

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR AND WASTE MANAGEMENT

Statutory Authority: 7 Delaware Code, Section 6010, (7 Del.C. §6010)
7 DE Admin. Code 1138

FINAL

Secretary's Order No.: 2007-A-0043

RE: Regarding: Proposed Amendments to Regulation 1138: "Emission Standards for Hazardous Air Pollutants for Source Categories", Section 6.0: Chromium Electroplating and Anodizing Operations

Date of Issuance: October 15, 2007

Effective Date of the Amendment: November 11, 2007

I. Background:

A public hearing was held on Thursday, August 23, 2007, at 6:00 p.m. at the DNREC Richardson & Robbins Building Auditorium to receive comment on proposed amendments to Subpart N of Delaware Regulation 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, *Section 6.0: Chromium Electroplating and Anodizing Operations*. Historically, Delaware adopted by reference the federal Maximum Achievable Control Technology standard (hereinafter referred to as the MACT standard) applicable to chromium electroplating facilities as Subpart N on Delaware's Regulation 38 on September 1, 1999. Delaware later amended Subpart N in October of 2000 when EPA issued a temporary extension to the Title V permitting deadline, and that extension was in effect until December 2005.

Since 2000, EPA has revised the chromium electroplating MACT standard several times. These changes included modifications to the standard's emission limitations, work practices, and other compliance provisions. In 2005, EPA permanently exempted the smaller area sources as we have here in Delaware from the obligation of obtaining a Title V permit. The Department's purpose in amending Subpart N at this time is to update Delaware's requirements, where appropriate, to be consistent with the federal requirements.

No members of the public attended this hearing on August 23, 2007, and no public comment or questions were received by the Department regarding this proposed action. Proper notice of the hearing was provided as required by law.

II. Findings:

The Department has provided a reasoned analysis and a sound conclusion with regard to the response given to each such comment, as reflected in the Hearing Officer's Report of October 12, 2007, which is attached and expressly incorporated into this Order. Moreover, the following findings and conclusions are entered at this time:

1. The Department has jurisdiction under its statutory authority to make a determination in this proceeding;
2. The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations;
3. The Department held a public hearing in a manner required by the law and regulations;
4. The Department considered all timely and relevant public comments in making its determination;
5. The Department has reviewed this proposed amendment in the light of the Regulatory Flexibility Act, and believes the same to be lawful, feasible and desirable, and that the recommendations as proposed should be applicable to all Delaware citizens equally;
6. Promulgation of these proposed amendments would update Delaware's requirements, where appropriate, to be consistent with the federal requirements, thus bringing Delaware into compliance with EPA standards;
7. In cases where the updated federal requirements would adversely affect the public health, those

updates were not incorporated into these proposed amendments;

8. The styling and formatting changes to this regulation will make the Department consistent with the Delaware Administrative Code System, as well as provide better clarity and a fuller understanding of the regulatory language contained within this regulation to the general public and the regulated community;

9. The Department has an adequate record for its decision, and no further public hearing is appropriate or necessary;

10. The Department's proposed regulation, as published in the August 1, 2007 *Delaware Register of Regulations* and set forth within Attachment "A" hereto, is adequately supported, not arbitrary or capricious, and is consistent with the applicable laws and regulations. Consequently, it should be approved as a final regulation, which shall go into effect ten days after its publication in the next available issue of the *Delaware Register of Regulations*;

11. The Department shall submit the proposed regulation as a final regulation to the *Delaware Registrar of Regulations* for publication in its next available issue, and shall provide written notice to the persons affected by the Order.

III. Order:

Based on the record developed, as reviewed in the Hearing Officer's Report dated October 12, 2007, and expressly incorporated herein, it is hereby ordered that the proposed amendments to State of Delaware Regulation 1138: Emission Standards for Hazardous Air Pollutants for Source Categories, Section 6.0 - Chromium Electroplating and Anodizing Operations - be promulgated in final form in the customary manner and established rule-making procedure required by law.

IV. Reasons:

The promulgation of the amendments to State of Delaware Regulation 1138, Section 6.0, will bring Delaware into compliance with federal MACT standards and requirements, and update Delaware's requirements, where appropriate, to be consistent with the federal requirements. Additionally, those changes being made concerning styling and formatting of this regulation will make the Department consistent with the Delaware Administrative Code System, as well as provide better clarity and a fuller understanding of the regulatory language contained within this regulation to the general public and the regulated community.

In developing this regulation, the Department has balanced the absolute environmental need for the State of Delaware to promulgate regulations concerning this matter with the important interests and public concerns surrounding the same, in furtherance of the policy and purposes of 7 Del.C., Ch. 60.

John A. Hughes, Secretary

1138 Emission Standards for Hazardous Air Pollutants for Source Categories

(Break in Continuity of Sections)

~~10/11/00~~ [2 11]/11/07

~~Subpart N~~ 6.0 Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

6.1 Applicability and designation of sources.

6.1.1 The affected source to which the provisions of Section 6.0 of this regulation apply is each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing.

6.1.2 Owners or operators of affected sources subject to the provisions of Section 6.0 of this regulation must also comply with the requirements of subpart A of this regulation, according to the applicability of subpart A of this regulation to such sources, as identified in Table 1 of Section 6.0.

6.1.3 Process tanks associated with a chromium electroplating or chromium anodizing process, but in which neither chromium electroplating nor chromium anodizing is taking place, are not subject to the provisions of Section 6.0 of this regulation. Examples of such tanks include, but are not limited to, rinse tanks, etching tanks, and cleaning tanks. Likewise, tanks that contain a chromium solution, but in which no electrolytic

process occurs, are not subject to Section 6.0. An example of such a tank is a chrome conversion coating tank where no electrical current is applied.

6.1.4 Affected sources in which research and laboratory operations are performed are exempt from the provisions of Section 6.0 of this regulation when such operations are taking place.

6.1.5 ~~The Department has determined, pursuant to the criteria under Sec. 3 of Regulation 30 of the State of Delaware "Regulations Governing the Control of Air Pollution", that an owner or operator of the following types of operations that are not by themselves major sources and that are not located at major sources, as defined in Regulation 30, is permanently exempt from title V permitting requirements for that operation:~~

(i) ~~Any decorative chromium electroplating operation or chromium anodizing operation that uses fume suppressants as an emission reduction technology; and~~

(ii) ~~Any decorative chromium electroplating operation that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient.~~

(2) ~~An owner or operator of any other affected source subject to the provisions of this subpart is subject to title V permitting requirements of Regulation 30. These affected sources, if not major or located at major sources as defined in Regulation 30, are deferred by the Department from title V permitting requirements until December 9, 2004. All sources receiving deferrals shall submit title V permit applications by December 9, 2005. All sources receiving deferrals still must meet the compliance schedule as stated in Sec. 63.343. The owner or operator of an area source subject to Section 6.0 of this regulation is exempt from the obligation to obtain a Title V operating permit under Regulation 30 of State of Delaware "Regulations Governing the Control of Air Pollution", if the owner or operator is not required to obtain a Title V operating permit under subsection 3.a. of Regulation 30 for a reason other than the owner or operator's status as an area source under Section 6.0. Notwithstanding the previous sentence, the owner or operator shall continue to comply with the provisions of Section 6.0 applicable to area sources.~~

3 DE Reg. 445 (9/1/99)

4 DE Reg. 707 (10/1/00)

11 DE Reg 683 (11-01-07)

6.2 Definitions and nomenclature.

6.2.1 Definitions.

Terms used in Section 6.0 of this regulation are defined in the Act, in subpart A of this regulation, or in 6.2 of this section. For the purposes of Section 6.0, if the same term is defined in subpart A and in 6.2, it shall have the meaning given in 6.2.

