apcd
County of San Diego

R. J. Sommerville
Air Pollution Control Officer

ADVISORY

NOTICE OF RULE ADOPTION
RULE 1201 - HEXAVALENT CHROMIUM - CHROME PLATING AND CHROMIC ACID ANODIZING
(Amendment)

The Air Pollution Control Board adopted amendments to Rule 1201 which became effective May 28, 1991. Rule 1201 is an existing rule regulating emissions of hexavalent chromium [Cr(VI)] from all electrolytic plating and anodizing facilities, including decorative chrome plating, hard chrome plating and chromic acid anodizing shops.

The amendments will clarify the applicability of the control standards which vary according to the magnitude of a facility's hexavalent chrome emissions. The emission standards of the rule were intended to be based on a facility's actual emissions, including any existing emission controls, rather than on uncontrolled emissions. To clarify this intent the definition of "Facility-Wide Emissions From Hard Chrome Plating or Chromic Acid Anodizing" is being modified to conform with the regulation adopted by the ARB. Also, to meet ARB rule requirements, the definition of "Emission Factor" is being revised to specify testing in accordance with California Air Resources Board (ARB) Method 425. This will be the only test method acceptable for determination of compliance with emission control and emission rate limits of the rule. Other minor changes are being made for conformity and clarity.

If you would like a copy of the rule, call Juanita Ogata at (619) 694-3307. If you have any questions concerning this Advisory, contact the District's Enforcement Division at (619) 694-3340.

RGS:ap
053091

AIR POLLUTION CONTROL DISTRICT
9150 Chesapeake Drive, San Diego, California 92123-1095
(619) 694-3307 FAX (619) 694-2730

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

ADVISORY

NATIONAL EMISSION STANDARD FOR DECORATIVE CHROMIUM ELECTROPLATING OPERATIONS

On January 25, 1995, the federal Environmental Protection Agency (EPA) established a National Emission Standard for Hazardous Air Pollutants (NESHAP) to control chromium emissions from hard and decorative chromium electroplating and chromic acid anodizing operations. The NESHAP applies to operations using trivalent and hexavalent chromium compounds. The EPA is phasing NESHAP implementation, which is initially applicable only to decorative chrome plating operations.

San Diego Air Pollution Control District Rule 1201 has regulated hard and decorative chromium electroplating and chromic acid anodizing operations since 1991, implementing a California Air Resources Board (ARB) Airborne Toxic Control Measure (ATCM). However, the ATCM and Rule 1201 do not apply to operations using trivalent chromium compounds.

The ARB is currently negotiating with the EPA to have the ATCM and Rule 1201 designated as equivalent to the NESHAP. Until an equivalency determination is made, the District recommends that decorative chrome plating facilities using hexavalent chromium comply with the NESHAP requirements outlined below. Requirements for facilities using trivalent chromium are presented on page 2.

SURFACE TENSION LIMIT

Do not allow the surface tension in the chrome plating bath to exceed 45 dynes per centimeter (dynes/cm). A fume suppressant type wetting agent must be used to meet this standard because foam blanket type fume suppressants (such as Dis-Mist NP™) alone generally only reduce the surface tension of the bath to about 70 dynes/cm.

Therefore, most foam blankets must be used in combination with a wetting agent to meet the 45 dynes/cm limit. Several combination wetting agent/foam blanket additives are also available. These may be used either as a replacement for other foam blankets or in combination with other foam blankets to comply with the 45 dynes/cm limit.

MONITORING SURFACE TENSION

Beginning **September 30, 1996,** measure and record the surface tension of the plating bath at least once every 40 hours of tank operation or once every 10,000 ampere-hours of operation. The measurements must be performed using a stalagometer or tensiometer and following EPA Test Method 306B, as outlined in the NESHAP. The surface tension must be measured and recorded. A video demonstrating the surface tension measurements may be obtained from the District.

RECORDKEEPING

Keep the following records on site for at least two years or until the next District inspection, whichever is longer:

- Surface tension monitoring data demonstrating compliance with the surface tension limit (45 dynes/cm), including the date and time the data were collected.

9150 Chesapeake Drive • San Diego • California 92123-1096 • (619) 694-3307
FAX (619) 694-2730 • Smoking Vehicle Hotline 1-800-28-SMOKE

RECORDKEEPING continued

- The date that any fume suppressant was added to the bath, the approximate volume and identification of the product.
- Identification of each occurrence, duration, cause (if known), and corrective action taken for each upset/breakdown condition having the potential to release excess emissions of hexavalent chromium. An upset/breakdown condition is an unforseeable equipment malfunction or failure which is not the result of neglect or disregard of any air pollution control regulations and is generally associated with breakdowns of air pollution control equipment.
- All documentation used to prepare required notifications and reports (i.e., initial notifications, compliance status notifications, and ongoing compliance status reports).

REPORTING

- Submit a Notification of Compliance Status form (Form #1 attached) to the District by **September 30, 1996**.
- Prepare annually (each calendar year) and maintain on site a summary report to document the ongoing compliance status of the facility. The attached Ongoing Compliance Status Report (Form #2) is provided to satisfy this requirement.

Below is a list of companies known by the District to sell or provide information about stalagometers or tensiometers:

Baxter Scientific Products	(847) 689-8410 ext. 7011	(Deerfield, Ill)
Fisher Scientific	(412) 562-8300	(Pittsburgh, Pa)
Kocour Co.	(312) 847-1111	(Chicago, Ill)
Lurex Scientific	(609) 794-2121	(Vineland, N.J.)

TRIVALENT CHROMIUM REQUIREMENTS:

For decorative chrome plating operations using a trivalent chromium bath containing a wetting agent as a bath ingredient, the NESHAP only requires that records be kept of the bath components purchased, and a Notification of Compliance Status (Form #1) be submitted by **September 30, 1996**. The surface tension limit and the monitoring requirements described above for hexavalent chromium operations do not apply.

If wetting agent is not used, the NESHAP requires decorative chrome plating operations using trivalent chromium to comply with the same emission standards as are specified for hexavalent chromium.

If you would like a copy of the NESHAP, please contact Juanita Ogata at (619) 694-8851. If you have any questions concerning the requirements of the NESHAP or its implementation, if you have any difficulty in understanding this Advisory, or if you would like to request that a workshop be held to discuss the NESHAP, please contact Kelley Cronin at (619) 694-2452 or Natalie Zlotin at (619) 694-3312.

NZ:KC:jo
8/28/96

NOTIFICATION OF COMPLIANCE STATUS	FORM #1

Applicable Rule: 40 CFR Part 63, Subpart N--National Emission Standards for Chromium Emissions from Decorative Chromium Electroplating Tanks

Please complete this form and return it by SEPTEMBER 30, 1996 to:

San Diego Air Pollution Control District
9150 Chesapeake Drive
San Diego, California 92123
Attn: Kelley Cronin

Owner/Operator/Title _____

Street Address _____

City _____ State _____ Zip Code _____

Plant Name _____

Plant Phone Number _____

Plant Contact/Title _____

Plant Address (if different from owner/operator's):

Street Address _____

City _____ State _____ Zip Code _____

1. Complete the following table. If additional copies are needed, make copies of this page.

Permit #	Type of tank	Applicable emission limit	Type of control technique	Method to determine compliance	Test method followed

EXAMPLE RESPONSE:

Permit #	Type of tank	Applicable emission limit	Type of control technique	Method to determine compliance	Test method followed
92050	Decorative chrome plating	45 dynes/cm	Wetting agent	Surface tension measurement	EPA Method 306

2. Complete the following table for each decorative chromium electroplating tank in which a wetting agent is used in the electroplating bath to control chromium emissions. **Note:** decorative chromium electroplating tanks which use a trivalent chromium bath and fume suppressant containing a wetting agent are not required to monitor the surface tension of the bath. If additional lines are needed, make copies of this page. If the applicable surface tension monitoring and reporting records differ from those required in 40 CFR Part 63, subpart N, attach a description.

Permit #	Surface Tension (dynes/cm)

3. Please identify the product names of all fume suppressants (i.e. wetting agents, foam blankets, or combination wetting agent/foam blanket) added to the bath in the space provided below.

_____

_____

_____

_____

_____

_____

4. Print or type the name and title of the Responsible Official for the plant:

_____

(Name) (Title)

A Responsible Official can be:

- The president, vice-president, secretary, or treasurer of the company that owns the plant;
- The owner of the plant;
- The plant engineer or supervisor;
- A government official if the plant is owned by the Federal, State, City, or County government; or
- A ranking military officer if the plant is located on a military base.

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.

_____ _____

(Signature of Responsible Official) (Date)

ONGOING COMPLIANCE STATUS REPORT	FORM #2

Applicable Rule: 40 CFR Part 63, Subpart N--National Emission Standards for Chromium Emissions from Decorative Chromium Electroplating Tanks

Please complete this report annually and retain it on-site. This report should be made available to the Air Pollution Control District upon request.

Owner/Operator/Title _____

Street Address _____

City _____ State _____ Zip Code _____

Plant Name _____

Plant Phone Number _____

Plant Contact/Title _____

Plant Address (if different than owner/operator's):

Street Address _____

City _____ State _____ Zip Code _____

1. Identify the beginning and ending dates of the reporting period:

   Beginning ____/____/____ Ending ____/____/____

2. Complete the following table. If additional copies are needed, make copies of this page.

Permit #	Type of tank	Applicable emission limit	Type of control technique	Operating parameter monitored to demonstrate compliance	Acceptable value for monitored parameter	Total operating time during reporting period

EXAMPLE RESPONSE:

Permit #	Type of tank	Applicable emission limit	Type of control technique	Operating parameter monitored to demonstrate compliance	Acceptable value for monitored parameter	Total operating time during reporting period
92050	Decorative	45 dynes/cm	Wetting agent	Surface tension	45 dynes/cm	1,040 hours

3. Attach all monitoring data forms for the reporting period (i.e. surface tension monitoring data if wetting agent is used in bath to comply with surface tension limit).

4. Identify the date(s) and duration of any upset/breakdown conditions that occurred during the reporting period. (An upset/breakdown condition is an unforseeable equipment malfunction or failure which is not the result of neglect or disregard of any air pollution control regulations and is generally associated with breakdowns of air pollution control equipment.)

5. Please describe any changes in monitoring, processes, or controls since the last reporting period.

6. Print or type the name and title of the Responsible Official for the plant:

(Name) (Title)

A Responsible Official can be:

- The president, vice-president, secretary, or treasurer of the company that owns the plant;
- The owner of the plant;
- The plant engineer or supervisor;
- A government official if the plant is owned by the Federal, State, City, or County government; or
- A ranking military officer if the plant is located on a military base.

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.

(Signature of Responsible Official) (Date)