, volatile organic material (VOM) content (3.5 lbs/gallon), coating density (12.34 lbs/gallon), particulate matter (PM) transfer efficiency (35%), and PM control efficiency (98%).

- c. Emissions and operation of the urethane coating booth shall not exceed the following limits:

Urethane Coating Usage		Particulate Matter (PM) Emissions	
<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
3,750	45,000	0.2	1.8

These limits are based on maximum coating usage, coating density of 9.24 lb/gallon, transfer efficiency of 65%, and filter efficiency of 98%.

- d. This permit is issued based on negligible emissions of VOM from the urethane coating booth. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
- e. This permit is issued based on negligible emissions of PM from the two powder coating booths. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/yr.
- f. Emissions and operation of the rust-proofing booth shall not exceed the following limits:

Material Usage		VOM Emissions	
<u>(Gallons/Mo)</u>	<u>(Gallons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
340	3,400	0.6	6.0

These limits are based on maximum material usage and maximum VOM content (3.5 lbs/gallon).

- g. Emissions and operation of the rust-proofing booth shall not exceed 0.5 tons/month and 2.7 tons/year for PM. These limits are based on the maximum PM emission rate (1.31 lbs/hour) and maximum operating time (4,000 hour/year).
- h. Emissions and operation of all natural gas-fired ovens (including central liquid coating booth oven (OV113) and the small parts E-coat system Oven (OV114)) shall not exceed the following limits:
 - i. Maximum combined firing rate of 37.3 mmBtu/hour.
 - ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor</u> (lbs/1000 Btu)	<u>E M I S S I O N S</u>	
		<u>(lbs/Hr)</u>	<u>(Ton/Yr)</u>
NO _x	98	3.68	7.37
CO	82.4	3.08	6.17
PM	7.4	0.32	0.64
VOM	5.4	<u>0.22</u>	<u>0.43</u>
Totals:		7.3	14.61

These limits are based on continuous operation at the maximum combined firing rate (37.3 mmBtu/hour), standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998), and maximum operation of 4,000 hours/year.

- i. This permit is issued based on negligible emissions of VOM from the electro-deposition dip tank. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
- j. This permit is issued based on negligible emissions of PM from the pickling tank with scrubber. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
- k. Emissions and operation of plant-wide clean-up operations shall not exceed the following limits:

<u>Clean-Up Solvent Usage</u>		<u>VOM Emissions</u>	
<u>(Gallons/Mo)</u>	<u>(Gallons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
300	1,500	1.1	5.625

These limits are based on maximum clean-up solvent usage and maximum VOM content (7.5 lbs/gallon).

- 9. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.99 tons/month and 19.9 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 of Section 112(g) of the Clean Air Act or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart Mmmm.
- 10. 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).
- 11a. The VOM and HAP emissions shall be calculated using the following equation:

$$E = [\sum P_i \times C_i] / 2,000$$

where

E - VOM/HAP emissions (tons);

P_i - coating, solvent and lubricating oil usage (gallons);

C_i - VOM/HAP content of raw material P_i used (lbs/gallon);

- b. PM emission shall be calculated using the following equation:

$$E = [\sum P_i \times S_i] \times OS \times (1 - CE),$$

where

E - PM emission (tons);

P_i - Coating usage (gallons);

S_i - Solids content of coating used (lbs/gallon);

OS - Overspray (assumed 60%);

CE - Control Efficiency (assumed 99%)

- 12a. 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. Pursuant to 35 Ill. Adm. Code 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:

i. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301, pursuant to 35 Ill. Adm. Code 212.107.

ii. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in 35 Ill. Adm. Code 212.113, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, pursuant to 35 Ill. Adm. Code 212.109.

iii. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, pursuant to 35 Ill. Adm. Code 212.110(a).

iv. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, pursuant to 35 Ill. Adm. Code 212.110(b).

- v. 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, pursuant to 35 Ill. Adm. Code 212.110(c).
 - c. Testing required by Condition 12 shall be performed by a qualified independent testing service.
- 13a. 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. 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.
 - c. The Permittee shall maintain monthly records of the following items so as to demonstrate compliance with the conditions of this permit:

- i. The name and identification number of each coating as applied each day;
 - ii. The weight of VOM per volume of each coating (minus water and exempt compounds which are specifically exempted from the definition of VOM) as applied;
 - iii. Coating and clean-up solvent usage (gallons/month, gallons/year);
 - iv. Coating and clean-up solvent VOM and HAP content (lbs/gallon);
 - v. Hours of operation for each gas-fired oven
 - vi. Lubricating oil usage (gallons/month, gallons/year) and its VOM and HAP content (lbs/gallon); and
 - vii. Monthly and annual CO, NO_x, PM, SO₂, VOM, and HAP emissions from the source with supporting calculations (tons/month, tons/year).
14. 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.
15. 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 Agency's Compliance and Enforcement 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.
16. 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.
17. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance and Enforcement 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
5215 North University
Peoria, Illinois 61614

It should be noted that this permit has been revised to include operation of the equipment described in Construction Permit 07060082.

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

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

Date Signed: _____

ECB:GB:jws

cc: Region 2

Attachment A-Emissions Summary

This attachment provides a summary of the maximum emission from the Metal Prefabricated Buildings Manufacturing Plant, 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 such a plant. The resulting maximum emissions are below the levels (100 tons per year of VOM) 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 material is handled, coatings used and control measures are more effective than in this permit.

<u>Emission Units</u>	<u>EMISSIONS (Tons/year)</u>			
	<u>VOM</u>	<u>PM</u>	<u>NO_x</u>	<u>CO</u>
Seven liquid Coating Booths	61.25	2.81		
One Urethane Coating Booth	0.44	1.80		
One Rust-Proofing Booth	6.00	2.70		
One Electro-Deposition Dip Tank	0.44	0.00		
One Small parts E-Coat System	2.16	0.19		
Plant Wide Clean-Up Solvent	5.625	0.00		
Two Powder Coating Booth	0.00	0.44		
One Pickling Tank	0.00	0.44		
All Natural Gas-Fired Ovens	<u>0.43</u>	<u>0.64</u>	<u>7.37</u>	<u>6.17</u>
Total	76.345	9.02	7.37	6.17

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