"Add-on air pollution control device" means equipment installed in the ventilation system of chromium electroplating and anodizing tanks for the purposes of collecting and containing chromium emissions from the tank or tanks.

"Air pollution control technique" means any method, such as an add-on air pollution control device or a chemical fume suppressant, used to reduce chromium emissions from chromium electroplating and chromium anodizing tanks.

"Base metal" means the metal or metal alloy that comprises the work piece.

"Bath component" means the trade or brand name of each component in trivalent chromium plating baths. For trivalent chromium baths, the bath composition is proprietary in most cases. Therefore, the trade or brand name for each component can be used; however, the chemical name of the wetting agent contained in that component must be identified.

"Chemical fume suppressant" means any chemical agent that reduces or suppresses fumes or mists at the surface of an electroplating or anodizing bath; another term for fume suppressant is mist suppressant.

"Chromic acid" means the common name for chromium anhydride (CrO₃).

"Chromium anodizing" means the electrolytic process by which an oxide layer is produced on the surface of a base metal for functional purposes (e.g., corrosion resistance or electrical insulation) using a chromic acid solution. In chromium anodizing, the part to be anodized acts as the anode in the electrical circuit, and the chromic acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

"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 or chromium anodizing tank means the receptacle or container in which hard or decorative chromium electroplating or chromium anodizing occurs.~~

"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.

"**Composite mesh-pad system**" means an add-on air pollution control device typically consisting of several mesh-pad stages. The purpose of the first stage is to remove large particles. Smaller particles are removed in the second stage, which consists of the composite mesh pad. A final stage may remove any re-entrained particles not collected by the composite mesh pad.

"**Decorative chromium electroplating**" means the process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part or parts serve as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 Amperes per square meter (amp/m²) for total plating times ranging between 0.5 to 5 minutes.

"**Electroplating or anodizing bath**" means the electrolytic solution used as the conducting medium in which the flow of current is accompanied by movement of metal ions for the purposes of electroplating metal out of the solution onto a work piece or for oxidizing the base material.

"**Emission limitation**" means, for the purposes of Section 6.0 of this regulation, the concentration of total chromium allowed to be emitted expressed in milligrams per dry standard cubic meter (mg/dscm), or the allowable surface tension expressed in dynes per centimeter (dynes/cm).

"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.

"**Facility**" means the major or area source at which chromium electroplating or chromium anodizing is performed.

"**Fiber-bed mist eliminator**" means an add-on air pollution control device that removes contaminants from a gas stream through the mechanisms of inertial impaction and Brownian diffusion. These devices are typically installed downstream of another control device, which serves to prevent plugging, and consist of one or more fiber beds. Each bed consists of a hollow cylinder formed from two concentric screens; the fiber between the screens may be fabricated from glass, ceramic, plastic, or metal.

"**Foam blanket**" means the type of chemical fume suppressant that generates a layer of foam across the surface of a solution when current is applied to that solution.

"**Fresh water**" means water, such as tap water, that has not been previously used in a process operation or, if the water has been recycled from a process operation, it has been treated and meets the effluent guidelines for chromium wastewater.

"**Hard chromium electroplating or industrial chromium electroplating**" means a process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance. In this process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Hard chromium electroplating process is performed at current densities typically ranging from 1,600 to 6,500 amp/m² for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness.

"**Hexavalent chromium**" means the form of chromium in a valence state of +6.

"**Large, hard chromium electroplating facility**" means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity greater than or equal to 60 million ampere-hours per year (amp-hr/yr).

"**Maximum cumulative potential rectifier capacity**" means the summation of the total installed rectifier capacity associated with the hard chromium electroplating tanks at a facility, expressed in amperes, multiplied by the maximum potential operating schedule of 8,400 hours per year and 0.7, which assumes that electrodes are energized 70 percent of the total operating time. The maximum potential operating schedule is based on operating 24 hours per day, 7 days per week, 50 weeks per year.

"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.

"**Operating parameter value**" means a minimum or maximum value established for a control device or

process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator is in continual compliance with the applicable emission limitation or standard.

"Packed-bed scrubber" means an add-on air pollution control device consisting of a single or double packed bed that contains packing media on which the chromic acid droplets impinge. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

"Research or laboratory operation" means an operation whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not involved in the manufacture of products for commercial sale in commerce, except in a de minimus manner.

"Small, hard chromium electroplating facility" means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity less than 60 million amp-hr/yr.

"Stalagmometer" means ~~a device~~ 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.

"Surface tension" means the property, due to molecular forces, that exists in the surface film of all liquids and tends to prevent liquid from spreading.

"Tank operation" means the time in which current or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank.

"Tensiometer" means ~~a device~~ 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.

"Trivalent chromium" means the form of chromium in a valence state of +3.

"Trivalent chromium process" means the process used for electrodeposition of a thin layer of chromium onto a base material using a trivalent chromium solution instead of a chromic acid solution.

"Wetting agent" means the type of chemical fume suppressant that reduces the surface tension of a liquid.

6.2.2 Nomenclature.

The nomenclature used in Section 6.0 of this regulation has the following meaning:

6.2.2.1 AMR = the allowable mass emission rate from each type of affected source subject to the same emission limitation in milligrams per hour (mg/hr).

6.2.2.2 AMR_{sys} = the allowable mass emission rate from affected sources controlled by an add-on air pollution control device controlling emissions from multiple sources in mg/hr.

6.2.2.3 EL = the applicable emission limitation in 6.3 of this section in milligrams per dry standard cubic meter (mg/dscm).

6.2.2.4 IAtotal = the sum of all inlet duct areas from both affected and nonaffected sources in meters squared.

6.2.2.5 IDAi = the total inlet area for all ducts associated with affected sources in meters squared.

6.2.2.6 IDAi,a = the total inlet duct area for all ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation in meters squared.

6.2.2.7 VR = the total of ventilation rates for each type of affected source subject to the same emission limitation in dry standard cubic meters per minute (dscm/min).

6.2.2.8 VRinlet = the total ventilation rate from all inlet ducts associated with affected sources in dscm/min.

6.2.2.9 VRinlet,a = the total ventilation rate from all inlet ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation in dscm/min.

6.2.2.10 VRtot = the average total ventilation rate for the three test runs as determined at the outlet by means of the Method 306 in Appendix A of 40 CFR Part 63 in dscm/min.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.3 Standards.

6.3.1 Each owner or operator of an affected source subject to the provisions of Section 6.0 of this regulation shall comply with these requirements on and after the compliance dates specified in 6.4.1 of this section. All affected sources are regulated by applying maximum achievable control technology.

6.3.2 Applicability of emission limits.

6.3.2.1 The emission limitations in 6.3 of this section apply ~~only~~ during tank operation as defined in 6.2 of this section, and ~~also apply~~ during periods of startup and shutdown as these are routine occurrences for affected sources subject to Section 6.0 of this regulation. The emission limitations do not apply during periods of malfunction, but the ~~work practice standards that address~~ operation and maintenance practices that are required in 6.3.6 of this section must be followed during malfunctions.

