

28 November 2008

Mr. David Habershaw, President
D&D Chrome Plating Inc.
355 Dexter Street
Providence, RI 02907

Dear Mr. Habershaw:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your request for a minor source permit.

Enclosed is a minor source permit issued pursuant to our review of your request. (Approval No. 2041)

For your information I have included copies of 40 CFR 63, Subparts A and N, the federal rules applicable to decorative chromium plating lines. The two Subparts are reference throughout this permit.

Should you have any questions concerning this permit, I can be reached at 222-2808, extension 7011.

Sincerely,

Ruth A. Gold
Senior Air Quality Specialist
Office of Air Resources

cc: Providence Building Official

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

D&D Chrome Plating Inc.

APPROVAL NO. 2041

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

D&D Chrome Plating Inc.

For the following:

Operation of a decorative chrome plating line (Approval No. 2041).

Located at: *355 Dexter Street, Providence*

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *D&D Chrome Plating Inc.* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Douglas L. McVay, Acting Chief
Office of Air Resources

Date of issuance

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES**

Permit Conditions and Emission Limitations

D&D Chrome Plating Inc.

Approval No. 2041

A. Emission Limitations:

1. Total chromium emissions discharged to the atmosphere from the decorative chromium electroplating tank shall be controlled by not allowing the surface tension of the electroplating bath within the tank to exceed 45 dynes per centimeter at any time during operation of the tank.
2. Emissions of hexavalent chromium discharged to the atmosphere from the entire facility shall not exceed 0.34 grams per month.
3. Emissions of hexavalent chromium discharged to the atmosphere from the decorative chromium electroplating tank shall not exceed 0.0078 milligrams per ampere-hour.

B. Operating Requirements

1. Ampere-hours for the decorative chrome electroplating process shall not exceed 525,000 in any 12 month period.
2. At all times, including periods of startup, shutdown, and malfunction, the owner/operator shall operate and maintain the chromium electroplating tank and the monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by this permit.
3. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by this permit.
4. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
5. Based on the results of a determination made under Condition B.4 of this permit, the Office of Air Resources may require that the owner/operator make changes to the operation and maintenance plan required by this permit. Revisions may be required if the Office of Air Resources finds that the plan:

- a. Does not address a malfunction that has occurred;
- b. Fails to provide for the operation of the decorative chromium electroplating tank, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
- c. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

C. Operation and Maintenance Plan

1. The owner/operator shall prepare an operation and maintenance plan to be implemented within 90 days of issuance of this permit. The plan shall include the following elements:
 - a. The plan shall specify the operation and maintenance criteria for the decorative chromium electroplating tank and the process and monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
 - b. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - c. The plan shall include a systematic procedure for identifying malfunctions of process equipment and monitoring equipment and for implementing corrective actions to address such malfunctions.
2. 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/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 or monitoring equipment during similar malfunction events, and a program for corrective action for such events.
3. If actions taken by the owner/operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the owner/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 Office of Air Resources.

4. 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 Office of Air Resources or its authorized representative for the life of the source. In addition, if the operation and maintenance plan is revised, the owner/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 Office of Air Resources or its authorized representative for a period of 5 years after each revision to the plan.

D. Monitoring

1. The owner/operator shall monitor the surface tension of the chromium electroplating bath. Operation of the chromium electroplating bath at a surface tension greater than 45 dynes/cm, shall constitute noncompliance with the emission limitations. The surface tension shall be monitored according to the following schedule:
 - a. The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, of 40 CFR 63, Appendix A .
 - b. The time between monitoring can be increased 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 startup. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation on this schedule, 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 Condition is once every 40 hours of tank operation.
 - c. 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 above. For example, if the owner/operator 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.
 - d. Once a bath solution is drained from the tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures described previously.

E. Recordkeeping

1. The owner/operator shall maintain the following records:
 - a. Inspection records for the monitoring equipment, to document that the inspection and maintenance required by the work practice standards of Condition C.1 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.
 - b. Records of all maintenance performed on the electroplating tank and monitoring equipment;
 - c. Records of the occurrence, duration, and cause (if known) of each malfunction of process and monitoring equipment;
 - d. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
 - e. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by Condition C.1;
 - f. Records of monitoring data required by Condition D.1 including the date and time the data are collected;
 - g. 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 or monitoring equipment;
 - h. 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 process or monitoring equipment;
 - i. The total process operating time of the affected source during the reporting period;
 - j. Records of the date and time that fume suppressants are added to the electroplating bath;
 - k. If the source has been granted a waiver under 40 CFR 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

- l. All documentation supporting the notifications and reports required by 40 CFR 63.9, 40 CFR 63.10 and 40 CFR 63.347; and
 - m. The total ampere-hours applied to the chromium plating tank on a monthly basis.
2. The owner/operator shall, on a monthly basis, no later than 15 days after the first of the month, determine the total ampere-hours applied to the chromium plating tank for the previous 12 months. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
3. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

F. Reporting

1. The owner/operator shall fulfill all reporting requirements outlined in this section, in 40 CFR part 63, Subpart A – General Provisions and in 40 CFR 63, Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Unless indicted otherwise, all reports shall be made to the USEPA Region I, at the address identified in 40 CFR 63.13 unless the Office of Air Resources has been delegated authority to implement 40 CFR part 63, Subpart N.
2. The owner/operator shall submit a notification of compliance status pursuant to the requirements of 40 CFR 63.347(e)(4).
3. The owner/operator shall submit a summary report to document the ongoing compliance status of the source pursuant to the requirements of 40 CFR 63.347(h).
4. The owner/operator shall notify the Office of Air Resources, in writing, within 30 days after the first of the month, whenever the total ampere-hours applied to the chromium plating tank equals or exceeds 525,000 in any 12 month period.
5. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rule or regulation.
6. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - a. The name and location of the facility;

- b. The subject source(s) that caused the noncompliance with the permit term;
 - c. The time and date of first observation of the incident of noncompliance;
 - d. The cause and expected duration of the incident of noncompliance;
 - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.
 - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
7. The Office of Air Resources shall be notified, in writing, of any planned physical or operational change to the air pollution control equipment or the equipment vented to the air pollution control equipment. Such notification shall include:
- a. Information describing the nature of the change.
 - b. Information describing the effect of the change on the emission of any air contaminant.
 - c. The scheduled completion date of the planned change.

Any change which may result in an increased emission rate of any air contaminant shall be subject to approval of the Director.

G. Other Permit Conditions

- 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.
- 2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records to be maintained by the Office of Air Resources.
- 3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results,

opacity observations, review of operating and maintenance procedures and inspection of the source.

4. D&D Chrome Plating is subject to all applicable provisions of 40 CFR Part 63, Subpart A – General Provisions and Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.