## EXISTING DECORATIVE CHROME ELECTROPLATERS FINAL RULE CHECKLIST

- 1. What material do you use for decorative electroplating?
  - □ hexavalent chrome (chromic acid)
  - $\Box$  trivalent chrome

If using trivalent chrome, go to item 20.

- 2. The emission limit for decorative chrome is  $4.4 \times 10^{-6}$  grains of total chromium per dry standard cubic foot (gr/dscf). This emission limit was based upon the use of a wetting agent type fume suppressant.
- 3. You should be in compliance with this rule by **January 25, 1996**.
- 4. If you cannot meet this compliance deadline, you can file for an **extension of up to one year**. This extension must be requested before July 25, 1995.
- 5. Initial notification must be submitted to the EPA by July 24, 1995. When these forms are received, they will be forwarded to you.
- 6. Everyone must prepare and implement an operation and maintenance plan by January 25, 1996. The following must be included in this plan:
  - a. Normal operating parameters for process equipment, the control systems, and monitoring equipment.
  - b. Checklist to document operation and maintenance of above equipment.
  - c. Work practice standards for the monitoring equipment (See Table 1).
  - d. Maintenance procedures to prevent process malfunctions.
  - e. Procedures for identifying and correcting malfunctions in equipment.
  - At all times, the operator must adhere to the procedures in the operation and maintenance plan.
  - Malfunctions must be corrected as soon as practicable.

- If the plan does not properly address a malfunction, it must be revised within 45 days of the malfunction.
- If, during a malfunction, the operator uses procedures other than those listed in the operation and maintenance plan, he must report such procedures within 2 working days and follow within a week with a report.
- This plan and its revisions must be kept for 5 years.

## **TABLE 1. Summary of Work Practice Standards**

Monitoring Equipment	Work Practice Standard	Frequency
Stalagmometer	1. Follow manufacturers recommendations.	1. 1/quarter

7. All decorative chrome electroplaters are required to conduct an **initial performance test by July 24, 1996.** 

**EXCEPTION:** Those using a wetting agent type fume suppressant may accept a surface tension of **45 dynes/cm** as the maximum surface tension value that corresponds to compliance.

- 8. Sixty days before you run the performance test, a written notification must be submitted to the EPA.
- 9. The initial performance test is conducted to set site specific operating parameters for your tanks. These parameters will confirm compliance with the emission limitation. The site specific operating parameters which must be tested include:
  - a. For wetting agent type fume suppressants, the maximum surface tension value which corresponds to compliance with the  $4.4 \times 10^{-6}$  gr/dscf emission limit; or,
  - b. The minimum foam blanket thickness that corresponds to compliance with the  $4.4 \times 10^{-6}$  gr/dscf emission limit. During the performance test, instead of measuring the minimum foam blanket thickness, a one inch (1") thickness of foam may be accepted as the minimum.

A description of the test methods is included in the federal rule - §63.344(d)(3).

- 10. The performance test report must contain the following information:
  - a. brief process description
  - b. sampling location description
  - c. description of sampling and analytical procedures
  - d. test results
  - e. quality assurance procedures and results
  - f. operating conditions during test
  - g. summary of chemical standard preparation and calibration procedure
  - h. data sheets from field sampling and lab analyses
  - i. documentation of calculations
  - j. other information required by test method
- 11. Once the initial performance test has been conducted **or** on or after July 24, 1996, monitoring must begin immediately. This continuous monitoring ensures compliance with the emission limitations.

Those using a fume suppressant, go to item 12; those with foam blankets, go to item 13.

12. Once every four (4) hours during tank operation, surface tension must be measured. This can be done with a stalagmometer or tensiometer.

A surface tension greater than the value established during the performance test (or 45 dynes/cm) constitutes non compliance.

The time between monitoring may be increased if no exceedances of surface tension occur:

- a. Once every 4 hours for the first 40 hours of tank operation.
- b. For the next 40 hours, measure once every 8 hours.
- c. After 80 hours of compliance, measure once every 40 hours of tank operation.

If an exceedance of surface tension occurs anytime during monitoring, one must return to the original schedule of once every 4 hours.

If the bath solution is drained, the original schedule of once every 4 hours must be resumed.

Go to item 14.

13. The foam blanket thickness shall be measured once every (1) hour of tank operation. This thickness must be measured near the cathode area of the tank.

A foam thickness less than the value established during the performance test (or 1") constitutes non compliance.

The time between monitoring may be increased according to the following schedule as long as the foam meets the minimum thickness required:

- a. Once every hour of the first 40 hours of tank operation.
- b. For the next 40 hours of operation, measure the thickness once every 4 hours.
- c. If after 80 hours of compliance, measure the thickness every 8 hours of operation.

If during the monitoring, the foam does not meet the minimum thickness requirement, one must return to the original schedule of once every hour.

If the bath solution is drained, the original schedule of once every hour must be resumed.