6.3.2.2 If an owner or operator is controlling a group of tanks with a common add-on air pollution control device, the emission limitations in 6.3.3 through 6.3.5 of this section apply whenever any one affected source is operated. The emission limitation that applies to the group of affected sources is:

6.3.2.2.1 The emission limitation identified in 6.3.3 through 6.3.5 of this section if the affected sources are performing the same type of operation (e.g., hard chromium electroplating), are subject to the same emission limitation, and are not controlled by an add-on air pollution control device also controlling nonaffected sources;

6.3.2.2.2 The emission limitation calculated according to 6.5.5.3 of this section if affected sources are performing the same type of operation, are subject to the same emission limitation, and are controlled with an add-on air pollution control device that is also controlling nonaffected sources; and

6.3.2.2.3 The emission limitation calculated according to 6.5.5.4 of this section if affected sources are performing different types of operations, or affected sources are performing the same operations but subject to different emission limitations, and are controlled with an add-on air pollution control device that may also be controlling emissions from nonaffected sources.

6.3.3 Standards for hard chromium electroplating tanks.

6.3.3.1 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 ~~not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed~~ either of the following:

6.3.3.1.1 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;

6.3.3.1.2 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

6.3.3.1.3 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 (lbf/ft)) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lbf/ft) as measured by a tensiometer at any time during tank operation.

6.3.3.2 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 of the following:

6.3.3.2.1 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;

6.3.3.2.2 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:

6.3.3.2.3 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} lbf/ft) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lbf/ft) as measured by a tensiometer at any time during tank operation:

6.3.3.2.4 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 6.5.6.1.1 of this section 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

6.3.3.2.5 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 6.5.6.1.2 of this section if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility.

6.3.3.3 Size demonstration of a hard chromium electroplating facility.

6.3.3.3.1 An owner or operator may demonstrate the size of a hard chromium electroplating facility through the definitions in 6.2.1 of this section. 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:

6.3.3.3.1.1 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 6.7.2.12 of this section. 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

6.3.3.3.1.2 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 6.7.2.12 of this section 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.

6.3.3.3.2 Once the monthly records required to be kept in 6.3.3.3.2 and 6.7.2.12 of this section 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 6.3.3.1.1, 6.3.3.1.3, 6.3.3.2.1, 6.3.3.2.3; or 6.3.3.2.4 of this section, in accordance with the compliance schedule in 6.4.1.5 of this section.

6.3.4 Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing 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:

6.3.4.1 Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.01 mg/dscm (4.4×10^{-6} gr/dscf) or

6.3.4.2 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 per centimeter (dynes/cm) (3.1×10^{-3} pound force per foot [lbf/ft]) as measured by a stalagmometer or 35 dynes/cm (2.4×10^{-3} lbf/ft) as measured by a tensiometer at any time during operation of the tank.

6.3.5 Standards for decorative chromium electroplating tanks using a trivalent chromium bath.

6.3.5.1 Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient is subject to the recordkeeping and reporting requirements in 6.7.2.14 and 6.8.9 of this section, but are not subject to the ~~work practice~~ operation and maintenance practice requirements in 6.3.6 of this section, or the continuous compliance monitoring requirements in 6.4.3 of this section. The wetting agent must be an ingredient in the trivalent chromium bath components purchased from vendors.

6.3.5.2 Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that uses a trivalent chromium bath that does not incorporate a wetting agent as a bath ingredient is subject to the standards in 6.3.4 of this section.

6.3.5.3 Each owner or operator of existing, new, or reconstructed decorative chromium electroplating tank that had been using a trivalent chromium bath that incorporates a wetting agent and ceases using this type of bath must fulfill the reporting requirements in 6.8.9.3 of this section and comply with the applicable emission limitation within the timeframe specified in 6.4.1.7 of this section.

6.3.6 ~~Work practice standards~~ Operation and maintenance practices. ~~The work practice standards of this section address operation and maintenance practices.~~ All owners or operators subject to the standards in 6.3.3 and 6.3.4 of this section are subject to these ~~work practice standards~~ operation and maintenance practices.

6.3.6.1 Requirements. The owner or operator of an existing, new, or reconstructed affected source shall:

6.3.6.1.1 At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required in 6.3.6.3 of this section.

6.3.6.1.2 Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required in 6.3.6.3 of this section.

6.3.6.1.3 Operation and maintenance requirements established pursuant to Section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

6.3.6.2 Review and revision of operating and maintenance procedures.

6.3.6.2.1 Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Department, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.

6.3.6.2.2 Based on the results of a determination made under 6.3.6.2.1 of this section, the Department may require that an owner or operator of an affected source make changes to the operation and maintenance plan required in 6.3.6.3 of this section for that source. Revisions may be required if the Department finds that the plan:

6.3.6.2.2.1 Does not address a malfunction that has occurred;

6.3.6.2.2.2 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

6.3.6.2.2.3 Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

6.3.6.3 Operation and maintenance plan.

6.3.6.3.1 The owner or operator of an affected source subject to the ~~work operation and maintenance practices~~ in 6.3.6 of this section shall prepare an operation and maintenance plan to be implemented no later than ~~September 11, 1999~~ the applicable compliance date. The plan shall be incorporated by reference into the source's Title V operating permit, if and when a Title V operating permit is required. The plan shall include the following elements:

6.3.6.3.1.1 The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;

6.3.6.3.1.2 For sources using an add-on air pollution control device or monitoring equipment to comply with Section 6.0 of this regulation, the plan shall incorporate the ~~work practice standards~~ operation and maintenance practices for that device or monitoring equipment, as identified in Table 6.3-1 of this section, if the specific equipment used is identified in Table 6.3-1 of this section;

6.3.6.3.1.3 If the specific equipment used is not identified in Table 6.3-1 of this section, the plan shall incorporate proposed ~~work practice standards~~ operation and maintenance

practices. These proposed ~~work practice standards~~ operation and maintenance practices shall be submitted to the Administrator (with copy to the Department) for approval as part of the submittal required in 6.4.4 of this section;

6.3.6.3.1.4 The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

6.3.6.3.1.5 The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.

6.3.6.3.2 If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

6.3.6.3.3 Recordkeeping associated with the operation and maintenance plan is identified in 6.3.6.3.5 and 6.7.2 of this section. Reporting associated with the operation and maintenance plan is identified in 6.3.6.3.4, 6.8.7, and 6.8.8 of this section.

6.3.6.3.4 If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required in 6.3.6.3.1 of this section, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Department.

6.3.6.3.5 The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Department for the life of the affected source or until the source is no longer subject to the provisions of Section 6.0 of this regulation. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Department for a period of 5 years after each revision to the plan.

6.3.6.3.6 To satisfy the requirements in 6.3.6.3 of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements in 6.3 of this section.

6.3.7 The standards in this section that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent.

Table 6.3-1 to ~~Sec. 63.342~~ --Summary of ~~Work Practice Standards~~ Operation and Maintenance Practices

Control technique	Work practice standards <u>Operation and maintenance practices</u>	Frequency
Composite mesh-pad (CMP) system.	1. Visually inspect device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device. 2. Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist. 3. Visually inspect ductwork from tank to the control device to ensure there are no leaks. 4. Perform washdown of the composite mesh-pads in accordance with manufacturer's recommendations.	1. 1/quarter. 2. 1/quarter. 3. 1/quarter. 4. Per manufacturer.

