ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[OAR–2002–0010, FRL–7786–9]

RIN 2060–AH69

National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; amendments.

SUMMARY: On January 25, 1995, the EPA promulgated national emission standards for chromium emissions from hard and decorative chromium electroplating and chromium anodizing tanks under section 112 of the Clean Air Act (CAA). On June 5, 2002, we proposed amendments to the rule. This action promulgates amendments to the emission limits, definitions, compliance provisions and performance test requirements in the standards for chromium emissions from hard and decorative chromium electroplating and anodizing tanks.

DATES: Effective July 19, 2004.

ADDRESSES: EPA has established a docket for this action under Docket ID Nos. OAR–2002–0010 and A–88–02. All documents in the docket are listed in the EDOCKET index at *http://www.epa.gov/edocket.* Although listed in the index, some information is not publicly available, *i.e.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in EDOCKET or in hard copy at the Air and Radiation Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Mr. Phil Mulrine, U.S. EPA, Office of Air Quality Planning and Standards, Emission Standards Division, Metals Group, (C439–02), Research Triangle Park, NC 27711, telephone number (919) 541–5289, electronic mail address: *mulrine.phil@epa.gov.*

SUPPLEMENTARY INFORMATION: *Regulated Entities.* Entities potentially regulated by this action include facilities engaged in hard chromium electroplating, decorative chromium electroplating, and chromium anodizing of metal or plastic parts either as a primary activity or as an activity incidental to a larger fabricating or manufacturing establishment. Regulated categories and entities include sources listed under the North American Information Classification System (NAICS) U.S. Industries code 332813, as well as sources listed under numerous industry codes within industry subsector 332, titled ''Fabricated Metal Product Manufacturing.''

Category	NAICS	Examples of regulated entities
Manufacturing	332813	Electroplating and anodizing facilities.
Manufacturing	332	Establishments primarily engaged in both fabricating and electroplating or anodizing products are classified in the Manufacturing sector according to the product made.

Docket. The EPA has established an official public docket for this action including both Docket ID No. OAR–2002–0010 and Docket ID No. A–88–02. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. All items may not be listed under both docket numbers, so interested parties should inspect both docket numbers to obtain all materials relevant to the final rule amendments. Although a part of the official public docket, the public docket does not include Confidential Business Information or other information the disclosure of which is restricted by statute. The official public docket is available for public viewing at the EPA Docket Center (Air Docket), EPA West, Room B–102, 1301 Constitution Avenue, NW., Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

Electronic Access. Electronic versions of the documents filed under Docket No. OAR–2002–0010 are available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at *http://www.epa.gov/edocket/* to submit or view public comments, access the index of the contents of the official public docket, and access those documents in the public docket that are available electronically. Once in the system, select ''search'' and key in the appropriate docket identification number.

The EPA's policy is that copyrighted material will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility identified in this document.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of today's document also will be available on the WWW. Following the Administrator's signature, a copy of this action will be posted at *www.epa.gov/ttn/oarpg* on EPA's Technology Transfer Network (TTN) policy and guidance page for newly proposed or promulgated rules. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541–5384.

Judicial Review. Under section 307(b)(1) of the CAA, judicial review of the final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by September 17, 2004. Under section 307(d)(7)(B) of the CAA, only an objection to the final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by the final rule amendments may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce the requirements.

Outline. The information presented in this preamble is organized as follows:

I. Background

On January 25, 1995, we promulgated national emission standards for hazardous air pollutants (NESHAP) for chromium emissions from hard and decorative chromium electroplating and chromium anodizing tanks (60 FR 4963) under the authority of section 112 of the CAA. Due to recent changes in control technology, additional information related to the monitoring required by the NESHAP, and problems with implementing some of the requirements of the NESHAP, we proposed amendments to the NESHAP on June 5, 2002 (67 FR 38810). The proposed amendments to the NESHAP addressed five technical areas: (1) The use of fume suppressants for controlling chromium emissions from hard chromium electroplating tanks; (2) a revised surface tension limit for decorative chromium electroplating tanks when measuring surface tension with a tensiometer; (3) an alternate emission limit for hard chromium electroplating tanks equipped with enclosing hoods; (4) revised definitions for chromium electroplating and chromium anodizing tanks; and (5) the pressure drop monitoring requirement for composite mesh pad (CMP) control systems.

Based on recommendations made by the Common Sense Initiative (CSI) Metal Finishing Subcommittee and research conducted by our Office and Research and Development (ORD), we proposed allowing owners and operators of hard chromium electroplating sources to meet a surface tension limit as an alternative to the chromium emissions concentration limit specified in the NESHAP. The data from recent emission tests conducted on hard chromium electroplating tanks indicates that compliance with the 0.015 milligram per dry standard cubic meter (mg/dscm) emission limit can be achieved when the surface tension of the electroplating tank bath is maintained below certain levels. Based on those data, we proposed surface tension limits of 45 dynes per centimeter (dynes/cm), when measured using a stalagmometer, and 35 dynes/cm, when measured using a tensiometer, for hard chromium electroplating tanks.

The research performed by ORD and other data show that, when used to measure the surface tension of chromium electroplating baths, tensiometers typically read about 20 percent lower than surface tension measurements of the same bath made using a stalagmometer. Because the 45 dynes/cm surface tension limit specified in the NESHAP for decorative chromium electroplating tanks is based on measurements using a stalagmometer, we proposed adding a separate surface tension limit of 35 dynes/cm when using a tensiometer to measure decorative chromium electroplating bath surface tension.

Since the promulgation of the NESHAP, several chromium electroplating facilities have installed state-of-the-art electroplating tanks equipped with enclosing hoods. Because the ventilation rates for these enclosed tanks are considerably lower than ventilation rates for conventional hooding, some facilities with enclosed tanks have had difficulty meeting the chromium emission concentration limit specified in the NESHAP, even when emissions from those tanks are well controlled. To rectify this situation, we proposed an alternative mass emission rate limit for chromium electroplating tanks equipped with enclosing hoods.

The NESHAP defined affected source as any chromium electroplating tank or chromium anodizing tank located at a facility that performs hard chromium electroplating, decorative chromium electroplating, or chromium anodizing. We have become aware that, in at least one case, this definition of affected source has resulted in the replacement of an existing electroplating tank being treated as a reconstruction, thereby triggering the emission limits for new sources. Because tank replacement is considered routine maintenance, it was not our intent to require more stringent emission limits when a facility replaced an existing chromium electroplating tank. Therefore, we proposed an amended definition of affected source that includes the peripheral equipment, such as rectifiers and anodes, that is essential for the chromium electroplating process.

Finally, we proposed an amendment to the requirement for establishing the operating limit for any source controlled with a CMP. In the promulgated NESHAP, owners and operators of affected sources controlled with a CMP are required to maintain the pressure drop across the CMP within 1 inch of water column (in. w.c.) of the pressure drop established during the initial performance test. However, we have recently become aware that the pressure drop across a CMP often exceeds the pressure drop operating limit by more than 1 in. w.c. immediately following the cleaning or replacement of pads. Consequently, we proposed increasing the allowable range of pressure drops from ±1 in. w.c. to ±2 in. w.c.

