

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

B.L. Downey Company, LLC
Attn: David C. Wasz, President
2125 Gardner Road
Broadview, Illinois 60155

<u>Application No.:</u> 91070104	<u>I.D. No.:</u> 031030ACP
<u>Applicant's Designation:</u>	<u>Date Received:</u> April 15, 2011
<u>Subject:</u> Miscellaneous Metal Coating Operation	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 2125 Gardner Road, Broadview, Cook County, 60155	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of five (5) plastisol dip coating lines with preheat and curing ovens; six (6) epoxy powder coating lines with six (6) curing ovens, five (5) preheat dry-off ovens, and three (3) wash stations, all controlled by four (4) cyclones and four (4) baghouses; two (2) burn off ovens; one (1) touch up spray paint area; five (5) electrocoat coating lines with gas-fired curing ovens (ECO-1, 2, 3, 4, 5); three (3) hot water boilers; one (1) liquid spray booth #1, and one (1) gas-fired batch oven, 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/yr for Volatile Organic Material (VOM) and 10 tons/year for any single Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for 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 permits issued for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an

opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, 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 212.302(a), 35 Ill. Adm. code 212.304 through 212.310 and 212.312 shall apply to all mining operations (SIC major groups 10 through 14), manufacturing operations (SIC major groups 20 through 39 except for those operations subject to 35 Ill. Adm. Code Part 212 Subpart S (Grain-Handling and Grain-Drying Operations) that are outside the areas defined in 35 Ill. Adm. Code 212.324(a)(1)), and electric generating operations (SIC group 491), which are located in the areas defined by the boundaries of the following townships, notwithstanding any political subdivisions contained therein, as the township boundaries were defined on October 1, 1979, in the following counties:
 - Cook: All townships
- e. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 3. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided in 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.
- 4a. Pursuant to 35 Ill. Adm. Code 218.204(q)(1), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for miscellaneous metal parts and products coating after

May 1, 2012. Except as otherwise provided in 35 Ill. Adm. Code 218.204(a), (c), (g), (h), (j), (l), (n), (p), and (q), compliance with the emission limitations is required on and after March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code Part 218 Subpart F (Coating Operations) must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. (Note: The equation presented in 35 Ill. Adm. Code 218.206 shall be used to calculate emission limitations for determining compliance by add on controls, credits for transfer efficiency, emissions trades and cross line averaging.) The emission limitations are as follows:

Miscellaneous Metal Parts and Products Coatings and Plastic Parts and Products Coatings On and After May 1, 2012. On and after May 1, 2012, the owner or operator of a miscellaneous metal or plastic parts coating line shall comply with the limitation in 35 Ill. Adm. Code 218.204(q). The limitation in 35 Ill. Adm. Code 218.204(q) shall not apply to aerosol coating products, powder coatings, or primer sealants and ejection cartridge sealants used in ammunition manufacturing. Primer sealants and ejection cartridge sealants shall instead be regulated under 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). For purposes of 35 Ill. Adm. Code 218.204(q)(1), "corrosion resistant basecoat" means a water-borne epoxy coating applied via an electrodeposition process to a metal surface prior to spray coating, for the purpose of enhancing corrosion resistance. The limitations in 35 Ill. Adm. Code 218.204(q)(1) shall not apply to stencil coats, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating. The limitations in 35 Ill. Adm. Code 218.219, however, shall apply to these coatings unless specifically excluded in 35 Ill. Adm. Code 218.219.

		kg/l	kg/l
		(lb/gal)	(lb/gal)
		coatings	solids
i.	General one component coating		
	A. Air dried	0.34 (2.8)	0.54 (4.52)
	B. Baked	0.28 (2.3)	0.40 (3.35)
		kg/l	kg/l
		(lb/gal)	(lb/gal)
		coatings	solids

ii.	General multi-component coating		
	A.	Air dried	0.34 (2.8) 0.54 (4.52)
	B.	Baked	0.28 (2.3) 0.40 (3.35)
iii.	Extreme performance coating		
	A.	Air dried	0.42 (3.5) 0.80 (6.67)
	B.	Baked	0.36 (3.0) 0.61 (5.06)
iv.	Pretreatment coating		0.42 (3.5) 0.80 (6.67)
v.	Repair coats and touch-up coatings		
	A.	Air dried	0.42 (3.5)
	B.	Baked	0.36 (3.01)
vi.	All other coatings		
	A.	Air dried	0.40 (3.3) 0.73 (5.98)
	B.	Baked	0.34 (2.8) 0.54 (4.52)