Table 6.3-1 to ~~Sec. 63.342.~~ --Summary of ~~Work Practice Standards~~ Operation and Maintenance Practices

Packed-bed scrubber (PBS)	1. Visually inspect device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device. 2. Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist. 3. Same as number 3 above. 4. Add fresh makeup water to the top of the packed bed a, b.	1. 1/quarter. 2. 1/quarter. 3. 1/quarter. 4. Whenever makeup is added.
PBS/CMP system.	1. Same as for CMP system. 2. Same as for CMP system. 3. Same as for CMP system. 4. Same as for CMP system.	1. 1/quarter. 2. 1/quarter. 3. 1/quarter. 4. Per manufacturer.
Fiber-bed mist eliminator ^c .	1. Visually inspect fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices. 2. Visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks. 3. Perform washdown of fiber elements in accordance with manufacturer's recommendations.	1. 1/quarter. 2. 1/quarter. 3. Per manufacturer.
Air pollution control device (APCD) not listed in rule.	To be proposed by the source for approval by the Administrator.	To be proposed by the source for approval by the Administrator.
Monitoring Equipment		
Pitot tube.	Backflush with water, or remove from the duct and rinse with fresh water. Replace in the duct and rotate 180 degrees to ensure that the same zero reading is obtained. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued.	1/quarter.
Stalagmometer.	Follow manufacturer's recommendations.	

^a If greater than 50 percent of the scrubber water is drained (e.g., for maintenance purposes), makeup water may be added to the scrubber basin.

^b For horizontal-flow scrubbers, top is defined as the section of the unit directly above the packing media such that the makeup water would flow perpendicular to the air flow through the packing. For vertical-flow units, the top is defined as the area downstream of the packing material such that the makeup water would flow countercurrent to the air flow through the unit.

^c ~~Work practice standards~~ Operating and maintenance practices for the control device installed upstream of the fiber-bed mist eliminator to prevent plugging do not apply as long as the ~~work practice standards~~ operating and maintenance practices for the fiber-bed unit are followed.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.4 Compliance provisions.

6.4.1 Compliance dates.

6.4.1.1 The owner or operator of an existing affected source shall comply by September 11, 1999 with the emission limitations in 6.3 of this section.

6.4.1.1.1 [Reserved]

6.4.1.1.2 [Reserved]

6.4.1.2 The owner or operator of a new or reconstructed affected source that has an initial startup after January 25, 1995, shall comply by September 11, 1999 or immediately upon startup of the source, whichever is later. The owner or operator of a new or reconstructed affected source that has an initial startup after December 16, 1993 but before January 25, 1995, shall comply by September 11, 1999.

6.4.1.3 The owner or operator of an existing area source that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source must comply with the provisions for existing major sources, including the reporting provisions in 6.8.7 of this section, immediately upon becoming a major source.

6.4.1.4 The owner or operator of a new area source (i.e., an area source for which construction or reconstruction was commenced after December 16, 1993) that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source must comply with the provisions for new major sources, immediately upon becoming a major source.

6.4.1.5 An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements in 6.3.3.1.1 of this section for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by 6.3.3.2 and 6.7.2.12 of this section show that the large designation is met.

6.4.1.6 Request for an extension of compliance. An owner or operator of an affected source or sources that requests an extension of compliance shall do so in accordance with 6.4.1.6 of this section and the applicable paragraphs of Sec. 63.6(i) of subpart A of this regulation. When the owner or operator is requesting the extension for more than one affected source located at the facility, then only one request may be submitted for all affected sources at the facility.

6.4.1.6.1 [Reserved]

6.4.1.6.2 [Reserved]

6.4.1.7 An owner or operator of a decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent, and that ceases using the trivalent chromium process, must comply with the emission limitation now applicable to the tank within 1 year of switching bath operation.

6.4.2 Methods to demonstrate initial compliance.

6.4.2.1 Except as provided in 6.4.2.2 and 6.4.2.3 of this section, an owner or operator of an affected source subject to the requirements of Section 6.0 of this regulation is required to conduct an initial performance test as required under Sec. 63.7 of subpart A of this regulation using the procedures and test methods listed in Sec. 63.7 of subpart A and 6.5 of this section.

6.4.2.2 If the owner or operator of an affected source meets all of the following criteria, an initial performance test is not required to be conducted under Section 6.0 of this regulation:

6.4.2.2.1 The affected source is a hard chromium electroplating tank, a decorative chromium electroplating tank or a chromium anodizing tank;

6.4.2.2.2 A wetting agent is used in the plating or anodizing bath to inhibit chromium emissions from the affected source; and

6.4.2.2.3 The owner or operator complies with the applicable surface tension limit in 6.3.3.1.3, 6.3.3.2.3, or 6.3.4.2 of this section as demonstrated through the continuous compliance monitoring required in 6.4.3.5.2 of this section.

6.4.2.3 If the affected source is a decorative chromium electroplating tank using a trivalent chromium bath, and the owner or operator is subject to the provisions of 6.3.5 of this section, an initial performance test is not required to be conducted under Section 6.0 of this regulation.

6.4.3 Monitoring to demonstrate continuous compliance. The owner or operator of an affected source subject to the emission limitations of Section 6.0 of this regulation shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

6.4.3.1 Composite mesh-pad systems.

6.4.3.1.1 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 6.3 of this section through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in 6.5.3 of this section, 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 6.5.4.5 of this section. 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 ± 1 inch of water column from this value as the compliant range.

6.4.3.1.2 On and after the date on which the initial performance test is required to be completed under Sec. 63.7 of subpart A of this regulation, 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 ± 1 inch 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.

6.4.3.1.3 The owner or operator of an affected source complying with the emission limitations in 6.4 of this section 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 6.4.3.1.1 or 6.4.3.1.2 of this section. To establish a new site-specific operating parameter for pressure drop, the owner or operator shall satisfy the requirements specified in 6.4.3.1.3.1 through 6.4.3.1.3.4 of this section.

6.4.3.1.3.1 Determine the outlet chromium concentration using the test methods and procedures in 6.5.3 of this section;

6.4.3.1.3.2 Establish the site-specific operating parameter value using the procedures in 6.5.4.5 of this section;

6.4.3.1.3.3 Satisfy the recordkeeping requirements in 6.7.2.6 through 6.7.2.8 of this section; and

6.4.3.1.3.4 Satisfy the reporting requirements in 6.8.4 and 6.8.6 of this section.

6.4.3.1.4 The requirement to operate a composite mesh-pad system within the range of pressure drop values established in 6.4.3.1.1 through 6.4.3.1.3 of this section does not apply during automatic washdown cycles of the composite mesh-pad system.

6.4.3.2 Packed-bed scrubber systems.

6.4.3.2.1 During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in 6.3 of this section through the use of a packed-bed scrubber system shall determine the outlet chromium concentration using the procedures in 6.5.3 of this section, and shall establish as site-specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in 6.5.4.4 and 6.5.4.5 of this section. An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the owner or operator may set as the compliant value the average pressure drop and inlet velocity pressure measured over the three test runs of one performance test, and accept ± 1 inch of water column from the pressure drop value and ± 10 percent from the velocity pressure value as the compliant range.

6.4.3.2.2 On and after the date on which the initial performance test is required to be completed under Sec. 63.7 of subpart A of this regulation, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the velocity pressure at the inlet to the packed-bed system and the pressure drop across the scrubber system once each day that any affected source is operating. To be in compliance with the standards, the scrubber system shall be operated within ± 10 percent of the velocity pressure value established during the initial performance test, and within ± 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests.

6.4.3.3 Packed-bed scrubber/composite mesh-pad system. The owner or operator of an affected source, or group of affected sources under common control, that uses a packed-bed scrubber in

conjunction with a composite mesh-pad system to meet the emission limitations in 6.3 of this section shall comply with the monitoring requirements for composite mesh-pad systems as identified in 6.4.3.1 of this section.

