

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NESHAP SOURCE -- RENEWAL

PERMITTEE

P & H Manufacturing
Attn: Joe Woodall
604 South Lodge
Shelbyville, Illinois 62565

Application No.: 02090068

I.D. No.: 173030AAC

Applicant's Designation:

Date Received: January 24, 2008

Subject: Welding and Coating

Date Issued:

Expiration Date:

Location: 604 South Lodge, Shelbyville, Shelby County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of four (4) paint booths with particulate filters, one (1) dip tank, and fifty (50) welding booths, and natural gas-fired outside air furnaces and hanging unit heaters (<2.5 mmBtu/hour, each) 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 for any combination of such HAPs). As a result, the source is excluded from the requirements 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.
 - iii. 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 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. The welding operations at this source are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subparts A and XXXXXX. The Illinois EPA is administering NESHAP in

Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 63.11514(b)(5), the provisions of 40 CFR 63 Subpart XXXXXX apply to each new and existing affected source listed and defined in 40 CFR 63.11514(b)(1) through (5) if you use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. Materials that contain MFHAP are defined to be materials that contain greater than 0.1 percent for carcinogens, as defined by OSHA at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens. For the MFHAP, this corresponds to materials that contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (of the metal), and materials that contain manganese in amounts greater than or equal to 1.0 percent by weight (of the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material. A welding affected source is the collection of all equipment and activities necessary to perform welding operations which use materials that contain MFHAP, as defined in 40 CFR 63.11522, "What definitions apply to this subpart?", or have the potential to emit MFHAP.

- b. Pursuant to 40 CFR 63.11515(a), if you own or operate an existing affected source, you must achieve compliance with the applicable provisions in 40 CFR 63 Subpart XXXXXX by July 25, 2011.
- 3a. 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 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- d. 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).

4. 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 source to exceed 2000 ppm.

5a. Pursuant to 35 Ill. Adm. Code 215.204(j) and (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 compounds which are specifically exempted from the definition of volatile organic material pursuant to 35 Ill. Adm. Code Part 215, delivered to the coating applicator:

i.	Miscellaneous Metal Parts and Products Coating	<u>kg/l</u>	<u>lb/gal</u>
A.	Clear coating	0.52	(4.3)
B.	Air dried coating	0.42	(3.5)
C.	Extreme performance coating	0.42	(3.5)
ii.	Heavy Off-highway Vehicle Products	<u>kg/l</u>	<u>lb/gal</u>
	In the remaining counties		
A.	Extreme performance prime coat	0.42	(3.5)
B.	Extreme performance top coat-air dried	0.52	(4.3)
C.	Final repair coat- air dried	0.58	(4.8)

b. 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 this limitation of 35 Ill. Adm. Code 215 Subpart K (Use of Organic Material) shall apply only to photochemically reactive material.

6a. This permit is issued based on the source not being subject to the National Emission Standard 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 coating operations at this source not being subject to the National Emission Standard 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.
- c. This permit is issued based on the coating operations at this source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the coating operations at this source do not use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. Materials that contain MFHAP are defined to be materials that contain greater than 0.1 percent for carcinogens, as defined by OSHA at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens.
- 7. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 8a. Pursuant to 35 Ill. Adm. Code 215.206(b), the limitations of 35 Ill. Adm. Code 215 Subpart F shall not apply to touch-up and repair coatings used by a coating source described in 35 Ill. Adm. Code 215.204(b), (d), (f), (g), (i), and (j); provided that the source-wide volume of such coatings does not exceed 0.95 l (1 quart) per eight-hour period or exceed 209 l/yr (55 gal/yr) for any rolling twelve-month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with 35 Ill. Adm. Code 215.206(c).
- b. Pursuant to 35 Ill. Adm. Code 215.206(d), "touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 215.206, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.
- c. 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.