We received a total of 16 public comments on the proposed amendments to the NESHAP. Two of the 16 comments requested an extension of the public comment period, 2 comments expressed general opposition to the amendments, and the other 12 comments addressed the technical issues associated with the proposed amendments. In addition, some commenters suggested changes to other requirements of the NESHAP not specifically addressed by the proposed amendments. Comments were submitted by five State and local air pollution control agencies, one environmental justice organization, four companies that perform chromium electroplating, and one Federal agency. Three industry trade associations submitted a joint set of comments, and two concerned citizens also submitted comments.

After full and careful consideration of the comments, we are promulgating the amendments as proposed with two minor clarifications. Both clarifications pertain to the requirement for establishing operating limits for the pressure drop across a CMP system. We have added paragraph (iii) to § 343(c)(1) of the final rule to indicate that an owner or operator can establish a new operating limit for the pressure drop across a CMP system by repeating the performance test. In such cases, the new operating limit will be based on the pressure drop established during the repeat performance test ±2 in. w.c. We also have added paragraph (iv) to § 343(c)(1) to indicate that the ±2 in.

w.c. requirement for the pressure drop across a CMP system does not apply during automatic washdown cycles of the CMP system.

II. Response to Comments

A. Use of Fume Suppressants for Controlling Chromium Emissions From Hard Chromium Electroplating Tanks

Comment: One commenter stated that the proposed change is based on a single emissions test, and that there are other data available, collected from the same facility and from other facilities, that contradict the findings of that test. To support that argument, the commenter summarized the results from three studies of the effectiveness of fume suppressants in controlling emissions from chromium electroplating tanks that were performed under EPA's CSI. The 2000 CSI report included the results of three emission tests conducted at a hard chromium electroplating facility. The results of the first test were used as the basis for the proposed amendment. In the second test, emissions were measured at higher surface tensions (32 to 34 dynes/cm) and higher process loading (3,973 to 5,652 ampere-hours (amp-hr)); emissions of total chromium exceeded the NESHAP limit of 0.015 mg/dscm, but hexavalent chromium concentrations were within the 0.015 mg/dscm limit. In the third test, emissions were measured at similar loading levels (4,700 to 5,000 amp-hr), but at even higher surface tensions (32 to 36 dynes/cm). Although there were problems with the test, the results indicated exceedances of the emission limit in two of three runs. During a 1998 CSI study, emissions from a hard chromium electroplating tank were below the 0.015 mg/dscm limit when surface tensions were maintained between 24 and 29 dynes/cm using a fluorinated chemical fume suppressant, which is referred to as a ''third generation'' fume suppressant. In the other study, six tests were performed on hard chromium electroplating tanks that contained fume suppressants. For the five valid tests, the results of two tests indicated compliance with the emission limit when surface tensions were 23 and 28 dynes/cm, respectively; for the other three tests, chromium emissions exceeded the 0.015 mg/dscm limit when surface tensions were maintained at 22, 32, and 41 dynes/cm, respectively.

Response: We have reviewed the additional test data referenced by the commenter, and we disagree with the commenter that other available data contradict the results of the test that we used as the basis for the proposed amendment. The additional studies that the commenter references present the results of 17 emission tests on hard chromium electroplating tanks. Two emission tests were conducted in May 1996 at the Diamond Chrome Plating, Incorporated, (Diamond) facility in Howell, Michigan. The tests were performed on five hard chromium electroplating tanks that were exhausted to a common duct. Each test consisted of three 2-hour runs using Method 306. During the first test, the surface tensions of the electroplating solutions in the five tanks ranged from 38 to 44 dynes/cm and averaged 41 dynes/cm. The total chromium emission concentration for that test was 0.0062 mg/dscm, and the hexavalent chromium concentration for the test was 0.0048 mg/dscm, both of which are far below the emission limit of 0.015 mg/dscm. During the other test, foam was discovered in the exhaust hood. Therefore, the results of that test are not valid.

Six emission tests were conducted during July and August 1997 at the Modern Hard Chrome Company (Modern) facility in Warren, Michigan. Three tests were performed on each of two hard chromium electroplating tanks. Each test consisted of three 2-hour Method 306 runs. For each tank, one of the tests was conducted without the addition of a fume suppressant to the electroplating bath. For the other four tests, a wetting agent fume suppressant was added to the electroplating bath, and the average surface tensions of the electroplating solutions ranged from 22 to 41 dynes/cm. The testing demonstrated compliance with the 0.015 mg/dscm emission limit in only one of the four controlled tests. However, the concentrations of total chromium varied considerably over the four tests, and the results were inconsistent with the other available data on the effectiveness of fume suppressants in controlling emissions from hard chromium electroplating tanks. Whereas one test indicated total chromium emissions to be 0.17 mg/dscm at a surface tension of 32 dynes/cm, another test conducted at a significantly higher surface tension of 41 dynes/cm indicated a much lower total chromium concentration of 0.050 mg/dscm. The other two tests were conducted at surface tensions of 22 to 23 dynes/cm. In one test, the total chromium concentration was 0.011 mg/dscm, but for the other test, the total chromium concentration was determined to be 0.028 mg/dscm. These variations are a strong indication of problems with the testing and/or source operation. However, we have been unable to obtain a complete copy of the report for this test to corroborate the test results and ensure that there were no problems with process operations or test procedures that could bias the results of the tests. Consequently, we do not consider the results for the tests at Modern to be valid.

Between September 1997 and January 1998, six emission tests were conducted at the Hohman Plating and Manufacturing (Hohman) facility in Dayton, Ohio. The tests were all conducted on the same hard chromium electroplating tank. Five of the tests consisted of six 2-hour test runs using Method 306; the other test consisted of four 2-hour Method 306 runs. One of the tests was conducted under baseline conditions, without the addition of a fume suppressant to the electroplating solution. For the other five tests, a wetting agent fume suppressant was added to the tank, and the electroplating bath surface tensions were maintained between 24.5 and 29.0 dynes/cm. The total chromium concentrations in the exhaust for the five controlled tests ranged from 0.0017 to 0.0050 mg/dscm and were all well below the emission limit of 0.015 mg/dscm.

Three emission tests were conducted at the Acme Hard Chrome, Incorporated, (Acme) facility in Alliance, Ohio. The tests took place in August 1998, October 1998, and January 1999 and were conducted on three hard chromium electroplating tanks that are exhausted to a common control system. Each test consisted of three 2-hour test runs using Method 306. The results of the first test were used as the basis for the proposed amendment. The surface tensions in the tanks during the first test ranged from 28 to 30 dynes/cm, and the total and hexavalent chromium emission concentrations for the test were 0.0034 mg/dscm and 0.0030 mg/dscm, respectively. In the second test, the surface tensions in the tanks ranged from 32 to 34 dynes/cm. An error in the test report indicated the total chromium concentration to be 0.018 mg/dscm. However, the corrected concentration of total chromium was actually 0.0092 mg/dscm, which is well below the 0.015 mg/dscm emission limit. The hexavalent chromium concentration for the second test was 0.0079 mg/dscm. In the third test, foam was discovered in the exhaust hood, so the results of that test are not considered to be valid.