14. For those sources conducting a performance test, a report of the performance test results must be submitted to the EPA within 90 days of its completion.

Those sources not required to conduct a performance test, a notification of compliance status must be submitted by February 24, 1996. The compliance status report must contain the following information:

- a. applicable emission limit
- b. surface tension measurement
- c. description of the air pollution control technique for each emission point
- d. statement that an operation and maintenance plan is on file
- e. statement of compliance with the standard
- 15. Is your facility, according to your air permit, a major source of air emissions?
  - □ yes □ no

If you answered no, go to item 17.

16. Compliance status reports must be submitted semiannually. (major source)

Go to item 18.

- 17. Compliance status reports must be completed annually and retained on site. (area source)
- 18. The compliance status reports must contain the following information:
  - a. company name and address
  - b. list of operating parameters which are monitored
  - c. emission limit for the source
  - d. compliant operating range for the site specific parameters as determined by the performance test
  - e. beginning and ending date of reporting period
  - f. description of process
  - g. total process operating time during reporting period
  - h. a statement that the procedures in the operating and maintenance plan were followed
  - i. description of any changes in monitoring, process, or controls since the last reporting period
  - j. name, title, and signature of the responsible official who is certifying the accuracy of the report
  - k. date of the report
  - 1. If, during the reporting period, the operating parameters were out of the compliant range, this excess, its duration, and cause must be reported.
  - m. If, during the reporting period, the procedures in the operation and maintenance plan are not followed, an assessment of whether emission exceedances occurred during this period must be made. A copy of the report which is required (item 6) must be attached.

If an exceedance in air emission is reported, the EPA may increase the reporting period and require submittal of reports.

## 19. **Recordkeeping:** The following items must recorded and kept on site for **five years**:

- a. work practice standards inspections (see item 6).
  - The inspection record should include:
  - i. date of the inspection
  - ii. description of the working condition of the device
  - iii actions taken to correct deficiencies
- b. all maintenance on monitoring equipment
- c. each malfunction including cause and duration †
- d. actions taken during the malfunction if these differed from the operation and maintenance plan (see item 6) †
- e. other data necessary to demonstrate compliance with the operation and maintenance plan (see item 6)

- f. compliance monitoring (see item 12,13); included in these reports must be the date and time of the measurement(s)
- g. performance test results
- h. the date and time of the beginning and end of a period of emission exceedance, as indicated by the monitoring data †
- i. total process operating time during a reporting period †
- j. copies of all notification reports
- † These are included in the compliance status report.

The EPA is generating sample reporting forms and monitoring checklist. When these are available, they will be forwarded to you.

Go to item 24.

- 20. Does the trivalent chrome solution you are using contain a wetting agent type fume suppressant as one of its components?
  - □ yes □ no

If you answered no, you must adhere to the rules listed in items 2 - 19. If you answered yes, continue to item 21.

- 21. An initial notification form must be submitted to the EPA by July 24, 1995. When these forms are received, they will be forwarded to you.
- 22. A compliance status report must be submitted by February 24, 1996. The compliance report must contain the following information:
  - a. name, title, and address of owner/operator
  - b. physical address of location
  - c. compliance date for each source
  - d. brief process description
  - e. is the source located at a major or area source of air emissions?
  - f. a list of bath components with the wetting agent clearly identified
- 23. Records of bath components purchased, with the wetting agent clearly identified as a bath constituent, must be kept for at least five years.
- 24. All decorative chrome electroplaters are required to obtain Title V air permits. The deadline for obtaining this permit is still being negotiated.

definitions	§ 63.341	p. 4963
emission limits	§ 63.342 (c)(1)(i)-(ii)	p. 4965
compliance deadline	§ 63.343 (a)	p. 4966
deadline extension request	§ 63.343 (a)(6)	p. 4967
work practice standard	§ 63.342 (f)(1)	p. 4965
operation and maintenance plan	§ 63.342 (f)(3)	p. 4966
compliance monitoring	§ 63.343 (c)	p. 4968
initial performance test	§ 63.344 (a)	p. 4970
methods to be used in conducting performance test	§ 63.344 (c)	p. 4970
establishing site specific parameters	§ 63.344 (d)	p. 4970
new and reconstructed sources	§ 63.345	p. 4972
recordkeeping	§ 63.346	p. 4973
initial notification report	§ 63.347 (c)	p. 4973
notification of performance test	§ 63.347 (d)	p. 4974
notification of compliance status	§ 63.347 (e)	p. 4974
ongoing compliance status report	§ 63.347 (g)(3)	p. 4975
emission exceedances	§ 63.347 (h)(2)	p. 4976
test methods	Appendix A	p. 4979
trivalent chrome	§ 63.347 (j)	p. 4976
Title V air permit requirement	§ 63 340 (e)	p 4963

25. The following table is an index of the final rule which you will find attached.