- 9a. Pursuant to 40 CFR 63.11516(f), if you own or operate a new or existing welding affected source, you must comply with the requirements in 40 CFR 63.11516(f)(1) and (2) for each welding operation that uses materials that contain MFHAP, as defined in 40 CFR 63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. If your welding affected source uses 2,000 pounds or more per year of welding rod containing one or more MFHAP (calculated on a rolling 12-month basis), you must demonstrate that management practices or fume control measures are being implemented by complying with the requirements in 40 CFR 63.11516(f)(3) through (8). The requirements in 40 CFR 63.11516(f)(1) through (8) do not apply when welding operations are being performed that do not use any materials containing MFHAP or do not have the potential to emit MFHAP.
- i. You must operate all equipment, capture, and control devices associated with welding operations according to manufacturer's instructions. You must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the capture and control devices, as specified by the requirements in 40 CFR 63.11519(c)(4), "Notification, recordkeeping, and reporting requirements."
 - ii. You must implement one or more of the management practices specified in 40 CFR 63.11516(f)(2)(i) through (v) to minimize emissions of MFHAP, as practicable, while maintaining the required welding quality through the application of sound engineering judgment.
 - A. Use welding processes with reduced fume generation capabilities (e.g., gas metal arc welding (GMAW)—also called metal inert gas welding (MIG));
 - B. Use welding process variations (e.g., pulsed current GMAW), which can reduce fume generation rates;
 - C. Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation;
 - D. Optimize welding process variables (e.g., electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated; and
 - E. Use a welding fume capture and control system, operated according to the manufacturer's specifications.
 - iii. You must perform visual determinations of welding fugitive emissions as specified in 40 CFR 63.11517(b), "Monitoring requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations. You must keep a record of all visual determinations of fugitive emissions along with any corrective action taken in accordance with the

requirements in 40 CFR 63.11519(c)(2), "Notification, recordkeeping, and reporting requirements."

- iv. If visible fugitive emissions are detected during any visual determination required in 40 CFR 63.11516(f)(3), you must comply with the requirements in 40 CFR 63.11516(f)(4)(i) and (ii).
 - A. Perform corrective actions that include, but are not limited to, inspection of welding fume sources, and evaluation of the proper operation and effectiveness of the management practices or fume control measures implemented in accordance with 40 CFR 63.11516(f)(2). After completing such corrective actions, you must perform a follow-up inspection for visible fugitive emissions in accordance with 40 CFR 63.11517(a), "Monitoring Requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations.
 - B. Report all instances where visible emissions are detected, along with any corrective action taken and the results of subsequent follow-up inspections for visible emissions, and submit with your annual certification and compliance report as required by 40 CFR 63.11519(b)(5), "Notification, recordkeeping, and reporting requirements."
- v. If visible fugitive emissions are detected more than once during any consecutive 12 month period (notwithstanding the results of any follow-up inspections), you must comply with 40 CFR 63.11516(f)(5)(i) through (iv).
 - A. Within 24 hours of the end of the visual determination of fugitive emissions in which visible fugitive emissions were detected, you must conduct a visual determination of emissions opacity, as specified in 40 CFR 63.11517(c), "Monitoring requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations.
 - B. In lieu of the requirement of 40 CFR 63.11516(f)(3) to perform visual determinations of fugitive emissions with EPA Method 22, you must perform visual determinations of emissions opacity in accordance with 40 CFR 63.11517(d), "Monitoring Requirements," using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.
 - C. You must keep a record of each visual determination of emissions opacity performed in accordance with 40 CFR 63.11516(f)(5)(i) or (ii), along with any subsequent corrective action taken, in accordance with the requirements in 40 CFR 63.11519(c)(3), "Notification, recordkeeping, and reporting requirements."