To summarize, we were able to obtain the results of 14 emission tests on hard chromium electroplating tanks controlled with wetting agent fume suppressants. Eight of the 14 tests provided valid results of fume suppressant performance. In all eight valid emission tests, the total chromium

concentration was determined to be less than the 0.015 mg/dscm emission limit for hard chromium electroplating tanks. Therefore, we have concluded that the available data do support the proposed amendment to allow hard chromium electroplating sources to comply with a surface tension limit as an alternative to the chromium emission concentration of 0.015 mg/dscm.

Comment: One commenter disagreed that the data, which were used as the basis for the proposed change, are conclusive. The commenter pointed out that the emission test was conducted at low production levels (227 to 1,405 amp-hr). Therefore, he believes that the test data are not representative of normal hard chromium electroplating operations.

Response: We agree with the commenter that the emission test that was used as the basis for the proposed amendment was conducted under relatively low process loads. However, the results from other tests on hard chromium electroplating tanks demonstrate that wetting agent fume suppressants are effective in controlling chromium emissions at higher process loads. For example, in the tests conducted at Acme, compliance was demonstrated at a process load of 5,000 amp-hr, and compliance was demonstrated at a process rate of 13,480 amp-hr for the tests at Diamond. These process loads are more typical of the hard chromium electroplating industry than the process load for the test that was used as the basis for the proposed amendment.

Comment: One commenter pointed out that the proposed amendment is based on tests using a ''new generation'' of fume suppressants, implying that other fume suppressants on the market may not perform as well. A second commenter concurred with this comment. The commenter pointed out that the 1998 CSI study indicates that some fume suppressants may be more effective than others in controlling emissions. However, the proposed amendment does not specify the type of fume suppressants that can be used in hard chromium electroplating tanks. The two commenters requested that the final rule specify the types of fume suppressants acceptable for use on hard chromium electroplating tanks that would comply with the proposed surface tension limits.

Response: Based on the available data, we have concluded that chromium emission concentrations from hard chromium electroplating tanks are primarily a function of the electroplating solution surface tension when wetting agent fume suppressants are used as the only emission control. If the surface tension is maintained below the proposed levels (*i.e.*, 35 dynes/cm when measured by tensiometer and 45 dynes/cm when measured by stalagmometer), the concentration of total chromium in the exhaust will be no greater than the 0.015 mg/dscm emission limit for hard chromium electroplating tanks. Furthermore, the available data do not indicate that emission control levels are a function of the type of fume suppressant used in the tank solution, as suggested by the commenters. We did indicate in the preamble to the June 5, 2002 proposal that the amendment was based on a test conducted using a new generation of fume suppressants. However, the term ''new generation'' actually was meant to apply to the performance of fume suppressants with respect to product quality (*e.g.*, the relative degree of pitting in the finished plate) and not to the effectiveness of those fume suppressants in reducing emissions from chromium electroplating tanks. Sources will be in compliance with the emission limits provided the surface tension is maintained at or below the proposed limits, regardless of the type of fume suppressant used.

Comment: One commenter stated that numerous factors affect emissions from chromium electroplating tanks, such as temperature, chromium concentration, and amperage applied, and it is not possible to account for all of those factors in a single emissions test. Another commenter stated that other factors that affect emissions from chromium electroplating tanks should be evaluated, including the degree of air agitation, bath temperature, collection efficiency, mist particle size, tank freeboard, and chromium dust levels in the ductwork and around the facility. The first commenter requested that we consider all of the available data and proceed with the amendment as proposed only if the data are conclusive. If the data are not conclusive, additional testing should be performed before a final decision is made to promulgate the amendments. Another commenter agreed that the data that we considered in proposing the amendment are not conclusive, and additional testing is warranted before allowing the use of fume suppressants as the only means of emissions control on hard chromium electroplating tanks.

Response: Since proposing the amendments, we have evaluated the results of several other emission tests that demonstrate the performance of wetting agent fume suppressants in controlling chromium emissions from hard chromium electroplating tanks. Those tests were conducted under a range of design and operating conditions, including type of fume suppressant, process load, and tank size and configuration. Although measurements of the other parameters listed by the commenters (*e.g.*, bath temperature, tank freeboard, degree of agitation) are not available for comparison, we expect that there were variations in those parameters for the electroplating tanks tested. Despite those variations, the data from all eight of the valid emission tests clearly demonstrate a strong relationship between surface tension and chromium emissions. When the surface tension is maintained at relatively low levels (below 35 dynes/cm), chromium emissions are below 0.015 mg/dscm. Therefore, we have concluded that the effects of those other design and operating parameters on chromium emissions are secondary to surface tension. Furthermore, an industry expert concurred with this conclusion that surface tension is the primary factor in determining chromium emissions from hard chromium electroplating baths.

Comment: Three commenters opposed the amendment because it would allow existing add-on emission controls to be removed from hard chromium electroplating tanks. The commenters believe that existing controls are necessary to protect public health given the toxicity of hexavalent chromium and the proximity of many hard chromium electroplating shops to residences. One of the commenters pointed out that most hard chromium electroplaters already have purchased and installed add-on emission controls, so continuing to require add-on controls would not result in additional control costs for existing sources.

Response: We recognize that, under the proposed amendment, owners and operators of hard chromium electroplating tanks that choose to comply with the proposed surface tension limit could remove existing add-on emission controls. However, the available data on the performance of wetting agent fume suppressants demonstrate that control of chromium emissions equivalent to the level achieved by add-on emission controls can be achieved by maintaining the electroplating bath surface tension below the limits specified in today's amendments. With respect to the public health risks associated with emissions of hexavalent chromium emissions, we have begun evaluating the residual risk for the chromium electroplating and chromium anodizing source category, as required under section 112(f)(2) of the

CAA. If our assessment indicates that the risk due to emissions from the facilities within this source category is unacceptable, we will consider additional measures for mitigating that risk. We agree with the commenter that most hard chromium electroplating facilities have purchased and installed add-on emission controls to comply with the NESHAP. However, we do not feel compelled to require facilities to continue to operate those controls because maintaining electroplating tank solution surface tensions below the proposed limits will ensure adequate control of chromium emissions from those sources.

Comment: One commenter pointed out that the proposed amendment would eliminate the requirement for hard chromium electroplating operations to conduct emission tests to demonstrate compliance with emission limits. The commenter believes that emission tests are necessary for determining compliance with the NESHAP.

Response: We agree that hard chromium electroplating facilities would not be required to conduct performance tests under the proposed amendment if the facility owner or operator decided to comply with the proposed surface tension limits. However, the data on the performance of wetting agent fume suppressants demonstrate that compliance with the 0.015 mg/dscm chromium emission limit will be ensured if surface tension is maintained at or below 35 dynes/cm as measured by a tensiometer, or 45 dynes/cm as measured using a stalagmometer. Consequently, performance tests are not necessary when wetting agent type fume suppressants are maintained below the proposed limits. Furthermore, not requiring performance tests helps to ease the burden on small businesses that are subject to the final rule.