- b. Pursuant to 35 Ill. Adm. Code 218.205(k), no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.205 shall operate the subject coating line unless the owner or operator has demonstrated compliance with 35 Ill. Adm. Code 218.205(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), or (k) (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in Ill. Adm. Code 218.211(d).

On and after May 1, 2012, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts or products coating line, pleasure craft surface coating line, or motor vehicle materials

coating line subject to the limitations of 35 Ill. Adm. Code 218.204(q) shall apply coatings on the subject coating line unless the requirements in 35 Ill. Adm. Code 218.205(k)(1) or (k)(2) are met.

- i. For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within 35 Ill. Adm. Code 218.204(q) during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - ii. For each coating line which applies coatings subject to more than one numerical emission limitation in 35 Ill. Adm. Code 218.204(q), during the same day, the owner or operator shall have a site specific proposal approved by the Illinois EPA and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- c. Pursuant to 35 Ill. Adm. Code 218.301, 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 unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material) shall only apply to photochemically reactive material.
- 5a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM. This is a result of the federally enforceable production and operating limitations established in this permit, 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 preheat and curing ovens, the curing ovens, the dry-off ovens, the burn off ovens, the hot water boilers, and the batch oven not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because the the preheat and curing ovens, the curing ovens, the dry-off ovens, the burn off ovens, and the hot water boilers are not located at, nor is part of, a major source of HAP as defined in 40 CFR 63.2.
- 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 Paint Stripping And Miscellaneous Surface Coating Operations At Area Sources, 40 CFR 63 Subpart HHHHHH because, the source is not involved in the spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target

HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

6. Pursuant to 35 Ill. Adm. Code 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.
- 7a. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(x), notwithstanding 35 Ill. Adm. Code 218.187(a)(1) cleaning operations within the miscellaneous metal parts coating category shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g).
- b. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code Part 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- 8a. Pursuant to 35 Ill. Adm. Code 212.306, 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.
- b. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 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.
- c. 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 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter), 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.
- d. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code Part 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- 9a. Pursuant to 35 Ill. Adm. Code 218.206, limitations in terms of kg (lbs) of VOM emissions per 1 (gal) of solids as applied at each coating applicator shall be determined by the following equation:

$$S = \frac{C}{1 - (C/D)}$$

where:

S = The limitation on VOM emissions in terms of kg VOM/1 (lbs VOM/gal) of solids;

C = The limitation on VOM emissions in terms of kg/1 (lbs/gal) of coating (minus water and any compounds which are specifically excluded from the definition of VOM) specified in 35 Ill. Adm. Code 218.204;

D = The density of VOM in the coating. For the purposes of calculating S, the density is 0.882 kg VOM/1 VOM (7.36 lbs VOM/gal VOM)

- b. Pursuant to 35 Ill. Adm. Code 218.219(b), except as provided in 35 Ill. Adm. Code 218.219(c), every owner or operator of a coating line described in 35 Ill. Adm. Code 218.204(q) shall:
- i. Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;