- D. You must report the results of all visual determinations of emissions opacity performed in accordance with 40 CFR 63.11516(f)(5)(i) or (ii), along with any subsequent corrective action taken, and submit with your annual certification and compliance report as required by 40 CFR 63.11519(b)(6), "Notification, recordkeeping, and reporting requirements."
- vi. For each visual determination of emissions opacity performed in accordance with 40 CFR 63.11516(f)(5) for which the average of the six-minute average opacities recorded is 20 percent or less but greater than zero, you must perform corrective actions, including inspection of all welding fume sources, and evaluation of the proper operation and effectiveness of the management practices or fume control measures implemented in accordance with 40 CFR 63.11516(f)(2).
- vii. For each visual determination of emissions opacity performed in accordance with 40 CFR 63.11516(f)(5) for which the average of the six-minute average opacities recorded exceeds 20 percent, you must comply with the requirements in 40 CFR 63.11516(f)(7)(i) through (v).
 - A. You must submit a report of exceedence of 20 percent opacity, along with your annual certification and compliance report, as specified in 40 CFR 63.11519(b)(8), "Notification, recordkeeping, and reporting requirements," and according to the requirements of 40 CFR 63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."
 - B. Within 30 days of the opacity exceedence, you must prepare and implement a Site-Specific Welding Emissions Management Plan, as specified in 40 CFR 63.11516(f)(8). If you have already prepared a Site-Specific Welding Emissions Management Plan in accordance with this paragraph, you must prepare and implement a revised Site-Specific Welding Emissions Management Plan within 30 days.
 - C. During the preparation (or revision) of the Site-Specific Welding Emissions Management Plan, you must continue to perform visual determinations of emissions opacity, beginning on a daily schedule as specified in 40 CFR 63.11517(d), "Monitoring Requirements," using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.
 - D. You must maintain records of daily visual determinations of emissions opacity performed in accordance with 40 CFR 63.11516(f)(7)(iii), during preparation of the Site-Specific Welding Emissions Management Plan, in accordance with the requirements in 40 CFR 63.11519(b)(9), "Notification, recordkeeping, and reporting requirements."

- E. You must include these records in your annual certification and compliance report, according to the requirements of 40 CFR 63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."
- viii. The Site-Specific Welding Emissions Management Plan must comply with the requirements in 40 CFR 63.11516(f)(8)(i) through (iii).
 - A. Site-Specific Welding Emissions Management Plan must contain the information in 40 CFR 63.11516(f)(8)(i)(A) through (F).
 - I. Company name and address;
 - II. A list and description of all welding operations which currently comprise the welding affected source;
 - III. A description of all management practices and/or fume control methods in place at the time of the opacity exceedence;
 - IV. A list and description of all management practices and/or fume control methods currently employed for the welding affected source;
 - V. A description of additional management practices and/or fume control methods to be implemented pursuant to 40 CFR 63.11516(f)(7)(ii), and the projected date of implementation; and
 - VI. Any revisions to a Site-Specific Welding Emissions Management Plan must contain copies of all previous plan entries, pursuant to 40 CFR 63.11516(f)(8)(i)(D) and (E).
 - B. The Site-Specific Welding Emissions Management Plan must be updated annually to contain current information, as required by 40 CFR 63.11516(f)(8)(i)(A) through (C), and submitted with your annual certification and compliance report, according to the requirements of 40 CFR 63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."
 - C. You must maintain a copy of the current Site-Specific Welding Emissions Management Plan in your records in a readily-accessible location for inspector review, in accordance with the requirements in 40 CFR 63.11519(c)(12), "Notification, recordkeeping, and reporting requirements."
- b. Pursuant to 40 CFR 63.11523, the provisions in 40 CFR Part 63, Subpart A, applicable to sources subject to 40 CFR 63.11514(a) are specified in Table 2 of 40 CFR 63 Subpart XXXXXX (see Attachment B).

- 10a. 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 paint booth filters so that the paint booth filters are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
 - c. The coating operations at this source shall not use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. Materials that contain MFHAP are defined to be materials that contain greater than 0.1 percent for carcinogens, as defined by OSHA at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens.
 - d. The outside air furnaces and hanging unit heaters shall only be operated with natural gas as the fuel. The use of any other fuel in any of the outside air furnaces or hanging unit heaters 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.
- 11a. Emissions of VOM and operation of the four (4) paint booths and one (1) dip tank shall not exceed the following limits:

VOM Usage		VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
16.0	97.0	16.0	97.0

These limits are based on maximum coating, solvent, and additive usages, and maximum VOM content. The following equation shall be used to calculate VOM and HAP emissions for the coating operations:

$$Te = \sum_{i=1}^n A_i B_i C_i$$

Where:

Te = Total VOM emissions from all coating lines each month in units of lbs/month or tons/month or HAP emissions;

n = Number of different coatings, solvent, and additive as applied each month on all coating lines;

i = Subscript denoting an individual coating, solvent, and additive;

A_i = Weight fraction of VOM per volume of each coating, solvent, and additive as applied each month on all coating lines (% by weight/100);

B_i = Volume of each coating, solvent and additive as applied each month on all coating lines in units of gallons/month; and

C_i = Density of each coating, solvent and additive as applied each month on all coating lines in units of lbs/gallon.

- b. This permit is issued based on negligible emissions of particulate matter (PM) from the paint booths. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- c. Emissions and operation of the welding operations shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Welding Wire</u>		<u>PM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Welding	360	2,155	2.0	11.22

These limits are based on standard emission factors (Table 12.19-1 of AP-42) and the maximum annual throughput.

- d. Emissions and operation of the natural gas combustion units shall not exceed the following limits:
 - i. Natural Gas Usage: 16 mmscf/month and 160 mmscf/year
 - ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(Lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84	0.68	6.72
Nitrogen Oxides (NO _x)	100	0.80	8.00
Particulate Matter (PM)	7.6	0.07	0.61
Sulfur Dioxide (SO ₂)	0.6	0.01	0.05
Volatile Organic Material (VOM)	5.5	0.50	0.44

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

- e. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall not 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 all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart Mmmm.

- f. Compliance with the annual limits of this permit shall be determined a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 12a. Pursuant to 35 Ill. Adm. Code 212.282, 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 13 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 13a. Pursuant to 35 Ill. Adm. Code 215.208(a), the VOM content of coatings shall be determined by Method 24, 40 CFR Part 60, Appendix A, except for glues and adhesive coatings, two component reactive coatings forming volatile reaction products, coatings requiring energy other than heat to initiate curing, and coatings requiring high temperature catalysis for curing, providing the person proposing testing of the material submits to the Illinois EPA proof that the Method 24 results would not be representative and proof that a proposed alternative test method gives representative, accurate test results. For printing inks, the volatile organic material content shall be determined by Method 24A, 40 CFR Part 60, Appendix A. Any alternate test method must be approved by the Illinois EPA which shall consider data comparing the performance of the proposed alternative to the performance of the

approved test method(s). If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative.

- b. Pursuant to 35 Ill. Adm. Code 215.208(b), transfer efficiency shall be determined by a method, procedure or standard approved by the USEPA, under the applicable new source performance standard or until such time as USEPA has approved and published such a method, procedure or standard, by any appropriate method, procedure or standard approved by the Illinois EPA.
- 14a. Pursuant to 40 CFR 63.11517(a), visual determination of fugitive emissions must be performed according to the procedures of EPA Method 22, of 40 CFR part 60, Appendix A-7. You must conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes, and visible emissions will be considered to be present if they are detected for more than six minutes of the fifteen minute period.
- b. Pursuant to 40 CFR 63.11517(b), visual determinations of fugitive emissions must be performed in accordance with 40 CFR 63.11517(a) and according to the schedule in 40 CFR 63.11517(b)(1) through (4).
 - i. Perform visual determination of fugitive emissions once per day, on each day the process is in operation, during operation of the process.
 - ii. If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, performed in accordance with 40 CFR 63.11517(b)(1) for 10 days of work day operation of the process, you may decrease the frequency of EPA Method 22 testing to once every five days of operation of the process (one calendar week). If visible fugitive emissions are detected during these tests, you must resume EPA Method 22 testing of that operation once per day during each day that the process is in operation, in accordance with 40 CFR 63.11517(b)(1).
 - iii. If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed in accordance with 40 CFR 63.11517(b)(2), you may decrease the frequency of EPA Method 22 testing to once per 21 days of operation of the process (one calendar month). If visible fugitive emissions are detected during these tests, you must resume weekly EPA Method 22 in accordance with 40 CFR 63.11517(b)(2).
 - iv. If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed in accordance with 40 CFR 63.11517(b)(3), you may decrease the frequency of EPA Method 22 testing to once per 60 days of operation of the process (3 calendar months). If visible fugitive emissions are detected during these tests, you must resume monthly EPA Method 22 in accordance with 40 CFR 63.11517(b)(3).

- c. Pursuant to 40 CFR 63.11517(c), visual determination of emissions opacity must be performed in accordance with the procedures of EPA Method 9, of 40 CFR part 60, Appendix A-4, and while the affected source is operating under normal conditions. The duration of the EPA Method 9 test shall be thirty minutes.
- d. Pursuant to 40 CFR 63.11517(d), you must perform visual determination of emissions opacity in accordance with Pursuant to 40 CFR 63.11517(c) and according to the schedule in 40 CFR 63.11517(d)(1) through (5).
 - i. Perform visual determination of emissions opacity once per day during each day that the process is in operation.
 - ii. If the average of the six minute opacities recorded during any of the daily consecutive EPA Method 9 tests performed in accordance with 40 CFR 63.11517(d)(1) does not exceed 20 percent for 10 days of operation of the process, you may decrease the frequency of EPA Method 9 testing to once per five days of consecutive work day operation. If opacity greater than 20 percent is detected during any of these tests, you must resume testing every day of operation of the process according to the requirements of 40 CFR 63.11517(d)(1).
 - iii. If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with 40 CFR 63.11517(d)(2) does not exceed 20 percent for four consecutive weekly tests, you may decrease the frequency of EPA Method 9 testing to once per every 21 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any monthly test, you must resume testing every five days of operation of the process according to the requirements of 40 CFR 63.11517(d)(2).
 - iv. If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with 40 CFR 63.11517(d)(3) does not exceed 20 percent for three consecutive monthly tests, you may decrease the frequency of EPA Method 9 testing to once per every 120 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any quarterly test, you must resume testing every 21 days (month) of operation of the process according to the requirements of 40 CFR 63.11517(d)(3).
 - v. If, after two consecutive months of testing, the average of the six minute opacities recorded during any of the monthly EPA Method 9 tests performed in accordance with 40 CFR 63.11517(d)(3) does not exceed 20 percent, you may resume EPA Method 22 testing as in 40 CFR 63.11517(b)(3) and (4). In lieu of this, you may elect to continue performing EPA Method 9 tests in accordance with 40 CFR 63.11517(d)(3) and (4).

15. 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.
- 16a. Pursuant to 40 CFR 63.11519(c), you must collect and keep records of the data and information specified in 40 CFR 63.11519(c)(1) through (13), according to the requirements in 40 CFR 63.11519(c)(14).
 - i. Maintain information specified in 40 CFR 63.11519(c)(1)(i) through (ii) for each affected source.
 - A. Each notification and report that you submitted to comply with 40 CFR 63 Subpart XXXXXX, and the documentation supporting each notification and report.
 - B. Records of the applicability determinations as in 40 CFR 63.11514(b)(1) through (5), "Am I subject to this subpart," listing equipment included in its affected source, as well as any changes to that and on what date they occurred, must be maintained for 5 years and be made available for inspector review at any time.
 - ii. Maintain a record of the information specified in 40 CFR 63.11519(c)(2)(i) through (iii) for each affected source which performs visual determination of fugitive emissions in accordance with 40 CFR 63.11517(a), "Monitoring requirements."

- A. The date and results of every visual determination of fugitive emissions;
 - B. A description of any corrective action taken subsequent to the test; and
 - C. The date and results of any follow-up visual determination of fugitive emissions performed after the corrective actions.
- iii. Maintain a record of the information specified in 40 CFR 63.11519(c)(3)(i) through (iii) for each affected source which performs visual determination of emissions opacity in accordance with 40 CFR 63.11517(c), "Monitoring requirements."
- A. The date of every visual determination of emissions opacity; and
 - B. The average of the six-minute opacities measured by the test; and
 - C. A description of any corrective action taken subsequent to the test.
- iv. You must maintain a record of each visual determination of emissions opacity performed during the preparation (or revision) of a Site-Specific Welding Emissions Management Plan, in accordance with 40 CFR 63.11516(f)(7)(iii), "Requirements for opacities exceeding 20 percent."
- v. If you have been required to prepare a plan in accordance with 40 CFR 63.11516(f)(7)(iii), "Site-Specific Welding Emissions Management Plan," you must maintain a copy of your current Site-Specific Welding Emissions Management Plan in your records and it must be readily available for inspector review.
- vi. If you comply with 40 CFR 63 Subpart XXXXXX by operating any equipment according to manufacturer's instruction, you must keep these instructions readily available for inspector review.
- vii. If you operate a new or existing welding affected source which is not required to comply with the requirements of 40 CFR 63.11516(f)(3) through (8) because it uses less than 2,000 pounds per year of welding rod (on a rolling 12-month basis), you must maintain records demonstrating your welding rod usage on a rolling 12-month basis.
- viii. Your records must be maintained according to the requirements in 40 CFR 63.11519(c)(14)(i) through (iii).
- A. Your records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1), "General Provisions." Where appropriate, the

records may be maintained as electronic spreadsheets or as a database.

- B. As specified in 40 CFR 63.10(b)(1), "General Provisions," you must keep each record for 5 years following the date of each occurrence, measurement, corrective action, report, or record.
 - C. You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, corrective action, report, or record according to 40 CFR 63.10(b)(1), "General Provisions." You may keep the records off-site for the remaining 3 years
- 17a. Pursuant to 35 Ill. Adm. Code 215.206(c), the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of 35 Ill. Adm. Code 215.204(b), (d), (f), (g), (i), and (j) because of the provisions of 35 Ill. Adm. Code 215.206(b) shall:
- i. Collect and record the name, identification number, and volume of each touch-up and repair coating, as applied on each coating line, per eight-hour period and per month;
 - ii. Perform calculations on a daily basis, and maintain at the source, records of such calculations of the combined volume of touch-up and repair coatings used source-wide for each eight-hour period;
 - iii. Perform calculations on a monthly basis, and maintain at the source, records of such calculations of the combined volume of touch-up and repair coatings used source-wide for the month and the rolling twelve-month period;
 - iv. Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to 35 Ill. Adm. Code 215.206(b) on or before January 31 of the following year;
 - v. Maintain at the source for a minimum of three years all records required to be kept under this 35 Ill. Adm. Code 215.206(c) and make such records available to the Agency upon request.
- 18a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the Conditions of this permit:
- i. Records addressing use of good operating practices for the paint booth filters:
 - A. Records for periodic inspection of the paint booth filters 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. Coating usage (gallons/month and gallons/year);
 - iii. Solvent usage (gallons/month and gallons/year);
 - iv. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied in pounds/gallon;
 - v. The name and identification number of each coating;
 - vi. VOM and HAP contents of materials used (percent by weight);
 - vii. The densities of materials used (lbs/gallon);
 - viii. Natural gas usage (mmscf/month and mmscf/year);
 - ix. Welding wire usage; and
 - x. Monthly and annual emissions of CO, NO_x, PM, SO₂, VOM and HAPs (individual and combined) with supporting calculations (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.
- 19a. Pursuant to 40 CFR 63.11519(b)(1), you must prepare and submit annual certification and compliance reports for each affected source according to the requirements of 40 CFR 63.11519(b)(2) through (7). The annual certification and compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in 40 CFR 63.11519(b)(3).
- b. Pursuant to 40 CFR 63.11519(b)(2), unless the Illinois EPA or USEPA has approved or agreed to a different schedule for submission of reports under 40 CFR 63.10(a), "General Provisions," you must prepare and submit each annual certification and compliance report according to the dates specified in 40 CFR 63.11519(b)(2)(i) through (iii). Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

- i. The first annual certification and compliance report must cover the first annual reporting period which begins the day after the compliance date and ends on December 31.
 - ii. Each subsequent annual certification and compliance report must cover the subsequent semiannual reporting period from January 1 through December 31.
 - iii. Each annual certification and compliance report must be prepared and submitted no later than January 31 and kept in a readily-accessible location for inspector review. If an exceedance has occurred during the year, each annual certification and compliance report must be submitted along with the exceedance reports, and postmarked or delivered no later than January 31.
- c. Pursuant to 40 CFR 63.11519(b)(4), the annual certification and compliance report must contain the information specified in 40 CFR 63.11519(b)(4)(i) through (iii), and the information specified in 40 CFR 63.11519(b)(5) through (7) that is applicable to each affected source.
- i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; and
 - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 12-month period ending on December 31. Note that the information reported for the 12 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- d. Pursuant to 40 CFR 63.11519(b)(5), the annual certification and compliance report must contain the information specified in 40 CFR 63.11519(b)(5)(i) through (iii) for each affected source which performs visual determination of fugitive emissions in accordance with 40 CFR 63.11517(a), "Monitoring requirements."
- i. The date of every visual determination of fugitive emissions which resulted in detection of visible emissions;
 - ii. A description of the corrective actions taken subsequent to the test; and
 - iii. The date and results of the follow-up visual determination of fugitive emissions performed after the corrective actions.
- e. Pursuant to 40 CFR 63.11519(b)(6), the annual certification and compliance report must contain the information specified in 40 CFR 63.11519(b)(6)(i) through (iii) for each affected source which performs visual determination of emissions opacity in accordance with 40 CFR 63.11517(c), "Monitoring requirements."