Comment: Two commenters summarized the results of a study performed by the San Diego Air Pollution Control District and the California Air Resources Board in the Barrio Logan community of San Diego County (Barrio Logan Study) from December 3, 2001, to May 12, 2002. During the study, a total of 431 ambient samples were collected at six locations in the vicinity of two electroplating facilities: a decorative chromium electroplating facility and a hard chromium electroplating facility. The study indicated that chromium emissions from the decorative chromium electroplating shop, which used fume suppressants for emission control, resulted in high levels of ambient hexavalent chromium concentrations. The same study also showed that emissions from the adjacent hard chromium electroplating shop, which used an add-on control, were much lower and did not contribute significantly to ambient hexavalent chromium concentrations. The study included estimates of cancer risk, based on 70-year exposures to the average hexavalent chromium concentrations measured during the 5-month study period. The risk assessment indicated that the average cancer risk ranged from 23 to 114 per million, depending on the location, and the overall average risk for all locations was 63 per million. The commenters stated that we should consider the results and implications of that study before proceeding with an amendment that would allow fume suppressants as the only means of emission control for hard chromium electroplating tanks. One of the commenters also requested that the study reports be included in the docket for the final rule.

Response: We have begun evaluating the residual risk associated with the chromium electroplating and chromium anodizing source category, as required under section 112(f)(2) of the CAA. The implications of the Barrio Logan Study would best be addressed within the context of residual risk, and we intend to give the data and results from that study full consideration as we evaluate the residual risk for the chromium electroplating and chromium anodizing source category. We cannot argue with the conclusion of the Barrio Logan Study that emissions from the decorative chromium electroplating shop were the main contributor to high ambient concentrations of chromium. However, the data do not support the conclusion that emissions from the decorative electroplating shop were higher simply because the facility used a fume suppressant and did not have add-on emission controls. Wetting agent fume suppressants are an effective means of emission control when they are used properly, but there are indications that the decorative chromium facility that was the focus of the Barrio Logan Study was not using their fume suppressant properly. Measurements made by the local air pollution control agency indicate that the decorative chromium electroplating facility was not in compliance with the surface tension limit of 45 dynes/cm during at least part of 40 of the 45 days surface tensions were recorded. This lack of adequate control of surface tension certainly contributed to the high ambient concentrations of chromium. In addition, there are indications that other factors, such as poor housekeeping practices, may also have contributed significantly to the ambient chromium concentrations.

B. Revised Surface Tension Limit When Measuring Surface Tension With a Tensiometer

Comment: Five commenters opposed the proposed amendment that would specify a lower maximum surface tension when the surface tension is measured using a tensiometer. One commenter noted that the proposed limit for tensiometer-measured surface tension is based on a single emission test, and the data from that test do not support the proposed surface tension limit of 35 dynes/cm. The commenter stated that surface tensions ranged from 28 to 30 dynes/cm during the test. Although the data demonstrated that the chromium emission limit was achieved at surface tensions below 30 dynes/cm, the data cannot be extrapolated to 35 dynes/cm. At the proposed surface tension limit of 35 dynes/cm, emission concentrations are very likely to be higher than the concentrations measured during the emission test in question. There are no data that demonstrate that emission concentrations will be below the chromium concentration limit of 0.015 mg/dscm when surface tensions are 35 dynes/cm, as measured using a tensiometer.

Response: We have obtained data from eight emission tests that measured chromium emissions from hard chromium electroplating tanks that were controlled only with wetting agent fume suppressants. In two of those tests, emissions were quantified at bath surface tensions of 32 dynes/cm or higher. The second Acme test was conducted at surface tensions of 32 to 34 dynes/cm, and the resulting concentrations of total chromium (0.0092 mg/dscm) and hexavalent chromium (0.0079 mg/dscm) were well under the 0.015 mg/dscm emission limit. Although we would expect the emission concentrations to be slightly higher if the test had been conducted at a surface tension of 35 dynes/cm, it is very unlikely the concentrations would have exceeded 0.015 mg/dscm (*i.e.*, would have been more than 50 percent higher) at the marginally higher surface tension. In the emission test performed at Diamond, the electroplating tank solution surface tension was 41 dynes/cm, and the concentrations in the tank exhaust were 0.0061 mg/dscm for total chromium and 0.0048 mg/dscm for hexavalent chromium, both of which also are well below the 0.015 mg/dscm

emission limit. This test demonstrated that, in some cases, the emission limit can be met even with a surface tension in excess of 35 dynes/cm. In the other six emission tests, surface tensions were below 30 dynes/cm and the measured emissions of chromium were well below the 0.015 mg/dscm emission limit. The results of all eight tests, and the two with the higher surface tensions in particular, demonstrate that compliance with the hard chromium electroplating tank emission limit will be achieved when surface tensions are maintained at or below the proposed limit of 35 dynes/cm.

Comment: One commenter stated that there are no data that demonstrate that chromium emissions from hard chromium electroplating operations will be below the chromium concentration limit of 0.015 mg/dscm when a stalagmometer indicates the surface tension is 45 dynes/cm. The commenter stated that additional testing should be performed before establishing a surface tension limit to ensure that chromium emission concentrations are achieved on a consistent basis when surface tensions are maintained below the limits of 35 and 45 dynes/cm for tensiometers and stalagmometers, respectively.

Response: Although the proposed surface tension limit for hard chromium electroplating tanks was based on measurements made using a tensiometer and not a stalagmometer, the data support a 45 dynes/cm limit for stalagmometer-based surface tension measurements. The test data clearly show that when surface tension, as measured using a tensiometer, is no more than 35 dynes/cm, the chromium emission concentration is no more than 0.015 mg/dscm. When simultaneous surface tension measurements of the same electroplating solution using both types of instruments are compared, the data indicate that the measurement differential is at least 10 dynes/cm when a stalagmometer indicates the surface tension to be 45 dynes/cm. In other words, if a stalagmometer measures the surface tension to be 45 dynes/cm, a tensiometer would measure the surface tension of the same electroplating bath to be no more than 35 dynes/cm. Therefore, when a tensiometer measures a surface tension of 35 dynes/cm or less, the chromium emission concentration meets the emission limit of 0.015 mg/dscm. We have concluded that the data also support the 45 dynes/cm limit for surface tensions measured using a stalagmometer.

Comment: One commenter stated that if hard chromium electroplating facilities are allowed to comply with the NESHAP by maintaining surface tensions below the limits of 35 dynes/cm and 45 dynes/cm, those facilities should be required to conduct an emission test to demonstrate compliance with the emission limits. Regardless of the instrument used to measure surface tension, the emission tests should be conducted over a range of operating conditions. Another commenter stated that when a fume suppressant is used with an add-on control device, the facility should be required to conduct an emissions test and establish an operating limit for surface tension.

