

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NESHAP SOURCE
RENEWAL

PERMITTEE

Yale Polishers and Platers, Inc.
Attn: Richard P. McCarter
5247 South Keeler Avenue
Chicago, Illinois 60632

Application No.: 86100005
Applicant's Designation:
Subject: Plating Operation
Date Issued:
Location: 5247 South Keeler Avenue, Chicago

I.D. No.: 031600EZF
Date Received: November 16, 2005
Expiration Date:

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a vapor degreaser, 3 coating dip tanks, plating operation with one decorative chrome plating tank, and boiler, 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., 10 tons/year of an individual hazardous air pollutant (HAP), and 25 tons/year of total 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.
 - ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. The decorative chromium electroplating tank is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chromium Emissions From Hard and Decorative Chromium Electroplating And Chromium Anodizing Tanks, 40 CFR 63, Subparts A and N. The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

- b. Chromium decorating and anodizing tank(s) using a fume suppressant containing a wetting agent shall not exceed the following limits pursuant to 40 CFR 63.342(d)(2):

<u>Equipment</u>	<u>Measured with</u>	<u>Surface Tension (dynes/cm)</u>
Chromium Anodizing Tank(s)	Stalagometer	45
	Tensiometer	35

This limit is the National Emission Standards for Chromium Emissions from Decorative Chromium Electroplating Tanks, 40 CFR Part 63, Subpart N and is based on the maximum cumulative potential rectifier capacity of the decorative chrome electroplating tanks being less than 60 million ampere-hours per year. An electroplating tank(s) installed before December 16, 1983, is considered an existing tank(s). Compliance with this limit shall be determined from initial performance testing and ongoing compliance monitoring requirements, as required by conditions in this permit.

- c. The Permittee shall be in compliance with 40 CFR Part 63, Subpart N - National Emission Standard for chromium anodizing tank(s) immediately after startup.
 - d. Failure to operate in accordance with the operating parameter value(s), determined during initial performance testing, shall be considered a violation of the above limit, pursuant to 40 CFR 63, Subpart N.
 - e. The surface tension of the decorative chromium electroplating baths using a fume suppressant containing a wetting agent shall not exceed 45 dynes per centimeter (measured with stalagometer) or 35 dynes/cm (measured with tensiometer), pursuant to 40 CFR 63.342(d)(2). This limit is based on Maximum Achievable Control Technology (MACT) control performance standard for decorative chromium electroplating tanks. Compliance with this limit shall be determined from initial performance testing and ongoing compliance monitoring requirements, as required by conditions of this permit.
 - f. The Permittee shall operate the fume suppressant/wetting agent at all times during the operation of the decorative chrome electroplating tanks.
- 3a. The vapor degreaser solvent cleaning machine(s) are subject to 40 CFR Part 63, Subpart T - National Emission Standards for Halogenated Solvent Cleaning. The Illinois EPA is administering this regulation in Illinois on behalf of the United States EPA under a delegation agreement. The United States EPA issued this final rule on December 2, 1994.
 - b. Each solvent cleaning machine must meet the following base design requirements, pursuant to 40 CFR, Part 63.463.

- i. Each solvent cleaning machine must be equipped with an idling or downtime mode cover that completely covers the machine openings. The cover must be periodically inspected to ensure that it remains free of cracks, holes, and other defects. The cover must be closed at all times except during the cleaning, solvent removal, maintenance and monitoring of the degreasers.
 - ii. A freeboard ratio of 0.75 or greater must be maintained for each solvent cleaning machine.
 - iii. Each solvent cleaning machine must have an automated parts handling system that handles parts from initial loading to removal of cleaned parts. If the Permittee wants to use manual hoist, the Permittee must demonstrate to the Illinois EPA that the hoist can never exceed 11 feet per minute.
 - iv. Each solvent cleaning machine must be equipped with a liquid and vapor level control device(s) that shuts off the sump heat if the sump liquid level drops to the sump heater coils or the vapor level rises above the height of the primary condenser and such device(s) must be operational at all times.
 - v. Each solvent cleaning machine must be equipped with a primary condenser to provide continuous condensation of rising solvent vapors and to create a controlled vapor zone.
 - vi. Each solvent cleaning machine with lip exhaust control must be controlled by a carbon adsorption unit.
- c. The Permittee shall comply with the following work and operational practice, requirements and post in the work place a one page summary of work practices, pursuant to 40 CFR Part 63.463(d).
- i. Conduct maintenance as per manufacturer's recommendation to ensure that each solvent cleaning machine works properly. Any alternative maintenance practice must be approved by the USEPA.
 - ii. Each solvent cleaning machine shall be covered to minimize air disturbances in the machine and the room at all times except during the cleaning, removal of solvent, maintenance and monitoring. If a cover cannot be used, air disturbances shall be controlled by Reduced Room Draft. Room draft shall not exceed 50 feet/minute.
 - iii. A. A speed of 3 feet/minute or less shall be maintained between entry and removal of parts basket or parts.

or

- B. Parts basket or parts size shall be less or equal to 50% of the solvent air interface area.

- iv. If the cleaning operation involves spraying, spraying must be performed within the vapor zone (i.e., a baffled or enclosed area of the solvent cleaning machine).
- v. The Permittee must ensure that parts or parts basket are positioned so that solvent drains freely and parts basket or parts are not removed from the machine until parts are clean and solvent dripping has stopped.
- vi. During the startup, the Permittee must turn on the primary condenser prior to turning on the sump pump and during shutdown, turn off the sump heater prior to turning off the primary condenser.
- vii. The Permittee must add and remove solvent with leak-proof couplings. The end of the pipe or hose introducing or withdrawing the solvent be located beneath the liquid solvent surface (i.e., submerged filling) in the sump.
- viii. The Permittee must collect and store the waste solvent, still bottoms, and sump bottoms in a closed container. Absorbent materials such as sponges, fabric, wood, and paper products shall not be cleaned.
- ix. Each operator of a solvent cleaning operation must be ready to take and pass an Operator Test at any time during the normal operation of the plant.
- x. The cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts [40 CFR 63.463(a)(3)].
- xi. The vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils [40 CFR 63.463(a)(4)].
- xii. The vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser [40 CFR 63.463(a)(5)].
- xiii. The vapor cleaning machine shall have a primary condenser [40 CFR 63.463(a)(6)].
- xiv. Cover(s) to each solvent cleaning machine shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that require the cover(s) to not be in place [40 CFR 63.463(d)(1)(I)].

- xv. The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less [40 CFR 63.463(d)(2)].
- xvi. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine) [40 CFR 63.463(d)(3)].
- xvii. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine [40 CFR 63.463(d)(4)].
- xviii. Parts baskets or parts shall not be removed until dripping has stopped [40 CFR 63.463(d)(5)].
- xix. During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater [40 CFR 63.463(d)(6)].
- xx. During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off [40 CFR 63.463(d)(7)].
- xxi. When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface [40 CFR 63.463(d)(8)].
- xxii. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Illinois EPA's satisfaction to achieve the same or better results as those recommended by the manufacturer [40 CFR 63.463(d)(9)].
- xxiii. Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures pursuant to 40 CFR, Part 63 Subpart T Appendix A if requested during an inspection by the Illinois EPA [40 CFR 63.463(d)(10)].
- xxiv. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container [40 CFR 63.463(d)(11)].

xxv. Sponges, fabric, wood, and paper products shall not be cleaned in the solvent cleaning machine [40 CFR 63.463(d)(12)].

d. The machine must meet the following control combination requirements of a dwell, freeboard ratio of 1.0 and reduced room draft, pursuant to 40 CFR Part 63.463:

i. For Reduced Room Draft (RRD), pursuant to 40 CFR 63.466(d), windspeed in room or within enclosure must be less than or equal to 50 feet/minute.

A. If windspeed in room is maintained by controlling room conditions, an initial test and a quarterly test shall be conducted to establish room condition. Also, room condition must be reestablished immediately if condition change. The Permittee shall monitor room condition every week.

B. If windspeed in room is maintained by using an enclosure, an initial and a monthly test shall be conducted to measure windspeed in enclosure. Also, windspeed in the enclosure must be remeasured immediately if condition changes. The Permittee shall inspect condition of enclosure every month.

ii. A. The Permittee shall ensure and obtain certification from the manufacturer that the freeboard height is greater than or equal to the width of the interior freeboard. Freeboard ratio shall be determined by dividing the height of freeboard to the smallest interior freeboard width. If the freeboard ratio is less than 1.0, the Permittee shall immediately correct the freeboard ratio.

B. Record of Freeboard Ratio and any modification to the Freeboard Ratio.

iii. A. The Permittee shall determine the dwell time for parts to be cleaned. The dwell time is determined as follows:

I. Using a stopwatch, measure the amount of time takes for the parts or parts baskets to cease dripping once placed in the vapor zone. This is the primary cleaning time.

II. The dwell time shall be greater than or equal to 35% of the primary cleaning time.

B. The Permittee shall ensure that parts are held in the freeboard area above the vapor zone for the determined dwell time. A monthly measurement of the actual dwell time shall be conducted.

C. Record dwell time determination in second and time measurement calculations for life time.

- 4a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
- b. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 Ill. Adm. Code 212.301 and 212.314.
- c. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

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

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

- v. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- e. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 Ill. Adm. Code 212.321.
5. Pursuant to 35 Ill. Adm. Code 214.303(a), with the exception of fuel combustion emission sources and acid manufacturing, no person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar emission sources at a plant or premises to exceed 45.4 grams in any one hour period for sulfuric acid usage less than 1180 MG/year (100 percent acid basis) (0.10 lbs/hour up to 1,300 tons/year).
- 6a. The batch vapor degreaser shall be operated in accordance with the following operating and equipment requirements of 35 Ill. Adm. Code 218.183:
- i. Operating Requirements: No person shall operate the batch vapor degreaser unless:
 - A. Solvent carry out emissions are minimized by allowing parts to dry within the degreaser until visually dry;
 - B. The degreaser is not loaded to the point where the vapor level would drop more than 10 cm (4 in) when the workload is removed from the vapor zone;
 - C. Solvent leaks are repaired immediately;
 - D. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
 - E. Water is not visually detectable in solvent exiting from the water separator; and

- F. Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et. seq.).
- ii. Equipment Requirements: No person shall operate the batch vapor degreaser unless;
 - A. The degreaser is equipped with a cover designed to open and close easily without disturbing the vapor zone;
 - B. The degreaser is equipped with the following switches;
 - I. One which shuts off the sump heat if the amount of condenser coolant is not sufficient to maintain the designed vapor level;
 - II. One which shuts off the spray pump if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil; and
 - III. One which shuts off the sump heat source when the vapor level exceeds the design level.
 - C. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser.
- 3a. Pursuant to 35 Ill. Adm. Code 218.204(j)(4)(A), 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 the specified coating. 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. The emission limitations are as follows:

<u>Miscellaneous Metal Parts and Products Coating</u>	<u>Kg/Liter</u>	<u>Lbs/Gallons</u>
All other coatings - Air Dried	0.40	(3.3)

- b. Exemptions for all coating categories except wood furniture coating. The limitations of 35 Ill. Adm. Code 218 Subpart F shall not apply to coating lines within a source, that otherwise would be subject to the same subsection of 35 Ill. Adm. Code 218.204 (because they belong to the same coating category, e.g. can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices. (For example, can coating

lines within a source would not be subject to the limitations of 35 Ill. Adm. Code 218.204(b) if the combined actual emissions of VOM from the can coating lines never exceed 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices). Volatile organic material emissions from heavy off-highway vehicle products coating lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. Any owner or operator of a coating source shall comply with 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(a) if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices and, therefore, are not subject to the limitations of 35 Ill. Adm. Code 218.204. Once a category of coating lines at a source is subject to the limitations in 35 Ill. Adm. Code 218.204 the coating lines are always subject to the limitations in 35 Ill. Adm. Code 218.204, pursuant to 35 Ill. Adm. Code 218.208(a).

- c. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
- d. 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 nuisance.
- 7a. The fume suppressant/wetting agent associated with decorative and anodizing chrome electroplating tank(s) shall be operated at all times during the operation of the tanks.
- b. Pursuant to 40 CFR 63.342(f), the Permittee shall implement the work practice requirements for chrome anodizing electroplating tank(s). The Permittee shall submit the work practice standards implemented for anodizing chrome electroplating tank(s). The work practice standard shall address at least the following:
 - i. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan.
 - ii. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.

- iii. Operation and maintenance requirements established pursuant to Section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 - iv. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Illinois EPA, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan; procedures; records; and inspection of the source.
 - v. A quarterly visual inspection of the composite mesh pad (CMP) system to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
 - vi. A quarterly visual inspection of the back portion of the mesh pad closes to the fan to ensure that there is no breakthrough of chromic acid mist.
 - vii. A quarterly visual inspection of the duct work from the tank(s) to the composite mesh pad scrubber(s) to ensure there are no leaks.
 - viii. Perform washdown of the composite mesh-pads in accordance with manufacturer's recommendations.
- 8a. Pursuant to 40 CFR 63.342(f)(3), the Permittee shall develop and implement an operation and maintenance (O & M) Plan.
- i. Description of the operation and maintenance criteria for the control devices and monitoring equipment and fume suppressant with wetting agent in use.
 - ii. A checklist to document the operation and maintenance of the fume suppressant with wetting agent and equipment.
 - iii. Procedure to follow to ensure that malfunctions due to poor maintenance or other preventable conditions does not occur.
 - iv. Procedures for identifying malfunctions and for implementing corrective actions.
 - v. The O and M plan shall incorporate proposed work practice standards. These proposed work practice standards shall be submitted to the Illinois EPA for approval as part of the submittal required under 40 CFR 63.343(d) and make available for inspection by the Illinois EPA.
 - vi. The plan shall specify procedures to be followed to ensure that malfunctions due to poor maintenance or other preventable conditions do not occur.

- vii. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices (if any), and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
 - viii. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
 - ix. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the owner or operator shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Illinois EPA.
 - x. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request by the Illinois EPA for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Illinois EPA for a period of 5 years after each revision to the plan.
- b. The Permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, provided the alternative plans meet the requirements of this section.
- 9a. This permit is issued based on negligible emissions of particulate matter (PM), nitrogen oxide (NO_x) and HAPs from all plating operations. For this purpose, emissions of each pollutant, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
 - b. This permit is issued based on negligible usage and emissions of hydrochloric acid (HCl). For this purpose, usage and emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
 - c. This permit is issued based on no VOM used in all plating operations.

- d. This permit is issued based upon the facility conducting nickel, copper, chrome, silver and tin plating. Any additional metal other than previously permitted will require a revised permit.
- 10a. Solvent usage and emissions from the degreaser shall not exceed the following limits:

<u>Trichloroethylene Usage</u> (Tons/Month)	<u>(Tons/Year)</u>	<u>HAP (e.g. Trichloroethylene) Emissions</u> (Tons/Month)	<u>(Tons/Year)</u>
0.24	2.4	0.24	2.4

These limits are based on maximum solvent usage of trichloroethylene, maximum operating hours, solvent density of 12.2 lbs/gallon and determined by material balance.

- b. The Permittee shall use only Trichloroethylene as solvent.
- c. For determination of compliance with the limits of this permit, solvent usage shall be determined by the following equation:

$$U = V - (W \times P)$$

where;

U = Solvent usage for compliance determinations (gallons).

V = Virgin solvent^A added to the solvent cleaning machines (gallons), as determined by daily addition log sheets.

W = Waste solvent^B removed from the solvent cleaning machines and sent off-site for reclamation or disposal, as determined by monthly manifests.

P = Percent concentration of solvent in waste, as determined by analysis/testing^C.

^A For purposes of this permit, virgin solvent is defined as unused solvent.

^B For purposes of this permit, waste solvent is defined as used solvent.

^C The percent concentration of solvent in waste (P) shall be determined in accordance with USEPA Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW-846), Test Method 8260.

- d. Compliance with the monthly organic material emission limits shall be calculated using the solvent density as specified in the Material Safety Data Sheet, and the solvent usage (U) per month, as follows:

$$\begin{aligned} \text{Emissions} &= \text{Solvent Usage (U)} \times \text{Solvent Density} \\ (\text{Lbs/Month}) &= (\text{Gallon/Month}) \times (\text{Lbs/Gallon}) \end{aligned}$$

- 11a. Usage and emissions of VOM from the 3 dip coating tanks shall not exceed 15 lbs/day of VOM and 2.74 Tons/year.
- b. The following equation shall be used to calculate total daily VOM emissions from the 3 dip tanks:

$$T_e = \sum_{j=1}^m \sum_{i=1}^n (A_i B_i)_j$$

Where:

- T_e = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day).
- m = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 218.104 of this Part (because they belong to the same category, e.g., can coating).
- j = Subscript denoting an individual coating line.
- n = Number of different coatings as applied each day on each coating line.
- i = Subscript denoting an individual coating.
- A_i = 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 in units of kg VOM/l (lbs VOM/gallons).
- B_i = 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 in units of l/day (gallon/day). The instrument or method by which the owner or operator accurately measured or calculated the volume of each coating as applied on each coating line each day shall be described in the certification to the Illinois EPA.
12. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of HAPs from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA.

13. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 14a. Pursuant to 35 Ill. Adm. Code 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:
 - i. For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301, pursuant to 35 Ill. Adm. Code 212.107.
 - ii. Except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in 35 Ill. Adm. Code 212.113, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, pursuant to 35 Ill. Adm. Code 212.109.
 - iii. Measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, pursuant to 35 Ill. Adm. Code 212.110(a).
 - iv. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, pursuant to 35 Ill. Adm. Code 212.110(b).
 - v. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA, pursuant to 35 Ill. Adm. Code 212.110(c).

- b. Testing required by Condition 14(a) shall be performed by a qualified independent testing service.
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 to establish the records required under 35 Ill. Adm. Code 218.211.
- 16a. The surface tension shall be monitored according to the following schedule:
- i. The Permittee of an affected source shall monitor the surface tension of the electroplating or anodizing bath. Operation of the affected source at a surface tension greater than the value established during the performance test, or greater than 45 dynes/cm if the Permittee is using this value in accordance with 40 CFR 63.343(5)(i) shall constitute noncompliance with the standards.
 - ii. The surface tension shall be measured once every 4 hours during operation of the tank with stalagmometer or a tensiometer as specified in Method 306B, Appendix A of 40 CFR Part 63 Subpart N.
 - iii. The time between monitoring can be increase if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedance during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.
 - iv. Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in special condition 4(a)(ii). For example, if a Permittee had been monitoring an affected source once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.
 - v. Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 40 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures in this permit.

- b. The Permittee shall comply with the following monitoring procedures requirements, pursuant to 40 CFR Part 63.466.
 - i. The Permittee shall conduct an initial monitoring test of the windspeed and of room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as per following procedures, pursuant to 40 CFR Part 63.466(d).
 - A. Measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the following procedure.
 - I. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.
 - II. Orient a velometer in the direction of the wind current at each of the four corners of the machine.
 - III. Record the reading for each corner.
 - IV. Average the values obtained at each corner and record the average wind speed.
 - B. Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.
 - C. If an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified above and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.
 - I. Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.
 - II. Record the maximum wind speed.
 - ii. The Permittee shall conduct monitoring and record the results on a monthly basis for the dwell, pursuant to 40 CFR Part 63.466(b)(2). The Permittee shall determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.

- c. The Permittee shall comply with the following monitoring procedures, pursuant to 40 CFR Part 63.466(c).
 - i. The Permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - ii. The monitoring shall be conducted monthly. If after the first year no exceedances of the hoist speed are measured the Permittee may begin monitoring the hoist speed quarterly.
 - iii. If an exceedance of the hoist speed occurs during quarterly monitoring the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated.
 - iv. If the Permittee can demonstrate to the Illinois EPA's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 11 feet per minute, the required monitoring frequency is quarterly, including during the first year of compliance.

- 17a. The Permittee shall keep the following records, pursuant to 40 CFR 63.346, to demonstrate continuous compliance monitoring requirement:

Records of monitoring data required by 40 CFR 63.343(c) shall be kept to demonstrate continuous compliance.

- i. The surface tension is dynes/cm, determined every 4 hours except as provided below.
- ii. If there are no exceedances of the maximum surface tension after 40 hours of operation, then the monitoring frequency can be decreased to once every 8 hours. If there are no exceedances for the next 40 hours, then the frequency can be decreased to once every 40 hours. If an exceedance occurs at any time after that, then the initial monitoring schedule (every 4 hours) must be resumed.
- iii. Inspection records for the control device and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 CFR 63.342(f) have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
- iv. Records of all maintenance performed on the chrome anodizing plating tanks as related to emissions, associated control system monitoring equipment, and fume suppressant with wetting agent.

- v. Records of the occurrence, duration, and cause (if known) of each malfunction of process, associated control system, and monitoring equipment.
 - vi. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
 - vii. Records, which may take the form of checklists, necessary to demonstrate consistency with the operation and maintenance plan required by 40 CFR 63.342(f)(3).
 - viii. Copies of test reports documenting results of all performance tests, and all measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 CFR 63.344(e).
 - ix. Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
 - x. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, control or monitoring equipment.
 - xi. For sources using fume suppressants to comply with the standards, records of the date and time, that fume suppressants are added to the anodizing bath.
 - xii. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the subject chrome plating tanks and associated control devices.
 - xiii. Record for the total process operating time of the affected chrome plating tank(s) during the reporting period.
 - xiv. Copies of the notification and reports required by 40 CFR Part 63.9, 63.10 and 63.347 with supporting documentation.
 - xv. All records shall be maintained for a period of five years, pursuant to 63.10(b)(1).
- b. The Permittee shall retain the following records on paper or computer disk for the lifetime of the solvent cleaning machine, pursuant to 40 CFR Part 63.467(a):

- i. An owner's manual or a written maintenance and operating procedure for each machine and each piece of control equipment.
 - ii. The installation date of each machine. If installation date isn't available, a letter certifying that machine was installed prior to or on or after November 29, 1993, to determine compliance option for existing or new source.
 - iii. Records of the halogenated HAP solvent content of each solvent used in each solvent cleaning machine.
 - iv. Record of the test to determine an appropriate dwell time for each part or parts basket.
- c. The Permittee shall retain the following records in electronic or written form for a period of 5 years, pursuant to 40 CFR Part 63.467(b).
- i. The results of control device monitoring required under 40 CFR Part 63.466.
 - A. Record of freeboard ratio and any modification to the freeboard ratio.
 - B. The Permittee shall keep weekly records of room condition and windspeed.
 - C. The Permittee shall keep monthly enclosure inspection results and windspeed measurements.
 - D. Record of dwell time determination in second and monthly actual dwell time determination calculation.
 - ii. Estimates of annual solvent consumption for each solvent cleaning machine.
- d. 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.
- e. Pursuant to 35 Ill. Adm. Code 218.211(b)(3), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(a) 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; and

- 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.
- f. Pursuant to 35 IAC 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 of and complying by means of 35 Ill. Adm. Code 218.204 shall collect and record 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 the coating lines.
 - 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 the coating lines.
- g. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. The usage of each coating cleaning solvent in units of (gallons/month and gallons/year);
 - ii. The VOM and HAP content of each coating, glue and cleaning solvent (weight %);
 - iii. Density of each coating and clean-up solvent (lbs/gallon); and
 - iv. Monthly and annual emissions of PM, VOM and HAPs from the source with supporting calculations (tons/month and tons/year).
- 18. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 19a. The Permittee shall comply with the following reporting requirements, pursuant to 40 CFR 63.347:
 - i. The Permittee shall notify the Illinois EPA in writing of intent to conduct a performance test (if conducted) at least 60 calendar days before the test is scheduled to begin to allow the Illinois EPA to have an observer present during the test, pursuant to 40 CFR 63.347(d). Observation of the performance test by the Illinois EPA is optional.

ii. If the scheduled date for the test is changed for unforeseen reasons, the Permittee shall inform the Illinois EPA within 5 calendar days of the originally scheduled test date and must specify the date of the rescheduled test.

b. The Permittee shall comply with the compliance reporting requirements of 40 CFR 63.347, including the following:

i. A notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the affected source has complied with this Subpart, pursuant to 40 CFR 63.347(e). The notification shall list the following:

A. The applicable emission limitation and the methods that were used to determine compliance with this limitation.

B. If the Permittee does not require to conduct a performance test in accordance with 40 CFR 63.343(b), the surface tension measurements in dynes/cm shall be submitted.

C. The specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit, pursuant to 40 CFR 63.6343(c).

ii. The type and quantity of hazardous air pollutants emitted by the source reported in mg/dscm or mg/hour if the source is using the special provisions of 40 CFR 63.344(e) to comply with the standards.

iii. The methods that will be used to determined continuous compliance.

iv. A description of the air pollution control technique for each emission point.

v. A statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the work practice standards of 40 CFR 63.342(f).

vi. If the Permittee is determining facility size based on actual cumulative rectifier capacity in accordance with 40 CFR 63.342(c)(2), records to support that the facility is small.

For existing sources, records from any 12 month period preceding the compliance date shall be used or a description of how operations will change to meet a small designation shall be provided.

For new sources, records of projected rectifier capacity for the first 12-month period of tank operation shall be used.

- vii. A statement by the owner or operator of the affected source as to whether the source has complied with the provisions of this Subpart.
 - viii. The notification of compliance status and reports of performance test results shall be submitted to the Illinois EPA no later than 90 calendar days following completion of the compliance demonstration/performance test.
- c. The Permittee shall prepare an ongoing compliance status report every 6 months and retained on site, and made available to the Illinois EPA upon request. However, if both of the following conditions are met, quarterly reports shall be prepared and submitted to the Illinois EPA:
- i. The total duration of excess emissions (as indicated by the monitoring data) is 1 percent or greater of the total operating time for the reporting period; and
 - ii. The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.
- d. The ongoing compliance status report shall contain the following:
- i. The company name and address of the affected source.
 - ii. An identification of the operating parameter that is monitored for compliance determination.
 - iii. The relevant emission limitation for the source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status.
 - iv. The beginning and ending dates of the reporting period.
 - v. A description of the type of process performed in the source.
 - vi. The total operating time of the source during the reporting period.
 - vii. The actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis, if the Permittee limits the maximum cumulative rectifier capacity less than 60 million amp-hour/year.
 - viii. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into

those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes.

- ix. A certification by a responsible official that the work practice standards followed in accordance with the operation and maintenance plan for the source.
 - x. If the operation and maintenance plan was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) documenting that the operation and maintenance plan was not followed.
 - xi. A description of any changes in monitoring, processes, or controls since the last reporting period.
 - xii. The name, title, and signature of the responsible official who is certifying the accuracy of the report.
 - xiii. The date of the report.
- e. The Permittee shall report the results from each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the Permittee shall only report the results from the monitoring device used to meet the monitoring requirements. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.
- 20a. The Permittee shall comply with the following reporting requirements, pursuant to 40 CFR Part 63.468:
- i. An annual compliance report must be submitted by February 1, of the year following the year the report covers. The compliance report shall include the following:
 - A. A statement, signed by the owner or operator or someone designate, stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required by 40 CFR 63.463(d)(10)."
 - B. Solvent consumption and HAP emissions for each machine in lb/month and ton/year, for the reporting period.
 - ii. An exceedance report shall be submitted every 6 months if there is not an exceedance, and every 3 months if there is an exceedance. If an exceedance did not occur the report would consist of a statement certifying that there were no exceedances. The frequency of the exceedance report will

increase to quarterly after an exceedance occurs. The quarterly exceedance report shall include the following:

- A. Information on the actions taken to comply with 40 CFR Part 63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
 - B. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
 - C. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
- iii. The Permittee shall submit an exceedance report within 30 days after the exceedance. 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 violation and efforts to reduce emissions and future occurrences.
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(b)(5), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of because of 35 Ill. Adm. Code 218.208(a) shall notify the Illinois EPA of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
- b. 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 of and complying by means of 35 Ill. Adm. Code 218.204 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 owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), respectively. 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) or (e), respectively.
- 23. 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/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, a description of the exceedances or deviation, and efforts to reduce emissions and future occurrences.
- 28. 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
9511 West Harrison
Des Plaines, Illinois 60016

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

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

ECB:RBS:cjc

cc: IEPA, FOS Region 1
Lotus Notes

Attachment A

This attachment provides a summary of the maximum emission of the plating 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 the plant. This is a maximum usage of degreasing solvent, and maximum VOM and HAP emissions from the degreaser and the 3 dip tanks. The resulting maximum emissions are below the threshold levels (e.g., 10 tons/year of an individual HAP, and 25 tons/year of total HAPs) at which this source would be considered a major source for purposes of the CAAPP. Actual emissions from this source will be less than predicted in this summary to the extent that production is less than that required in this permit.

<u>Equipment</u>	E M I S S I O N S (Tons/Year)				
	<u>Single HAP</u>	<u>Total HAPs</u>	<u>VOM</u>	<u>NO_x</u>	<u>PM</u>
Vapor Degreaser	2.40	2.40	2.40		
Three Dip Tanks	2.74	2.74	2.75		
All Plating		<u>0.44</u>		<u>0.44</u>	<u>0.44</u>
Totals	< 10	< 25	5.15	0.44	0.44

RBS:cjc