



period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

- c. Pursuant to 35 Ill. Adm. Code 212.321(a), 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, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 218.204(j), no owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to 35 Ill. Adm. Code Part 215, delivered to the coating applicator:

	<u>kg/l</u>	<u>lb/gal</u>
<u>Miscellaneous Metal Parts and Products Coating</u>		
Air dried coating	0.42	(3.5)
All other coatings	0.36	(3.0)

- b. Pursuant to 35 Ill. Adm. Code 215.205, owners or operators of coating lines subject to 35 Ill. Adm. Code 215.204 may comply with 35 Ill. Adm. Code 215.205, rather than with 35 Ill. Adm. Code 215.204. The methods or procedures used to determine emissions of organic material under 35 Ill. Adm. Code 215.205 shall be approved by the Illinois EPA. Emissions of volatile organic material from emission units subject to 35 Ill. Adm. Code 215.204, are allowable, notwithstanding the limitations in 35 Ill. Adm. Code 215.204, if:
  - i. For all other emission units subject to 35 Ill. Adm. Code 215.204, the emissions are controlled by an afterburner system which provides:
    - A. 81% reduction in the overall emissions of volatile organic material from the coating line, and
    - B. Oxidation to carbon dioxide and water of 90% of the nonmethane volatile organic material (measured at total combustible carbon) which enters the afterburner.
  - ii. The system used to control such emissions is demonstrated to have control efficiency equivalent to or greater than that provided under the applicable provision of 35 Ill. Adm. Code 215.204 or 35 Ill. Adm. Code 215.205(a) or (b).

5. This permit is issued based upon the source not being subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63 Subpart M. This is consequence of the federally enforceable production and operating limitations, which are being established in this permit to 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.
- 6a. 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/year (55 gal/year) 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 215.209, 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.
- 7a. 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 RTO such that the RTO is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- c. The RTO and the packed water scrubber shall be in operation at all times when the associated emission unit(s) is in operation and emitting air contaminants.
- d. The RTO's combustion chamber 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.
- 8a. Emissions and operation of dip/spin coating lines 71,72, 73 and 70 shall not exceed the following limits (Note: One Period = Four Weeks):

VOM Usage		VOM Emissions	
<u>(Tons/Period)</u>	<u>(Tons/Year)</u>	<u>(Tons/Period)</u>	<u>(Tons/Year)</u>
20.3	203	3.9	38.6

The limits above are based on maximum volatile organic material usage (VOM) the use of coating with a VOM content of 3.5 lb/gal (pursuant to 35 Ill. Adm. Code 215.204(j)(2)) or an 81% overall reduction of the RTO (pursuant to 35 Ill. Adm. Code 215.205(b)). Material usage includes all coatings, thinners, clean-up solvents and any other VOM containing material.

- b. Emissions and operation of Coating Line 74 shall not exceed the following limits:

<u>Maximum Coating VOM</u> <u>(lb/Gallon)</u>	<u>VOM Usage and Emissions</u>	
	<u>(Tons/4 Weeks)</u>	<u>(Tons/Year)</u>
3.5	0.45	5.9

Compliance with the maximum coating VOM content shall be determined on an as applied basis excluding exempt solvents and water.

- c. Emissions and operation of the E-Coat Dip Line shall not exceed the following:

<u>VOM Usage</u>		<u>Emission Factor</u> <u>(%)</u>	<u>Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
14.3	143	3.3	0.5	4.7

These limits are based on the maximum VOM content of the coatings, the maximum coating usage and the resulting VOM emissions.

- d. VOM usage as applied shall be calculated as follows:

$$E = \sum_{i=1}^n d_i B_i C_i$$

Where:

E = VOM usage from all VOM containing materials used on all coating lines (lb/year);

d = The density of the material (lb VOM/gallon);

B = The volume of each material as used on the coating line (gallons/period);

C = The VOM or HAP content of the material (% by weight);

$i$  = Subscript denoting an individual component; and

$n$  = The number of different coatings delivered to the coating line.

- e. Compliance with the annual limits Conditions 8(a), (b), and (c) shall be determined on a periodic (i.e., four weeks) basis from the sum of the data for the current period plus the preceding 12 periods (running total of 13 4-week periods).

- 9a. This permit is issued based on negligible emissions of particulate matter from the dip/spin coating line filters. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- b. This permit is issued based on negligible emissions of particulate matter from the phosphate line controlled by a packed water scrubber. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
10. The emissions of Hazardous Air Pollutants (HAP) 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 to obtain a CAAPP permit from the Illinois EPA and Section 112(g) of the Clean Air Act.
11. Compliance with the annual limits of Conditions 9 and 10 shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 12a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Conditions 13 and 14 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 13a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.
- b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehiclepass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.
  - c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
  - d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
  - e. 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.
- 14a. 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.
- 15. The RTO shall be equipped with a continuous temperature indicator and strip chart recorder or disk storage for the RTO combustion chamber temperature. The Permittee shall retain all records of equipment operation and strip charts or disk storage for at least one year from the date of occurrence. These records shall be available for inspection by the Illinois EPA.
- 16. 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.
- 17a. 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.

- b. 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; and
- 18a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Afterburner monitoring device records, with documentation of all 3-hour periods (during coating operations) during which the average combustion temperature of the afterburner was more than 28°C (50°F) below the average combustion temperature during the most recent performance test that demonstrated compliance.
  - ii. Records addressing use of good operating practices of the RTO and the packed water scrubber including:
    - A. Records of periodic inspection of the RTO and the packed water scrubber with the 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.
  - iii. Coating, thinners, and cleanup solvent usage for the coating lines (tons/4 week period and tons/year);

- iv. Density of each coating, thinners, and cleanup solvent used on the coating lines (% by weight);
  - v. VOM and HAP contents of all materials used on the coating lines (% by weight); and
  - vi. Monthly or 4-week period, and annual PM, VOM and HAP emissions from the source 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 (4) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
19. 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.
20. 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
21. 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/year (55 gal/year) 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.
22. Two (2) copies of required reports and notifications shall be sent to:

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

Springfield, Illinois 62794-9276

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

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

It should be noted that this permit has been revised so as to include operation of the equipment described in construction permit 02120014.

It should also be noted that this permit has been revised to allow the usage of compliant coatings on Dip/Spin Coating Lines 71, 72, 73 and 70 without relying on the use of the RTO to comply with 35 Ill. Adm. Code Part 215 Subpart F.

If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.

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

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

ECB:RBS:jws

cc: IEPA, FOS Region 2  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the metal parts coating plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons/year of VOM, 10 tons per year for a 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)			
	PM	<u>VOM</u>	Single <u>HAP</u>	Total <u>HAPs</u>
Dip/Spin Coating Lines 71, 72, 73 and 70	----	38.6		
Coating Line 74	----	5.9		
E-Coat Dip Line	----	4.7		
Phosphate Line	<u>0.44</u>	<u>-----</u>		
Total	<u>0.44</u>	<u>49.2</u>	<u>9.0</u>	<u>22.5</u>

RBS:jws