- ii. Ensure that mixing and storage containers used for VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing these materials;
 - iii. Minimize spills of VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials;
 - iv. Convey VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials from one location to another in closed containers or pipes;
 - v. Minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers; and
 - vi. Apply all coatings using one or more of the following application methods:
 - A. Electrostatic spray;
 - B. High volume low pressure (HVLP) spray;
 - C. Flow coating. For the purposes of 35 Ill. Adm. Code 218.219(b) (6) (C), flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
 - D. Roll coating;
 - E. Dip coating, including electro-deposition. For purposes of 35 Ill. Adm. Code 218.219(b) (6) (E), electro-deposition means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;
 - F. Airless spray;
 - G. Air-assisted airless spray; or
 - H. Another coating application method capable of achieving transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Illinois EPA.
- 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 cyclones and baghouses associated with the epoxy powder coating lines, the afterburners associated with the burn-off ovens, and the paint booth filters such that the cyclones, baghouses, afterburners, and 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 preheat and curing ovens, the curing ovens, the dry-off ovens, the burn-off ovens, the hot water boilers, and the batch oven shall only be operated with natural gas as the fuel. The use of any other fuel in any of the preheat and curing ovens, the curing ovens, the dry-off ovens, the burn-off ovens, the hot water boilers, or the batch oven requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
 - d. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to the burn-off ovens.
 - e. The afterburner associated with each burn-off 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 each burn-off oven.
 - f. Each burn-off oven shall be equipped with an afterburner temperature indicator.
- 11a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).
 - c. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in

addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.

12a. Emissions and operating of the coating lines (constructed before June 15, 2005) including touch-up and clean-up solvents shall not exceed the following limits:

i. VOM emissions from coating lines, touch-up and clean-up solvents constructed before June 15, 2005 shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Coating Lines	0.9	8.1	0.9	8.1
5 Electrocoat Lines				
5 Plastisol Dip Lines				
6 Powder Coating lines				
1 Touch-Up area				
Clean-Up Solvents	1.5	15.0	1.5	15.0
			Total:	23.1

These limits are based on maximum coating material usage and maximum VOM content.

ii. This permit is issued based on negligible emissions of particulate matter from the powder coat line. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

b. Emissions and operation of the liquid coating (spray booth #1) shall not exceed the following limits:

i. VOM emissions from the liquid coating (spray booth #1) shall not exceed the following limits:

<u>Material</u>	<u>Material Usage</u>		<u>VOM Content</u> <u>(lb/gal)</u>	<u>VOM Emissions</u>	
	<u>(gal/mo)</u>	<u>(gal/yr)</u>		<u>(lb/mo)</u>	<u>(ton/yr)</u>
Primer	330	3,300	1.71	600	3.00
Coating	460	4,600	0.86	396	1.98
			Total:		4.98

These limits are based on maximum coatings and solvents usage, and maximum VOM content of coatings and solvents. Emissions were determined based on material balance. The above limitations were established in Permit 09110043, pursuant to 35 Ill. Adm. Code Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not

constitute a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203.

- ii. This permit is issued based on negligible emissions of particulate matter from liquid coating spray booth #1. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- c. Emissions and operation of all natural gas combustion equipment are not to exceed the following limits:

Fuel Usage		Pollutant	Emissions	
(mmscf/Mo)	(mmscf/Yr)		(Tons/Mo)	(Tons/Yr)
54	535	CO	2.3	22.5
		NO _x	2.7	26.8
		PM/PM ₁₀	0.2	2.1
		SO ₂	0.1	0.2
		VOM	0.2	1.5

These limits are based on the maximum firing rates, maximum hours of operation, a heat content of 1,000 Btu/scf for natural gas, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- d. This permit is issued based on negligible emissions of particulate matter (PM) and volatile organic material (VOM) from the two burn-off ovens. For this purpose emissions of each pollutant from each emission unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- e. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source 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 any HAP from this source not triggering the requirements of Section 112(g) of the Clean Air Act and the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart MMMM.
- f. VOM and HAP emissions shall be determined from the following equation:

$$E = [\sum(M_i \times C_i \times d_i) - W \times C_w \times d_w] / 2,000$$

where:

E = VOM or HAP emissions (tons);

M_i = Raw material usage (gallons);

C_i = VOM or HAP content of the raw material (% by weight);

d_i = Density of the raw material (lbs/gallon);

W = Certified amount of waste shipped-off (gallons);

C_w = certified VOM or HAP content of the waste (% by weight); and

d_w = Density of the waste material (lbs/gallon).