6.4.3.4 Fiber-bed mist eliminator.

6.4.3.4.1 During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in 6.3 of this section through the use of a fiber-bed mist eliminator shall determine the outlet chromium concentration using the procedures in 6.5.3 of this section, and shall establish as a site-specific operating parameter the pressure drop across the fiber-bed mist eliminator and the pressure drop across the control device installed upstream of the fiber bed to prevent plugging, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in 6.5.4.5 of this section. 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 ± 1 inch of water column from this value as the compliant range.

6.4.3.4.2 On and after the date on which the initial performance test is required to be completed under Sec. 63.7 of subpart A of this regulation, 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 fiber-bed mist eliminator, and the control device installed upstream of the fiber bed to prevent plugging, once each day that any affected source is operating. To be in compliance with the standards, the fiber-bed mist eliminator and the upstream control device shall be operated within ± 1 inch 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.

6.4.3.5 Wetting agent-type or combination wetting agent-type/foam blanket fume suppressants.

6.4.3.5.1 During the initial performance test, the owner or operator of an affected source complying with the emission limitations in 6.3 of this section through the use of a wetting agent in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in 6.5.3 of this section. The owner or operator shall establish as the site-specific operating parameter the surface tension of the bath using Method 306B in Appendix A of 40 CFR Part 63, 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 in 6.4.2.2 of this section are met.

6.4.3.5.2 On and after the date on which the initial performance test is required to be completed under Sec. 63.7 of subpart A of this regulation, 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 6.4.3.5.1 of this section, shall constitute noncompliance with the standards. The surface tension shall be monitored according to the following schedule:

6.4.3.5.2.1 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 in Appendix A of 40 CFR Part 63.

6.4.3.5.2.2 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 Section 6.0 of this regulation is once every 40 hours of tank operation.

6.4.3.5.2.3 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 6.4.3.5.2.2 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.

6.4.3.5.3 Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures in 6.4.3.5.2.2 and 6.4.3.5.2.3 of this section.

6.4.3.6 Foam blanket-type fume suppressants.

6.4.3.6.1 During the initial performance test, the owner or operator of an affected source complying with the emission limitations in 6.3 of this section through the use of a foam blanket in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in 6.5.3 of this section, and shall establish as the site-specific operating parameter the thickness of the foam blanket, setting the minimum thickness that corresponds to compliance with the applicable emission limitation. In lieu of establishing the minimum foam blanket thickness during the performance test, the owner or operator may accept 2.54 centimeters (1 inch) as the minimum foam blanket thickness that corresponds to compliance with the applicable emission limitation. All foam blanket measurements must be taken in close proximity to the work piece or cathode area in the plating tank or tanks.

6.4.3.6.2 On and after the date on which the initial performance test is required to be completed under Sec. 63.7 of subpart A of this regulation, the owner or operator of an affected source shall monitor the foam blanket thickness of the electroplating or anodizing bath. Operation of the affected source at a foam blanket thickness less than the value established during the performance test, or less than 2.54 cm (1 inch) if the owner or operator is using this value in accordance with 6.4.3.6.1 of this section, shall constitute noncompliance with the standards. The foam blanket thickness shall be measured according to the following schedule:

6.4.3.6.2.1 The foam blanket thickness shall be measured once every **[4]** hour of tank operation.

6.4.3.6.2.2 The time between monitoring can be increased if there have been no exceedances. The foam blanket thickness shall be measured once every hour of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances for 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 4 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 8 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by Section 6.0 of this regulation is once per 8 hours of tank operation.

6.4.3.6.2.3 Once an exceedance occurs as indicated through foam blanket thickness monitoring, the original monitoring schedule of once every hour must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in 6.4.3.6.2.2 of this section. For example, if an owner or operator had been monitoring an affected source once every 8 hours and an exceedance occurs, subsequent monitoring would take place once every hour of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 8 hours of tank operation.

6.4.3.6.3 Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every hour must be resumed, with a decrease in monitoring frequency allowed following the procedures in 6.4.3.6.2.2 and 6.4.3.6.2.3 of this section.

6.4.3.7 Fume suppressant/add-on control device.

6.4.3.7.1 If the owner or operator of an affected source uses both a fume suppressant and add-on control device and both are needed to comply with the applicable emission limit, monitoring requirements as identified 6.4.3.1 through 6.4.3.6 of this section, and the ~~work practice standards~~ operation and maintenance practices of Table 6.3-1 in 6.3 of this section, apply for each of the control techniques used.

6.4.3.7.2 If the owner or operator of an affected source uses both a fume suppressant and add-on control device, but only one of these techniques is needed to comply with the applicable emission limit, monitoring requirements as identified in 6.4.3.1 through 6.4.3.6 of this section, and ~~work practice standards~~ the operation and maintenance practices of Table 6.3-1 in 6.3 of this section, apply only for the control technique used to achieve compliance.

6.4.3.8 Use of an alternative monitoring method.

6.4.3.8.1 Requests and approvals of alternative monitoring methods shall be considered in accordance with Sec. 63.8(f)(1), (f)(3), (f)(4), and (f)(5) of subpart A of this regulation.

6.4.3.8.2 After receipt and consideration of an application for an alternative monitoring method, the Administrator may approve alternatives to any monitoring methods or procedures of this section including, but not limited to, the following:

6.4.3.8.2.1 Alternative monitoring requirements when installation or use of monitoring devices specified in Section 6.0 of this regulation would not provide accurate measurements due to interferences caused by substances within the effluent gases or

6.4.3.8.2.2 Alternative locations for installing monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

6.4.4 An owner or operator who uses an air pollution control device not listed in this section shall submit to the Administrator (with copy to the Department) a description of the device, test results collected in accordance with 6.5.3 of this section verifying the performance of the device for reducing chromium emissions to the atmosphere to the level required by Section 6.0 of this regulation, a copy of the operation and maintenance plan referenced in 6.3.6 of this section including ~~proposed work practice standards~~ operation and maintenance practices, and appropriate operating parameters that will be monitored to establish continuous compliance with the standards. The monitoring plan submitted identifying the continuous compliance monitoring is subject to the Administrator's approval.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.5 Performance test requirements and test methods.

6.5.1 Performance test requirements. Performance tests shall be conducted using the test methods and procedures in 6.5 of this section and Sec. 63.7 of subpart A of this regulation. Performance test results shall be documented in complete test reports that contain the information required in 6.5.1.1 through 6.5.1.9 of this section. The test plan to be followed shall be made available to the Department prior to the testing, if requested.

6.5.1.1 A brief process description;

6.5.1.2 Sampling location description or descriptions;

6.5.1.3 A description of sampling and analytical procedures and any modifications to standard procedures;

6.5.1.4 Test results;

6.5.1.5 Quality assurance procedures and results;

6.5.1.6 Records of operating conditions during the test, preparation of standards, and calibration procedures;

6.5.1.7 Raw data sheets for field sampling and field and laboratory analyses;

6.5.1.8 Documentation of calculations; and

6.5.1.9 Any other information required by the test method.

6.5.2 Other performance testing options and limitations.

6.5.2.1 If the owner or operator of an affected source conducts performance testing at startup to obtain an operating permit ~~in the State in which the affected source is located~~, the results of such testing may be used to demonstrate compliance with Section 6.0 of this regulation if:

6.5.2.1.1 The test methods and procedures identified in 6.5.3 of this section were used during the performance test;

6.5.2.1.2 The performance test was conducted under representative operating conditions for the source;

6.5.2.1.3 The performance test report contains the elements required in 6.5.1 of this section; and

6.5.2.1.4 The owner or operator of the affected source for which the performance test was conducted has sufficient data to establish the operating parameter value or values that correspond to compliance with the standards, as required for continuous compliance monitoring in 6.4.3 of this section.

6.5.2.2 The results of tests conducted prior to December 1991 in which Method 306A in Appendix A of 40 CFR Part 63, was used to demonstrate the performance of a control technique are not acceptable.

6.5.3 Test methods. Each owner or operator subject to the provisions of Section 6.0 of this regulation and required in 6.4.2 of this section to conduct an initial performance test shall use the test methods identified in this section to demonstrate compliance with the standards in 6.3 of this section.

6.5.3.1 Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations," in Appendix A of 40 CFR Part 63 shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A in Appendix of 40 CFR Part 63 shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A in Appendix A of 40 CFR Part 63 allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of Section 6.0 of this regulation, sources using chromic acid baths can demonstrate compliance with the emission limits of 6.3 of this section by measuring either total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

6.5.3.2 The California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, 1102 Q Street, Sacramento, California 95814) may be used to determine the chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:

6.5.3.2.1 If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33 to 66 micrograms of catch in the sampling train.

6.5.3.2.2 If Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-column Reactor (ICPCR) analyses were used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).

6.5.3.2.3 In the case of either 6.5.3.2.1 or 6.5.3.2.2 of this section, a minimum of 3 separate runs must be conducted. The other requirements of Sec. 63.7 of subpart A of this regulation that apply to affected sources, as indicated in Table 1 of Section 6.0 of this regulation, must also be met.

6.5.3.3 Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities" in Appendix A of 40 CFR Part 63 shall be used to measure the surface tension of electroplating and anodizing baths.

6.5.3.4 Alternate test methods may also be used if the method has been validated using Method 301 in Appendix A of 40 CFR Part 63 and if approved by the Administrator. Procedures for requesting and obtaining approval are contained in Sec. 63.7(f) of subpart A of this regulation.

6.5.4 Establishing site-specific operating parameter values.

6.5.4.1 Each owner or operator required to establish site-specific operating parameters shall follow the procedures in 6.5 of this section.

6.5.4.2 All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

6.5.4.2.1 Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with Section 2.2 of Method 2 in Appendix A of 40 CFR Part 60.

6.5.4.2.2 Specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with manufacturer's accuracy specifications.

6.5.4.3 The surface tension of electroplating and anodizing baths shall be measured using Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks used at Decorative Chromium Electroplating and Anodizing Facilities" in Appendix A of 40 CFR Part 63. This method should also be followed when wetting agent type or combination wetting agent/foam blanket type fume suppressants are used to control chromium emissions from a hard chromium electroplating tank and surface tension measurement is conducted to

demonstrate continuous compliance.

6.5.4.4 The owner or operator of a source required to measure the velocity pressure at the inlet to an add-on air pollution control device in accordance with 6.4.3.2 of this section, shall establish the site-specific velocity pressure as follows:

6.5.4.4.1 Locate a velocity traverse port in a section of straight duct that connects the hooding on the plating tank or tanks with the control device. The port shall be located as close to the control system as possible, and shall be placed a minimum of 2 duct diameters downstream and 0.5 duct diameter upstream of any flow disturbance such as a bend, expansion, or contraction (see Method 1 in Appendix A of 40 CFR Part 60). If 2.5 diameters of straight duct work do not exist, locate the port 0.8 of the duct diameter downstream and 0.2 of the duct diameter upstream from any flow disturbance.

6.5.4.4.2 A 12-point velocity traverse of the duct to the control device shall be conducted along a single axis according to Method 2 in Appendix A of 40 CFR Part 60 using an S-type pitot tube; measurement of the barometric pressure and duct temperature at each traverse point is not required, but is suggested. Mark the S-type pitot tube as specified in Method 1 in Appendix A of 40 CFR Part 60 with 12 points. Measure the velocity pressure ($^a p$) values for the velocity points and record. Determine the square root of the individual velocity point $^a p$ values and average. The point with the square root value that comes closest to the average square root value is the point of average velocity. The $^a p$ value measured for this point during the performance test will be used as the reference for future monitoring.

6.5.4.5 The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with 6.4.3.1 through 6.4.3.4 of this section may establish the pressure drop in accordance with the following guidelines:

6.5.4.5.1 Pressure taps shall be installed at any of the following locations:

6.5.4.5.1.1 At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;

6.5.4.5.1.2 On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or

6.5.4.5.1.3 On the front side of the first mesh pad and back side of the last mesh pad within the control system.

6.5.4.5.2 Pressure taps shall be sited at locations that are:

6.5.4.5.2.1 Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.

6.5.4.5.2.2 Situated such that no air infiltration at measurement site will occur that could bias the measurement.

6.5.4.5.3 Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.

6.5.4.5.4 Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.

6.5.4.5.5 Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.

6.5.4.5.6 Prior to connecting any pressure lines to the pressure gauge or gauges, each gauge should be zeroed. No calibration of the pressure gauges is required.

6.5.5 Special compliance provisions for multiple sources controlled by a common add-on air pollution control device.

6.5.5.1 This section identifies procedures for measuring the outlet chromium concentration from an add-on air pollution control device that is used to control multiple sources that may or may not include sources not affected by Section 6.0 of this regulation.

6.5.5.2 When multiple affected sources performing the same type of operation (e.g., all are performing hard chromium electroplating) and subject to the same emission limitation are controlled with an add-on air pollution control device that is not controlling emissions from any other type of affected operation or from any nonaffected sources, the applicable emission limitation identified in 6.3 of this section must be met at the outlet of the add-on air pollution control device.

6.5.5.3 When multiple affected sources performing the same type of operation and subject to the same emission limitation are controlled with a common add-on air pollution control device that is also

controlling emissions from sources not affected by these standards, the following procedures should be followed to determine compliance with the applicable emission limitation in 6.3 of this section:

6.5.5.3.1 Calculate the cross-sectional area of each inlet duct (i.e., uptakes from each hood) including those not affected by the standard.

6.5.5.3.2 Determine the total sample time per test run by dividing the total inlet area from all tanks connected to the control system by the total inlet area for all ducts associated with affected sources, and then multiply this number by 2 hours. The calculated time is the minimum sample time required per test run.

6.5.5.3.3 Perform Method 306 testing and calculate an outlet mass emission rate.

6.5.5.3.4 Determine the total ventilation rate from the affected sources (VR_{inlet}) by using equation 1:

$$VR_{inlet} = VR_{tot} * IDA_i / IA_{total} \quad (1)$$

where:

- VR_{inlet} = the total ventilation rate from all inlet ducts associated with affected sources;
- VR_{tot} = the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing;
- IDA_i = the total inlet area for all ducts associated with affected sources; and
- IA_{total} = the sum of all inlet duct areas from both affected and nonaffected sources.

6.5.5.3.5 Establish the allowable mass emission rate of the system (AMR_{sys}) in milligrams of total chromium per hour (mg/hr) using equation 2:

$$AMR_{sys} = VR_{inlet} * EL * 60 \text{ minutes/hour} \quad (2)$$

where:

- AMR_{sys} = the allowable mass emission rate of the system in mg/hr;
- VR_{inlet} = the average total ventilation rate in dscm/min for the three test runs from the affected sources; and
- EL = the applicable emission limitation in 6.3 of this section in mg/dscm.

The allowable mass emission rate (AMR_{sys}) calculated from equation 2 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 testing in order for the source to be in compliance with the standard.

6.5.5.4 When multiple affected sources performing different types of operations (e.g., hard chromium electroplating, decorative chromium electroplating, or chromium anodizing) are controlled by a common add-on air pollution control device that may or may not also be controlling emissions from sources not affected by these standards, or if the affected sources controlled by the common add-on air pollution control device perform the same operation but are subject to different emission limitations (e.g., because one is a new hard chromium plating tank and one is an existing small, hard chromium plating tank), the following procedures should be followed to determine compliance with the applicable emission limitation in 6.3 of this section:

6.5.5.4.1 Follow the steps outlined in 6.5.5.3.1 through 6.5.5.3.3 of this section.

6.5.5.4.2 Determine the total ventilation rate for each type of affected source ($VR_{inlet,a}$) using equation 3:

$$VR_{inlet,a} = VR_{tot} * IDA_{i,a} / IA_{total} \quad (3)$$

where:

- $VR_{inlet,a}$ = the total ventilation rate from all inlet

ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation;

VR_{tot} = the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing;

$IDA_{i,a}$ = the total inlet duct area for all ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation; and

IA_{total} = the sum of all duct areas from both affected and nonaffected sources.

6.5.5.4.3 Establish the allowable mass emission rate in mg/hr for each type of affected source (AMR) that is controlled by the add-on air pollution control device using equation 4, 5, 6, or 7 as appropriate:

AMR_{hc1} = $VR_{hc1} * EL_{hc1} * 60$ minutes/hour (4)

AMR_{hc2} = $VR_{hc2} * EL_{hc2} * 60$ minutes/hour (5)

AMR_{dc} = $VR_{dc} * EL_{dc} * 60$ minutes/hour (6)

AMR_{ca} = $VR_{ca} * EL_{ca} * 60$ minutes/hour (7)

where:

AMR ≡ the allowable mass emission rate in mg/hr for each type of affected source;

VR ≡ the total ventilation rate from all inlet ducts conveying chromic acid;

EL = the applicable emission limitation in 6.3 of this section in mg/dscm. There are two equations for hard chromium electroplating tanks because different emission limitations may apply (e.g., a new tank versus an existing, small tank); and

"hc" applies to the total of ventilation rates for all hard chromium electroplating tanks subject to the same emission limitation;

"dc" applies to the total of ventilation rates for the decorative chromium electroplating tanks; and

"ca" applies to the total of ventilation rates for the chromium anodizing tanks.

6.5.5.4.4 Establish the allowable mass emission rate (AMR_{sys}) in mg/hr for the system using equation 8, including each type of affected source as appropriate:

AMR_{sys} = $AMR_{hc1} + AMR_{hc2} + AMR_{dc} + AMR_{ca}$ (8)

The allowable mass emission rate calculated from equation 8 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 testing in order for the source to be in compliance with the standards.

6.5.5.5 Each owner or operator that uses the special compliance provisions in 6.5.5 of this section to demonstrate compliance with the emission limitations in 6.3 of this section shall submit the measurements and calculations to support these compliance methods with the notification of compliance status

required in 6.8.5 of this section.

6.5.5.6 Each owner or operator that uses the special compliance provisions in 6.5 of this section to demonstrate compliance with the emission limitations in 6.3 of this section shall repeat these procedures if a tank is added or removed from the control system regardless of whether that tank is a nonaffected source. If the new nonaffected tank replaces an existing nonaffected tank of the same size and is connected to the control system through the same size inlet duct then this procedure does not have to be repeated.

6.5.6 Compliance provisions for the mass rate emission standard for enclosed hard chromium electroplating tanks.

6.5.6.1 Procedures for calculating the maximum allowable mass emission rate for owners or operators who choose to meet the mass emission rate standard in 6.3.3.2.4 of this section.

6.5.6.1.1 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 6.3.3.2.4 of this section 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 (MAMER) calculated using equation 9:

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

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 (ft²); and

K = the conversion factor, 425 dscm/(ft²-hr).

6.5.6.1.2 Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from testing using Method 306 in Appendix A of 40 CFR Part 63 is less than or equal to the maximum allowable mass emission rate (MAMER) calculated from equation 9.

6.5.6.2 Procedures for calculating the maximum allowable mass emission rate for owners or operators of small hard chromium electroplating tanks who choose to meet the mass emission rate standard in 6.3.3.2.5 of this section.

6.5.6.2.1 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 6.3.3.2.5 of this section 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 (MAMER) calculated using equation 10:

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

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 (ft²); and

K = the conversion factor, 425 dscm/(ft²-hr).

6.5.6.2.2 Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from testing using Method 306 in Appendix A of 40 CFR Part 63 is less than or equal to the maximum allowable mass emission rate (MAMER) calculated from equation 10.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.6 Provisions for new and reconstructed sources.

6.6.1 ~~This section identifies~~ The preconstruction review requirements for new and reconstructed affected sources that are subject to, or become subject to, Section 6.0 of this regulation are identified in 6.6 of this section.

6.6.2 New or reconstructed affected sources. The owner or operator of a new or reconstructed

affected source is subject to applicable requirements of Sec. 63.5 of subpart A of this regulation, as noted in Table 1 of Section 6.0 of this regulation, as well as the provisions of 6.6.2 of this section.

6.6.2.1 After September 11, 1999, no person may construct a new affected source or reconstruct an affected source subject to Section 6.0 of this regulation, or reconstruct a source such that it becomes an affected source subject to Section 6.0, without submitting a notification of construction or reconstruction to the Department. The notification shall contain the information identified in 6.6.2.2 and 6.6.2.3 of this section, as appropriate.

6.6.2.2 The notification of construction or reconstruction required in 6.6.2.1 of this section shall include:

- 6.6.2.2.1 The owner or operator's name, title, and address;
- 6.6.2.2.2 The address (i.e., physical location) or proposed address of the affected source if different from the owner or operator's address;
- 6.6.2.2.3 A notification of intention to construct a new affected source or make any physical or operational changes to an affected source that may meet or has been determined to meet the criteria for a reconstruction as defined in Sec. 63.2 of subpart A of this regulation;
- 6.6.2.2.4 An identification of Section 6.0 of this regulation as the basis for the notification;
- 6.6.2.2.5 The expected commencement and completion dates of the construction or reconstruction;
- 6.6.2.2.6 The anticipated date of (initial) startup of the affected source;
- 6.6.2.2.7 The type of process operation to be performed (hard or decorative chromium electroplating or chromium anodizing);
- 6.6.2.2.8 A description of the air pollution control technique to be used to control emissions from the affected source, such as preliminary design drawings and design capacity if an add-on air pollution control device is used; and
- 6.6.2.2.9 An estimate of emissions from the source based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emission limits of Section 6.0 of this regulation. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.

6.6.2.3 If a reconstruction is to occur, the notification required in 6.6.2.1 of this section shall include the following in addition to the information required in 6.6.2.2 of this section:

- 6.6.2.3.1 A brief description of the affected source and the components to be replaced;
- 6.6.2.3.2 A brief description of the present and proposed emission control technique, including the information required in 6.6.2.2.8 and 6.6.2.2.9 of this section;
- 6.6.2.3.3 An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;
- 6.6.2.3.4 The estimated life of the affected source after the replacements; and
- 6.6.2.3.5 A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Department's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.
- 6.6.2.3.6 If in the notification of reconstruction, the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or requirements, the owner or operator need not submit the information required in 6.6.2.3.3 through 6.6.2.3.5 of this section.

6.6.2.4 Departmental approvals.

6.6.2.4.1 The owner or operator of a new or reconstructed affected area source that submits a notification in accordance with 6.6.2.1 through 6.6.2.3 of this section is not subject to approval by the Department. Construction or reconstruction is subject only to notification and can begin upon submission of a complete notification.