Response: We disagree with the commenters that an emission test should be required when a hard chromium electroplating facility chooses to comply with the surface tension limits of 35 dynes/cm by tensiometer or 45 dynes/cm by stalagmometer. The test data clearly show that when the surface tension is maintained below these surface tension limits, chromium emission concentrations are no more than 0.015 mg/dscm. Therefore, emission tests are unnecessary in such cases. We also recognize that chromium electroplating tank operating parameters differ from facility to facility. However, surface tension has a more significant impact on chromium emissions than any of other chromium electroplating tank operating parameters because surface tension directly impacts the specific mechanism by which chromium is emitted; that is, the bursting of bubbles at the surface of the electroplating tank solution. The other operating parameters may affect how much fume suppressant is needed to reduce the surface tension to a level at or below 35 dynes/cm, but surface tension has the greatest impact on emission levels. An industry expert also has concurred with this conclusion that surface tension is the primary factor in determining chromium emissions from hard chromium electroplating baths. Therefore, we have concluded that there is no need to measure emissions over a range of operating parameters, as suggested by the commenter, provided the surface tension is maintained below the proposed limits.

Regarding the comment about establishing an operating limit for surface tension when an add-on control device is used with a fume suppressant, § 343(c)(5) of the NESHAP specifies a provision for allowing an affected facility to establish an operating limit for surface tension and subsequently monitor surface tension to demonstrate continuing compliance. This provision addresses the commenter's concern. However, as stated previously in this response, an emission test is not necessary to show initial compliance with the emission limit provided the surface tension is maintained below the 35 dynes/cm and 45 dynes/cm limits for tensiometer and stalagmometer measurements, respectively.

Comment: One commenter stated that the differences in surface tension observed by ORD when comparing measurements made using a tensiometer and a stalagmometer indicate that there is a serious measurement error associated with one or both of the analytical methods used in those instruments. Therefore, it is inappropriate for EPA to establish limits on surface tension using those data. The commenter recommended that we either determine the nature of the flaws in the two analytical methods or obtain additional data that demonstrate the relationship between surface tension and emission concentrations.

Response: Neither tensiometers nor stalagmometers measure surface tension directly. Tensiometers measure the force on a plate or ring as it is pulled from the surface of the liquid, and stalagmometers use a drop weight method, in which the number and weight of drops of the liquid are compared to those of a reference liquid. Both instruments measure *indicators* of surface tension. Because the indicators measured (force and drop weight) are different, stalagmometers and tensiometers may produce different values for the surface tension of a solution. We disagree that this measurement differential indicates a measurement error. We acknowledge that there is a difference in how the two instruments characterize surface tension, and we have addressed that difference in today's final rule by specifying a different surface tension limit for stalagmometers and for tensiometers. We are confident that the emission limit of 0.015 mg/dscm is being met when the surface tension is below 35 dynes/cm, as measured with a tensiometer, or 45 dynes/cm, as measured with a stalagmometer.

Comment: Two commenters disagreed with our conclusion that the available data support a 10 dynes/cm differential between surface tensions measured with a tensiometer and with a stalagmometer. One commenter pointed out that the study, which was the basis for the proposed amendment, shows that surface tension measurements using the two instruments varied by as much as 33 dynes/cm when measuring a known surface tension of approximately 40 dynes/cm. The commenter also stated that the same study shows that other factors, such as temperature and stalagmometer drop rate, can affect

surface tension measurements significantly. One commenter stated that the measurement difference between the two instruments is not linear but highly variable, with the greatest variations in the range of 30 to 50 dynes/cm. The commenter noted that, within this range, the measurement differences for the two instruments is much greater than 10 dynes/cm. The commenter also stated that the available data indicate that a reduction in surface tension from 45 dynes/cm to approximately 30 dynes/cm can affect emission rates by an order of magnitude. The commenter stated that, in view of the uncertainties in the data, the NESHAP should require the use of only one type of instrument, a stalagmometer, for monitoring surface tension in plating tanks. Both commenters believe that additional data must be collected and evaluated to determine how measurements made by tensiometers and stalagmometers differ. One of the commenters also stated that his agency is collecting additional data and can provide the data to us.

Response: We agree with the commenters that the available data indicate that the difference in surface tension measurements between tensiometers and stalagmometers is not 10 dynes/cm under all conditions, but varies depending on the surface tension of the liquid, the type of fume suppressant used, and possibly other factors. The data indicate that within the range of surface tensions characteristic of chromium electroplating baths that include wetting agents, stalagmometer measurements of surface tension are higher than measurements made using a tensiometer. For surface tensions in the range of the proposed surface tension limit of 35 dynes/cm for tensiometer measurements, stalagmometers can indicate surface tensions that are 20 to 30 dynes/cm higher. For surface tensions of 25 to 30 dynes/cm, which represents the lower end of the range of surface tensions typically found in chromium electroplating tanks, the difference in measurements between tensiometers and stalagmometers is closer to 10 dynes/cm. In addition, other data that we have obtained since proposing the amendments to the NESHAP also support the 10 dynes/cm differential between tensiometers and stalagmometers.

For the proposed amendment, we selected the surface tension limit of 35 dynes/cm for tensiometer measurements because the limit is based on measurements made using a tensiometer, and the data support that surface tension limit. On the other hand, the surface tension limit of 45 dynes/cm, which is specified in the NESHAP for decorative chromium electroplating tanks, is based on measurements of surface tensions using a stalagmometer. Thus, we based the surface tension limits for tensiometers and stalagmometers on two different sets of data.

We agree that the data from direct comparisons of measurements using the two types of instruments show a larger differential at surface tensions greater than 30 dynes/cm. However, if a stalagmometer indicates the surface tension is in compliance (*i.e.*, no greater than 45 dynes/cm), the surface tension measured using a tensiometer would certainly be no greater than 35 dynes/cm. Consequently, the 10 dynes/cm differential is appropriate.

We disagree with the suggestion by one of the commenters that the NESHAP should allow the use only of stalagmometers for demonstrating compliance with the surface tension limit. Many chromium electroplating facilities currently use tensiometers to monitor surface tension. Furthermore, the proposed amendment to allow owners and operators of affected hard chromium electroplating tanks to meet a surface tension limit rather than an emission limit is based on surface tension measurements using a tensiometer. Therefore, we do not want to prohibit the use of tensiometers for surface tension measurements.

C. Emission Limit for Hard Chromium Electroplating Tanks Equipped With Enclosing Hoods

Comment: One commenter supported the proposed mass emission limit as an alternative to the emission concentration limit for enclosed hard chromium electroplating tanks. However, the commenter believes emission rates increase when enclosing hoods are used because the hoods increase capture efficiency. He also pointed out that the use of enclosing hoods is recommended for worker safety.

Response: We appreciate the commenter's support for the proposed amendment. We also agree with the commenter's statement that enclosing hoods increase capture efficiency, and we concur with the commenter's statement that enclosing hoods provide an added benefit by reducing worker exposure to electroplating tank emissions. However, we disagree with the commenter's statement that overall emissions are greater when an enclosed hard chromium electroplating tank is used. It is true that the lower ventilation rates that are characteristic of electroplating tanks with enclosing hoods may result in increases in emission concentrations due to the introduction of less dilution air into the exhaust stream. However, when an enclosing hood is used, actual mass emission rates (*e.g.*, pounds per hour) typically are no more than 50 percent of the mass emission rate for a comparable electroplating tank with conventional hooding and ventilation rates. Therefore, enclosing hoods actually achieve a net decrease in electroplating tank emissions.

D. Chromium Electroplating and Chromium Anodizing Tank Definitions

Comment: One commenter supported the proposed change to the definition of affected source. However, the commenter suggested that the definition of affected source be expanded to include ventilation equipment.

Response: As indicated in § 63.2 of the general provisions to 40 CFR part 63, we have defined stationary source in terms of emissions. Any equipment, peripheral device, or facility that is to be considered either a source or part of a source must contribute to the generation of emissions of a regulated pollutant. In most installations, ventilation systems do not themselves contribute to emissions. In the case of chromium electroplating, ventilation systems do not generate emissions but capture and collect emissions from the source and direct the emissions to a control system or to a stack for release to the atmosphere. Therefore, we do not agree with the commenter that the definition of affected source should be expanded to include ventilation equipment.

Comment: One commenter supported the proposed change to the definition of affected source but stated that the proposed definition is still too vague and may be interpreted to include processes immediately prior to and after the plating operation. Therefore, the final rule should list examples of what is and is not ancillary equipment. The commenter suggested that the ancillary equipment that should be included in cost analyses should consist only of the equipment necessary for the electroplating process to function, or, in other words, equipment required for electroplating while the rectifier is supplying energy to the anode. In addition, the commenter requested that the final rule also clarify that tanks, which qualify neither as anodizing tanks nor as electroplating tanks, are not subject to the NESHAP.

Response: We agree with the commenter's remark that the summary of the amendments in the preamble to the proposal could be misleading because the summary did not

adequately define what constitutes an affected source. However, the intent of the summary is to provide an overview of the amendments, not to provide all of the details. The language presented in the final rule is the basis for determining compliance, and clearly defines what we consider to be part of an affected source. For chromium electroplating, the proposed amendment would expand the definition of affected source to include rectifiers, anodes, heat exchanger equipment, circulation pumps, and air agitation systems. It would be difficult to develop a comprehensive list that includes all of the equipment that could be interpreted to be part of the electroplating process, and such a list might complicate the final rule unnecessarily. Therefore, we have decided against expanding the definition of affected source further, as suggested by the commenter.

Concerning the commenter's request that we clarify that process tanks, other than electroplating and anodizing tanks, are not subject to the final rule, we point out that § 63.340, which addresses the applicability of the NESHAP, lists several types of process tanks associated with chromium electroplating that are not subject to the NESHAP. Section 63.340(c) of the final rule already addresses the commenter's concern.

E. Pressure Drop Monitoring Requirement for Composite Mesh Pads

Comment: Five commenters supported the proposed change to the operating limit for the pressure drop across a CMP system from ± 1 in. w.c. to ± 2 in. w.c. However, one commenter does not believe that the pressure drop requirement for CMP systems applies ''* * * at all times * * *,'' as stated in the preamble to the proposed amendments. The commenter explained that during automatic washdown cycles currently required by the rule as proposed and recommended by CMP manufacturers, the pressure drop across a CMP system may exceed the ±2 in. w.c. operating limit for a brief time. The commenter believes the proposed amendment was intended to apply to changes in pressure drop following comprehensive cleaning of mesh pads and not to short-term changes in pressure drop associated with automatic washdown cycles. The commenter believes the final rule should clarify that the pressure drop requirement does not apply to these automatic washdown cycles. The commenter also provided suggested rule language to that effect.

Response: We agree with the commenter that the proposed change was not meant to apply during the automatic washdown cycles of a CMP system. We consider automatic washdowns to be part of the normal operation of such control systems, whereas the proposed amendment was intended to apply to periodic maintenance that entails removing mesh pads and cleaning or replacing the pads. Although we stated in the preamble to the proposal that the pressure drop requirement applies ''* * * at all times * * *,'' the final rule clearly specifies that compliance is determined through a daily measurement of pressure drop across the CMP system. Owners or operators of affected sources that are controlled with a CMP system can determine when to measure the pressure drop and, presumably, they would choose to take pressure drop measurements outside of automatic washdown cycles. However, to avoid any further misunderstanding of this requirement, we have indicated in the final rule that the pressure drop requirement does not apply during automatic washdown cycles.

Comment: One commenter stated that the proposed amendment specifies that the ±2 in. w.c. pressure drop requirement would apply during the initial performance test, but does not address the retesting of an affected source. The commenter believes that if a source is retested and shown to be in compliance, the affected facility should be allowed to establish a new operating limit at ±2 in. w.c. of the pressure drop measured during that subsequent performance test.

Response: We agree with the commenter and have written the final rule amendments to reflect this change. The final rule indicates that the affected facilities may establish a new operating limit at ±2 in. w.c. of the pressure drop measured during subsequent performance tests.

III. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is ''significant'' and, therefore, subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligation of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that the final rule amendments do not constitute a ''significant regulatory action'' because none of the listed criteria applies to this action. Consequently, this action was not submitted to OMB for review under Executive Order 12866.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. The final rule amendments provide to owners and operators of affected sources alternatives to existing requirements. The existing alternatives will still be available for those owners and operators who choose to use them. The final rule amendments will increase the flexibility of compliance with the current regulations without imposing any additional recordkeeping requirements. The OMB has previously approved the information collection requirements specified in the final NESHAP under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.* and assigned the OMB control number 2060–0327.

A copy of the information collection request (ICR) support document prepared by EPA for the approved information collection requirements (ICR No. 1611.02) may be obtained from Susan Auby by mail at U.S. EPA, Office of Environmental Information, Collection Strategies Division (MD–2822T), 1200 Pennsylvania Avenue, NW., Washington, DC 20460; by e-mail at *auby.susan@epa.gov*; or by calling (202) 566–1672. You may also download a copy from the Internet at *http://www.epa.gov/icr*. Include the ICR and/or OMB control number in any correspondence.

The recordkeeping and reporting requirements are specifically authorized by section 112 of the CAA (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to Agency procedures set forth in 40 CFR part 2, subpart B.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a current valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

C. Regulatory Flexibility Act (RFA)

The RFA generally requires an agency to prepare a regulatory flexibility analysis for any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act, or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administrations' regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives ''which minimize any significant economic impact of the proposed rule on small entities.'' 5 U.S.C. Sections 603 and 604. Thus, an agency may conclude that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule. The final rule amendments will not have a significant economic impact on a substantial number of small entities because the amendments only provide options that are designed to provide increased flexibility to affected facilities. The final rule amendments will not impose any additional requirements on any small entities and are expected to relieve the burden for some small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with ''Federal mandates'' that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA's regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that today's final rule amendments do not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. Thus, the final rule amendments are not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that today's final rule amendments contain no regulatory requirements that might significantly or uniquely affect small governments because the amendments contain no requirements that apply to such governments or impose obligations upon them. Therefore, today's final rule amendments are not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

The final rule amendments do not have federalism implications. The amendments will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. None of the affected facilities is owned or operated by State governments, and the final rule amendments will not supersede State regulations that are more stringent. Thus, Executive Order 13132 does not apply to the final rule amendments.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 9, 2000) requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' The final rule

amendments do not have tribal implications, as specified in Executive Order 13175. The amendments will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to the final rule amendments.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be ''economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned rule is preferable to other potentially effective and reasonably feasible alternatives that EPA considered.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. Today's final rule amendments are not subject to Executive Order 13045 because the amendments are based on technology performance and not on health or safety risks. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, the final rule amendments have been determined not to be ''economically significant'' as defined under Executive Order 12866.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

Today's final rule amendments are not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because the amendments are not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. 104–113; 15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to the OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

Today's final rule amendments do not involve technical standards other than those standards already specified in the final rule. Therefore, EPA is not considering the use of any voluntary consensus standards in connection with the final rule amendments.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing the final rule amendments and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the amendments in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: July 8, 2004.

Michael O. Leavitt,

Administrator.

■ For reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

Subpart N—[Amended]

■ 2. Section 63.341(a) is amended as follows:
■ a. Removing the definition ''Chromium electroplating or chromium anodizing tank''.
■ b. Revising the definitions ''Stalagmometer'' and ''Tensiometer''.
■ c. Adding in alphabetical order definitions ''Chromium anodizing tank'', ''Chromium electroplating tank'', ''Enclosed hard chromium electroplating tank''; and ''Open surface hard chromium electroplating tank''.

§ 63.341 Definitions and nomenclature.

(a) * * *

Chromium anodizing tank means the receptacle or container along with the following accompanying internal and external components needed for chromium anodizing: rectifiers fitted with controls to allow for voltage adjustments, heat exchanger equipment, circulation pumps, and air agitation systems.

Chromium electroplating tank means the receptacle or container along with the following internal and external components needed for chromium electroplating: Rectifiers, anodes, heat exchanger equipment, circulation pumps, and air agitation systems.

* * * * *

Enclosed hard chromium electroplating tank means a chromium electroplating tank that is equipped with an enclosing hood and ventilated at half the rate or less that of an open surface tank of the same surface area.

* * * * *

Open surface hard chromium electroplating tank means a chromium electroplating tank that is ventilated at a rate consistent with good ventilation practices for open tanks.

* * * * *

Stalagmometer means an instrument used to measure the surface tension of a solution by determining the mass of a drop of liquid by weighing a known number of drops or by counting the number of drops obtained from a given volume of liquid.

* * * * *

Tensiometer means an instrument used to measure the surface tension of a solution by determining the amount of force needed to pull a ring from the liquid surface. The amount of force is proportional to the surface tension.

* * * * *

■ 3. Section 63.342 is amended by:
■ a. Revising paragraph (b)(1),
■ b. Revising paragraph (c),
■ c. Revising paragraph (d)(2), and
■ d. Revising paragraph (f)(2)(ii)(B).

The revisions and additions read as follows:

§ 63.342 Standards.

* * * * *

(b) *Applicability of emission limitations.* (1) The emission limitations in this section apply during tank operation as defined in § 63.341, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance and that are required by paragraph (f) of this section must be followed during malfunctions.

* * * * *

(c)(1) *Standards for open surface hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(i) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air (6.6×10^{-6} grains per dry standard cubic foot (gr/dscf)) for all open surface hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5} gr/dscf) if the open surface hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility; or

(iii) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 45 dynes per centimeter (dynes/cm) (3.1×10^{-3} pound-force per foot (lb_f/ft)) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lb_f/ft) as measured by a tensiometer at any time during tank operation.

(2) *Standards for enclosed hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(i) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf) for all enclosed hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small, hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5} gr/dscf) if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility; or

(iii) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 45 dynes/cm (3.1×10^{-3} lb_f/ft) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lb_f/ft) as measured by a tensiometer at any time during tank operation; or

(iv) Not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate determined by using the calculation procedure in § 63.344(f)(1)(i) for all enclosed hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small, hard chromium electroplating facilities; or

(v) Not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate determined by using the calculation procedure in § 63.344(f)(1)(ii) if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility.

(3)(i) An owner or operator may demonstrate the size of a hard chromium electroplating facility through the definitions in § 63.341(a). Alternatively, an owner or operator of a facility with a maximum cumulative potential rectifier capacity of 60 million amp-hr/yr or more may be considered small if the actual cumulative rectifier capacity is less than 60 million amp-hr/yr as demonstrated using the following procedures:

(A) If records show that the facility's previous annual actual rectifier capacity was less than 60 million amp-hr/yr, by using nonresettable ampere-hr meters and keeping monthly records of actual ampere-hr usage for each 12-month rolling period following the compliance date in accordance with § 63.346(b)(12). The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months; or

(B) By accepting a federally-enforceable limit on the maximum cumulative potential rectifier capacity of a hard chromium electroplating facility and by maintaining monthly records in accordance with § 63.346(b)(12) to demonstrate that the limit has not been exceeded. The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months.

(ii) Once the monthly records required to be kept by § 63.346(b)(12) and by this paragraph (c)(3)(ii) show that the actual cumulative rectifier capacity over the previous 12-month rolling period corresponds to the large designation, the owner or operator is subject to the emission limitation identified in paragraph (c)(1)(i), (iii), (c)(2)(i), (iii), or (iv) of this section, in accordance with the compliance schedule of § 63.343(a)(5).

(d) * * *

(2) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected source to exceed 45 dynes/cm (3.1×10^{-3} lb_f/ft) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lb_f/ft) as measured by a tensiometer at any time during operation of the tank.

* * * * *

(f) * * *

(2) * * *

(ii) * * *

(B) Fails to provide for the proper operation of the affected source, 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

* * * * *

■ 4. Section 63.343 is amended by:

■ a. Revising paragraphs (b)(2)(i) and (iii),

■ b. Revising paragraph (c)(1), and

■ c. Revising paragraphs (c)(5)(i) and (ii).

The revisions read as follows:

§ 63.343 Compliance provisions.

* * * * *

(b) * * *

(2) * * *

(i) The affected source is a hard chromium electroplating tank, a decorative chromium electroplating tank or a chromium anodizing tank; and

* * * * *

(iii) The owner or operator complies with the applicable surface tension limit of § 63.342(c)(1)(iii), (c)(2)(iii), or (d)(2) as demonstrated through the continuous compliance monitoring required by paragraph (c)(5)(ii) of this section.

* * * * *

(c) * * *

(1) *Composite mesh-pad systems.* (i) During the initial performance test, the owner or operator of an affected source, or a group of affected sources under common control, complying with the emission limitations in § 63.342 through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in § 63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in § 63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ±2 inches of water column from this value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under § 63.7, except for hard chromium electroplaters and chromium anodizing operations in California, which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ±2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

(iii) The owner or operator of an affected source complying with the emission limitations in § 63.343 through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs (c)(1)(i) or (ii) of this section. To establish a new site-specific operating parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs (c)(1)(iii)(A) through (D) of this section.

(A) Determine the outlet chromium concentration using the test methods and procedures in § 63.344(c);

(B) Establish the site-specific operating parameter value using the procedures § 63.344(d)(5);

(C) Satisfy the recordkeeping requirements in § 63.346(b)(6) through (8); and

(D) Satisfy the reporting requirements in § 63.347(d) and (f).

(iv) The requirement to operate a composite mesh-pad system within the range of pressure drop values established under paragraphs (c)(1)(i) through (iii) of this section does not apply during automatic washdown cycles of the composite mesh-pad system.

* * * * *

(5) *Wetting agent-type or combination wetting agent-type/foam blanket fume suppressants.* (i) During the initial performance test, the owner or operator of an affected source complying with the emission limitations in § 63.342 through the use of a wetting agent in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in § 63.344(c). The owner or operator shall establish as the site-specific operating parameter the surface tension of the bath using Method 306B, appendix A of this part, setting the maximum value that corresponds to compliance with the applicable emission limitation. In lieu of establishing the maximum surface tension during the performance test, the owner or operator may accept 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer as the maximum surface tension value that corresponds to compliance with the applicable emission limitation. However, the owner or operator is exempt from conducting a performance test only if the criteria of paragraph (b)(2) of this section are met.

(ii) On and after the date on which the initial performance test is required to be completed under § 63.7, except for hard chromium electroplaters and chromium anodizing operations in California, which have until January 25, 1998, the owner or operator 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 as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer if the owner or operator is using this value in accordance with paragraph (c)(5)(i) of this section, shall constitute noncompliance with the standards. 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, appendix A of this part.

(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 the compliance date. 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, 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.

(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 in paragraph (c)(5)(ii)(B) of this section. For example, if an owner or 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.

* * * * *

■ 5. Section 63.344 is amended by adding paragraph (f) to read as follows:

§ 63.344 Performance test requirements and test methods.

* * * * *

(f) *Compliance provisions for the mass rate emission standard for enclosed hard chromium electroplating tanks.* (1) This section identifies procedures for calculating the maximum allowable mass emission rate for owners or operators of affected sources who choose to meet the mass emission rate standard in § 63.342(c)(2)(iv) or (v).

(i)(A) The owner or operator of an enclosed hard chromium electroplating tank that is an affected source other than an existing affected source located at a small hard chromium electroplating

facility who chooses to meet the mass emission rate standard in § 63.342(c)(2)(iv) shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 9:

$$MAMER = ETSA \times K \times 0.015 \text{ mg/dscm} \quad (9)$$

Where:

MAMER = the alternative emission rate for enclosed hard chromium electroplating tanks in mg/hr.

ETSA = the hard chromium electroplating tank surface area in square feet(ft^2).

K = a conversion factor, 425 dscm/($ft^2 \times hr$).

(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from Method 306 testing is less than or equal to the maximum allowable mass emission rate calculated from equation 9.

(ii)(A) The owner or operator of an enclosed hard chromium electroplating tank that is an existing affected source located at a small hard chromium electroplating facility who chooses to meet the mass emission rate standard in § 63.342(c)(2)(v) shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 10:

$$MAMER = ETSA \times K \times 0.03 \text{ mg/dscm.} \quad (10)$$

(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from testing using Method 306 of appendix A to part 63 is less than or equal to the maximum allowable mass emission rate calculated from equation 10.

■ 6. Section 63.347 is amended by revising paragraph (c)(1)(viii) to read as follows:

§ 63.347 Reporting requirements.

* * * * *

(c) * * *

(1) * * *

(viii) For sources performing hard chromium electroplating, a statement of whether the owner or operator of an affected source(s) will limit the maximum potential cumulative rectifier capacity in accordance with § 63.342(c)(2) such that the hard chromium electroplating facility is considered small; and

* * * * *

[FR Doc. 04–16206 Filed 7–16–04; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 04–1735; MM Docket No. 03–141; RM–10703]

Radio Broadcasting Services; Corona de Tucson and Sierra Vista, AZ

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In response to petition for rule making filed by this document substitutes Channel 267C3 for Channel 269A at Sierra Vista, Arizona, reallots Channel 267C3 to Corona de Tucson, Arizona, and modifies the Station KKYZ license to specify operation on Channel 267C3 at Corona de Tucson. In doing so, it dismissed a counterproposal filed by Christian County Network proposing that Channel 267C3 be reserved for noncommercial educational use. This allotment is also conditioned on concurrence from the Mexican government. *See* 68 FR 42665, July 18, 2003. The reference coordinates for the Channel 267C3 allotment at Corona de Tucson, Arizona, are 31–57–24 and 110–41–38.

DATES: Effective August 9, 2004.

FOR FURTHER INFORMATION CONTACT: Robert Hayne, Media Bureau (202) 418–2177.

SUPPLEMENTARY INFORMATION: This is a synopsis of the *Report and Order* in MM Docket No.03–141 adopted June 23, 2004, and released June 25, 2004. The full text of this decision is available for inspection and copying during normal business hours in the FCC Reference Information Center at Portals II, CY–A257, 445 12th Street, SW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160 or *www.BCPIWEB.com.*

List of Subjects in 47 CFR Part 73

Radio, Radio Broadcasting.

■ Part 73 of the Code of Federal Regulations is amended as follows:

PART 73—RADIO BROADCAST SERVICES

■ 1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334 and 336.

§ 73.202(b) [Amended]

■ 2. Section 73.202(b), the Table of FM Allotments under Arizona, is amended by removing Channel 269A at Sierra Vista, and by adding Corona de Tucson, Channel 267C3.

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. 04–16367 Filed 7–16–04; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 04–1730, MB Docket No. 03–258, RM–10833, 10864]

Radio Broadcasting Services; Centennial, WY, Gering, NE, Newcastle, WY, Pine Haven, WY, Scottsbluff, NE, and Warren AFB, WY

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: This document grants a petition filed by Michael Radio Group, licensee of Station KRKI(FM), Newcastle, Wyoming by substituting Channel 258C0 for Channel 258A at Newcastle and by modifying the license of Station KRKI(FM) accordingly. To accommodate the allotment at Newcastle, this document also substitutes Channel 260A for Channel 259A at Pine Haven, Wyoming. *See* 69 FR 611, published January 6, 2004. Channel 258C0 can be allotted to Newcastle, Wyoming, in compliance with the minimum distance separation requirement of the Commission's rules, provided there is a site restriction 36.5 kilometers (22.7 miles) east of the community. The reference coordinates for Channel 258C0 at Newcastle are 43–52–10 NL and 103–45–04 WL. Channel 260A can be allotted to Pine Haven, in compliance with the minimum distance separation requirement of the Commission's Rules at city reference coordinates. The reference coordinates for Channel 260A at Pine Haven are 44–21–28 NL and 104–48–36 WL. Additionally, this document grants, in part, a counterproposal filed by Tracy Broadcasting Corporation by