- g. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month of total).
- 13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Conditions 14 and 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 14. 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.

15. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 of this Part to establish the records required under 35 Ill. Adm. Code 218.211.
- 16a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator that uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor for each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.
 - b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or $\pm 0.5^\circ$ C, whichever is greater.
17. 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 unaffected 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.

18. 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.
- 19a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:
 - i. The name and identification number of each coating as applied on each coating line;
 - ii. 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 each day on each coating line;
 - iii. For coating lines subject to the limitations of 35 Ill. Adm. Code 218.204(q), the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line, and certified product data sheets for each coating.
- b. Pursuant to 35 Ill. Adm. Code 218.211(d)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.205 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
 - i. The name and identification number of each coating as applied on each coating line.
 - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
 - iii. For coating lines subject to the limitations of 35 Ill. Adm. Code 218.204(q), the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.

- iv. The daily weighted average VOM content of all coatings as applied on each coating line as defined in 35 Ill. Adm. Code 218.104.
 - c. Pursuant to 35 Ill. Adm. Code 218.211(h) (3), on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of 35 Ill. Adm. Code 218.219 shall comply with the following: Maintain at the source all records required by 35 Ill. Adm. Code 218.211(h) for a minimum of three years from the date the document was created and make those records available to the Illinois EPA upon request.
- 20a. 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 cyclones and baghouses associated with the epoxy powder coating lines, and the paint booth filters:
 - A. Records for periodic inspection of the cyclones, baghouses, afterburners, and 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 defects, effect on emissions, date identified, date repaired, and nature of repairs.
 - ii. The amount of coating material and cleaning solvent used (gallons/month and gallons/year).
 - iii. Coating and solvent VOM and HAP content (% by weight);
 - iv. Density of each coating and solvent (lbs/gallon);
 - v. Certified amount of waste shipped-off (gallons/month and gallons/year);
 - vi. VOM and HAP content of waste shipped-off (% by weight);
 - vii. Density of waste shipped-off (lbs/gallon);
 - viii. Natural gas usage (scf/month and scf/year); and
 - ix. Monthly and annual CO, NO_x, PM, SO₂, VOM, and HAP emissions from the source with supporting calculations and documentation (tons/month and tons/year).
- b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:

- i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
 - c. 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.
21. 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.
- 22a. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:
 - i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
 - ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the Permittee shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), as applicable. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d), (e), or (i), as

applicable.

- b. Pursuant to 35 Ill. Adm. Code 218.211(d) (3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.205 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:
 - i. Any record showing violation of 35 Ill. Adm. Code 218.205 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
 - ii. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart F from 35 Ill. Adm. Code 218.205 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all as applicable of 35 Ill. Adm. Code 218.211(c) (1) or (e) (1), as applicable. Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart F from 35 Ill. Adm. Code 218.205 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c) or (e), as applicable.
- c. Pursuant to 35 Ill. Adm. Code 218.211(h) (2), on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of 35 Ill. Adm. Code 218.219 shall comply with the following: Notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.219 by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation;
- 23a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to Illinois EPA's regional office at the following address unless otherwise indicated:

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Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

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

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

Date Signed: _____

REP:GB:

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Miscellaneous Metal Coating 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 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 less material is handled, and 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 HAP	Combine HAPs
	CO	NO _x	PM	SO ₂	VOM			
Coating Lines:								
5 Plastisol Dip Lines								
5 Electrocoat Lines								
6 Powder Coat Lines								
1 Touch-up Area			0.44		8.10			
Clean-Up Solvents					15.00			
Spray Booth #1			0.44		4.98			
Burn-off Ovens			0.88		0.88			
Fuel Combustion	<u>22.50</u>	<u>26.80</u>	<u>2.10</u>	<u>0.20</u>	<u>1.50</u>	<u>--</u>	<u>--</u>	
Totals:	22.50	26.80	3.86	0.20	30.46	9.0	22.5	

GB: