SUPPLEMENT TO PERMIT NO. 186-91B

Apollo Plating, Inc. Roseville, Michigan

March 31, 1998

GENERAL CONDITIONS

- 1. Rule 201(1) The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule.
- 2. Rule 201(4) If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install.
- 3. Rule 201(6)(a) If this Permit to Install is issued for a process or process equipment located at a stationary source which is subject to a Renewable Operating Permit pursuant to Rule 210, trial operation is allowed if the equipment performs in accordance with the terms and conditions of this Permit to Install and until the appropriate terms and conditions of this Permit to Install have been incorporated into the Renewable Operating Permit as a modification pursuant to Rule 216 or upon renewal pursuant to Rule 217. Upon incorporation of the appropriate terms and conditions into the Renewable Operating Permit, this Permit to Install shall become void.
- 4. Rules 201(7)(a) or 216(1)(a)(v)(A) Except as provided in General Condition No. 3, operation of the process or process equipment is allowed if, not more than 30 days after completion of the installation, construction, reconstruction, relocation, alteration, or modification authorized by this Permit to Install, the person to whom this Permit to Install was issued, or the authorized agent pursuant to Rule 204, notifies the District Supervisor, Air Quality Division, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, alteration, or modification is considered to occur not later than commencement of trial operation of the process or process equipment.
- 5. Rule 201(7)(b) Except as provided in General Condition No. 3, not more than 18 months after completion of the installation, construction, reconstruction, relocation, alteration, or modification authorized by this Permit to Install, the person to whom this permit was issued, or the authorized agent pursuant to Rule 204, shall notify the District Supervisor, Air Quality Division, in writing, of the status of compliance of the process or process equipment with the terms and conditions of the Permit to Install. The notification shall include all of the following:
 - A. The results of all testing, monitoring, and recordkeeping performed to determine the actual emissions from the process or process equipment and to demonstrate compliance with the terms and conditions of the Permit to Install.
 - B. A schedule of compliance for the process or process equipment as described in Rule 119(a).

Apollo Plating, Inc. Permit No. 186-91B Page 2 March 31, 1998

- C. A statement, signed by the person owning or operating the process or process equipment, that, based on information and belief formed after reasonable inquiry, the statements and information in the notification are true, accurate, and complete.
- 6. Rule 201(8) and Section 5510 of Act 451, P.A. 1994 The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Departments' rules or the Clean Air Act.
- 7. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required in Rule 219(1)(a), (b) and (c). The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality.
- 8. Rule 901 Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property.
- 9. Rule 912 The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within 10 days, with the information required in this rule.
- 10. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future regulations which may be promulgated under Part 55 of Act 451, P.A. 1994.
- 11. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 12. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, P.A. 1994, and the rules promulgated thereunder.

SPECIAL CONDITIONS

- 13. For purposes of this permit, "the existing zinc line" means the zinc plating equipment identified by the plant and in previous permits as "the zinc line".
- 14. The total chromium emission from the decorative chromium electroplating process tanks, hereinafter "chromium line I", exhausted through a wet scrubber/mist eliminator, hereinafter "Control A", shall not exceed 0.007 micrograms per cubic meter, corrected to 70°F and 29.92 inches Hg.

Apollo Plating, Inc. Permit No. 186-91B Page 3 March 31, 1998

- 15. The total chromium emission from the nickel-chrome plating line including the decorative chromium tanks, hereinafter, "nickel-chrome plating line IV", exhausted through a wet scrubber, hereinafter, "Control D", shall not exceed 0.05 micrograms per cubic meter, corrected to 70°F and 29.92 inches Hg.
- 16. The hydrogen chloride (HCl) emission from the zinc electroplating process, hereinafter, "new zinc line", exhausted through a wet scrubber, hereinafter, "Control B", shall not exceed 0.8 milligrams per cubic meter, corrected to 70°F and 29.92 inches Hg.
- 17. The nitric acid emission from the nitric acid strip tank exhausted through a wet scrubber, hereinafter "Control C", shall not exceed 32.4 milligrams per cubic meter, corrected to 70°F and 29.92 inches Hg.
- 18. Visible emissions from the vented process tanks, including chromium line I, the new and existing zinc lines, and nickel-chrome plating line IV, shall not exceed 0% opacity.
- 19. Visible emissions from the nitric acid strip tank shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a).
- 20. Applicant shall not operate chromium line I unless Control A is installed and operating properly.
- 21. Applicant shall not operate nickel-chrome plating line IV unless Control D is installed and operating properly.
- 22. Applicant shall not operate the new zinc line or the existing zinc line unless Control B is installed and operating properly.
- 23. Applicant shall not operate the nitric acid strip tank unless Control C is installed and operating properly.
- 24. Applicant shall equip and maintain Control A, Control B, Control C and Control D with liquid flow indication devices to maintain constant water flow to the controls.
- 25. Within 45 calendar days of issuance of this permit, applicant shall prepare and submit an operation and maintenance plan for the equipment covered by this permit to install, including the start-up, shutdown, and malfunction plan of the control equipment, to the Air Quality District Supervisor for approval. The plan shall also include a standardized checklist to document the operation and maintenance of the controls which addresses a systematic procedure for identifying malfunctions, reporting process parameters to the operation supervisors and other actions to be followed to ensure that control equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur. For clarification purposes, each major equipment item is to be identified by a model number and by some other unique identifier (such as "new zinc line process tank # 1").
- 26. The applicant shall maintain the surface tension of chromium line I and nickel-chrome plating line IV, at less than 45 dynes per centimeter by adding a chemical fume suppressant with wetting agent to the tank.

Apollo Plating, Inc. Permit No. 186-91B Page 4 March 31, 1998

- 27. Applicant shall not operate chromium line I nor nickel-chromium line IV, unless all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for chromium as specified in 40 CFR, Part 63, Subparts A and N are met. This includes the monitoring and recording of emissions, operating, and maintenance information.
- 28. Applicant shall maintain records of inspections required to comply with applicable Work Practice Standards of 40 CFR 63.342 (f). Each inspection record shall identify the device inspected, the date, approximated time of inspection, and a brief description of the working condition of the device during the inspection. Applicant shall also record any actions taken to correct deficiencies found during the inspection. Records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.
- 29. Rules 1001, 1003, and 1004 Verification of total chromium emission rates from chromium line I and nickel-chrome plating line IV, by testing, at owner's expense, in accordance with Department requirements, may be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods for total chromium emissions, 40 CFR, Part 63, Appendix A. The testing shall be conducted within 60 days following the receipt of the written notification of the requirement. Verification of emission rates includes the submittal of a complete report of the test results. If testing is required, a complete test plan must be submitted to the Air Quality Division. The final plan must be approved by the Division prior to testing and a complete report of test results must be submitted to the Division within 60 days following the last date of testing.
- 30. Rules 1001, 1003, and 1004 Verification of nitric acid and HCl emission rates from the nitric acid strip tank exhausted through Control C and the new zinc line exhausted through Control B respectively, by testing, at owner's expense, in accordance with Department requirements, may be required. The testing shall be conducted within 60 days following the receipt of the written notification of the requirement. Verification of emission rates includes the submittal of a complete report of the test results. If testing is required, a complete test plan must be submitted to the Air Quality Division. The final plan must be approved by the Division prior to testing and a complete report of test results must be submitted to the Division within 60 days following the last date of testing.
- 31. The exhaust gases from the equipment listed in the table below shall be discharged unobstructed vertically upwards to the ambient air from stacks with maximum dimensions and at exit points not less than those described in the table. All stacks shall be in place prior to June 1, 1998.

Equipment	Maximum Dimensions	Exit Point
chromium line I/Control A	16.8 inches in diameter	23.2 feet above ground
nickel-chrome plating line IV/Control D	36.0 inches in diameter	38.0 feet above ground
new & existing zinc lines/Control B	41.0 inches in diameter	32.0 feet above ground
nitric strip tank/Control C	14.0 inches by 16.0 inches	36.0 feet above ground