- i. The date of every visual determination of emissions opacity;
 - ii. The average of the six-minute opacities measured by the test; and
 - iii. A description of any corrective action taken subsequent to the test.
- f. Pursuant to 40 CFR 63.11519(b)(8), as required by 40 CFR 63.11516(f)(7)(i), "Requirements for opacities exceeding 20 percent," you must prepare an exceedance report whenever the average of the six-minute average opacities recorded during a visual determination of emissions opacity exceeds 20 percent. This report must be submitted along with your annual certification and compliance report according to the requirements in 40 CFR 63.11519(b)(1), and must contain the information in 40 CFR 63.11519(b)(8)(iii)(A) and (B).
 - i. The date on which the exceedance occurred; and
 - ii. The average of the six-minute average opacities recorded during the visual determination of emissions opacity.
- g. Pursuant to 40 CFR 63.11519(b)(9), you must submit a copy of the records of daily visual determinations of emissions recorded in accordance with 40 CFR 63.11516(f)(7)(iv), "Tier 3 requirements for opacities exceeding 20 percent," and a copy of your Site-Specific Welding Emissions Management Plan and any subsequent revisions to the plan pursuant to 40 CFR 63.11516(f)(8), "Site-specific Welding Emission Management Plan," along with your annual certification and compliance report, according to the requirements in 40 CFR 63.11519(b)(1).
- 20. Pursuant to 35 Ill. Adm. Code 215.206(c)(6), the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of 35 Ill. Adm. code 215.204(b), (d), (f), (g), (i), and (j) because of the provisions of 35 Ill. Adm. Code 215.206(b) shall notify the Illinois EPA in writing if the use of touch-up and repair coatings at the source ever exceeds a volume of 0.95 l (1 quart) per eight-hour period or exceeds 209 l/yr (55 gal/yr) for any rolling twelve-month period within 30 days after any such exceedance. Such notification shall include a copy of any records of such exceedance.
- 21a. 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 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
2009 Mall Street
Collinsville, Illinois 62234

It should be noted that the following operations are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146.

<u>Operation</u>	<u>35 Ill. Adm. Code 201.146()</u>
Cutting	aa
Grinding	aa
Machining	aa
Shot Blasting	aa
Soap Storage	n
Propane Fueled Trucks	e

If you have any questions on this, please call David Hulskotter at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:DWH:psj

cc: Illinois EPA, FOS Region 3
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the coating and welding operation 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 (e.g., 100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such HAPs) 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 less material is handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)						
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	Single <u>HAP</u>	Combined <u>HAPs</u>
4 Paint Spray Booths and 1 Dip Tank			0.44		97.00		
Natural Gas-Fired Combustion Equipment	6.72	8.00	0.61	0.05	0.44		
Welding Operations	--	--	<u>11.22</u>	--	--	--	--
Totals	<u>6.72</u>	<u>8.00</u>	<u>12.27</u>	<u>0.05</u>	<u>97.44</u>	<u>9.0</u>	<u>22.5</u>

DWH:psj

Attachment B - Table 2 to Subpart XXXXXX of Part 63-Applicability of General Provisions to Metal Fabrication or Finishing Area Sources

Instructions for Table 2-As required in 40 CFR 63.11523, "General Provisions Requirements," you must meet each requirement in the following table that applies to you

Citation	Subject
63.1 ¹	Applicability.
63.2	Definitions.
63.3	Units and abbreviations.
63.4	Prohibited activities.
63.5	Construction/reconstruction.
63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), (g), (i), (j)	Compliance with standards and maintenance requirements.
63.9(a)-(d)	Notification requirements.
63.10(a), (b) except for (b)(2), (d)(1), (d)(4)	Recordkeeping and reporting.
63.12	State authority and delegations.
63.13	Addresses of State air pollution control agencies and EPA regional offices.
63.14	Incorporation by reference.
63.15	Availability of information and confidentiality.
63.16	Performance track provisions.

¹§63.11514(g), "Am I subject to this subpart?" exempts affected sources from the obligation to obtain title V operating permits.