6.6.2.4.2 The owner or operator of a new or reconstructed affected major source that submits a notification in accordance with 6.6.2.1 through 6.6.2.3 of this section and an application for

approval of construction or reconstruction in accordance with requirements of Sec. 63.5 of subpart A of this regulation is subject to approval by the Department. Construction or reconstruction can not commence prior to receipt of the Department's approval of the application for approval of construction or reconstruction or approval of the Regulation 1102 permit to construct application.

6.6.2.4.3 Additionally, the owner or operator of a new or reconstructed affected source may be required to obtain an approved construction permit under Regulation 1102 of the State of Delaware "Regulations Governing the Control of Air Pollution", before commencing construction or reconstruction.

6.6.2.5 Submittal timeframes. After September 11, 1999, an owner or operator of a new or reconstructed affected source shall submit the notification of construction or reconstruction required in 6.6.2.1 of this section or the application for approval of construction or reconstruction required by Sec. 63.5 of subpart A of this regulation according to the following schedule:

6.6.2.5.1 If construction or reconstruction commences after September 11, 1999, the notification or application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence.

6.6.2.5.2 If the construction or reconstruction had commenced and initial startup had not occurred before September 11, 1999, the notification or application shall be submitted as soon as practicable after September 11, 1999.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.7 Recordkeeping requirements.

6.7.1 The owner or operator of each affected source subject to these standards shall fulfill all recordkeeping requirements outlined in 6.7 of this section and in subpart A of this regulation as identified in Table 1 of Section 6.0 of this regulation.

6.7.2 The owner or operator of an affected source subject to the provisions of Section 6.0 of this regulation shall maintain the following records for such source:

6.7.2.1 Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the ~~work practice standards~~ operation and maintenance practices in 6.3.6 of this section and Table 6.3-1 in 6.3 of this section have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

6.7.2.2 Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;

6.7.2.3 Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;

6.7.2.4 Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;

6.7.2.5 Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required in 6.3.6.3 of this section;

6.7.2.6 Test reports documenting results of all performance tests;

6.7.2.7 All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures in 6.5.5 of this section;

6.7.2.8 Records of monitoring data required in 6.4.3 of this section that are used to demonstrate compliance with the standard including the date and time the data are collected;

6.7.2.9 The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;

6.7.2.10 The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;

6.7.2.11 The total process operating time of the affected source during the reporting period;

6.7.2.12 Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the owner or operator is using the actual cumulative rectifier capacity to determine facility size in accordance with 6.3.3.2 of this section;

6.7.2.13 For sources using fume suppressants to comply with the standards, records of the date and time that fume suppressants are added to the electroplating or anodizing bath;

6.7.2.14 For sources complying with 6.3.5 of this section, records of the bath components purchased, with the wetting agent clearly identified as a bath constituent contained in one of the components;

6.7.2.15 Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements, if the source has been granted a waiver under Sec. 63.10(f) of subpart A of this regulation; and

6.7.2.16 All documentation supporting the notifications and reports required by Sec. 63.9 and Sec. 63.10 of subpart A of this regulation and by 6.8 of this section.

6.7.3 All records shall be maintained for a period of 5 years in accordance with Sec. 63.10(b)(1) of subpart A of this regulation.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.8 Reporting requirements.

6.8.1 The owner or operator of each affected source subject to these standards shall fulfill all reporting requirements outlined in 6.8 of this section and in subpart A of this regulation as identified in Table 1 of Section 6.0 of this regulation. These reports shall be made to the Administrator and to the Department, in accordance with Sec. 63.10(a)(4) of subpart A.

6.8.1.1 Reports required by subpart A of this regulation and 6.8 of this section may be sent by U.S. mail, fax, or by another courier.

6.8.1.1.1 Submittals sent by U.S. mail shall be postmarked on or before the specified date.

6.8.1.1.2 Submittals sent by other methods shall be received by the Administrator and Department on or before the specified date.

6.8.1.2 If acceptable to both the Department and the owner or operator of an affected source, reports may be submitted on electronic media.

6.8.2 The reporting requirements in 6.8 of this section apply to the owner or operator of an affected source when such source becomes subject to the provisions of Section 6.0 of this regulation.

6.8.3 Initial notifications.

6.8.3.1 The owner or operator of an affected source that has an initial startup before September 11, 1999, shall notify the Department in writing that the source is subject to Section 6.0 of this regulation. The notification shall be submitted no later than September 11, 1999, and shall contain the following information:

6.8.3.1.1 The name, title, and address of the owner or operator;

6.8.3.1.2 The address (i.e., physical location) of each affected source;

6.8.3.1.3 A statement that Section 6.0 of this regulation is the basis for this notification;

6.8.3.1.4 Identification of the applicable emission limitation and compliance date for each affected source;

6.8.3.1.5 A brief description of each affected source, including the type of process operation performed;

6.8.3.1.6 For sources performing hard chromium electroplating, the maximum cumulative potential rectifier capacity;

6.8.3.1.7 For sources performing hard chromium electroplating, a statement of whether the affected source or sources is located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum cumulative potential rectifier capacity;

6.8.3.1.8 For sources performing hard chromium electroplating, a statement of whether the owner or operator of an affected source or sources will limit the maximum cumulative

potential rectifier capacity in accordance with 6.3.3.2 of this section such that the hard chromium electroplating facility is considered small; and

6.8.3.1.9 A statement of whether the affected source is located at a major source or an area source as defined in Sec. 63.2 of subpart A of this regulation.

6.8.3.2 The owner or operator of a new or reconstructed affected source that has an initial startup after January 25, 1995 shall submit an initial notification, in addition to the notification of construction or reconstruction required in 6.6.2 of this section, as follows:

6.8.3.2.1 A notification of the date when construction or reconstruction was commenced, shall be submitted simultaneously with the notification of construction or reconstruction, if construction or reconstruction was commenced before September 11, 1999;

6.8.3.2.2 A notification of the date when construction or reconstruction was commenced, shall be submitted no later than 30 calendar days after such date, if construction or reconstruction was commenced after September 11, 1999; and

6.8.3.2.3 A notification of the actual date of startup of the source shall be submitted by September 11, 1999 or within 30 calendar days after startup, whichever is later.

6.8.4 Notification of performance test.

6.8.4.1 The owner or operator of an affected source shall notify the Department in writing of his or her intention to conduct a performance test at least 60 calendar days before the test is scheduled to begin to allow the Department to have an observer present during the test. Observation of the performance test by the Department is optional.

6.8.4.2 In the event the owner or operator is unable to conduct the performance test as scheduled, the provisions of Sec. 63.7(b)(2) of subpart A of this regulation apply.

6.8.5 Notification of compliance status.

6.8.5.1 A notification of compliance status is required each time that an affected source becomes subject to the requirements of Section 6.0 of this regulation.

6.8.5.2 If the State in which the source is located has not been delegated the authority to implement the rule, each time a notification of compliance status is required under this regulation, the owner or operator of an affected source shall submit to the Administrator (with copy to the Department) a notification of compliance status, signed by the responsible official (as defined in Sec. 63.2 of subpart A of this regulation) who shall certify its accuracy, attesting to whether the affected source has complied with Section 6.0 of this regulation. If the State has been delegated the authority, the notification of compliance status shall be submitted to the Department. The notification shall list for each affected source:

6.8.5.2.1 The applicable emission limitation and the methods that were used to determine compliance with this limitation;

6.8.5.2.2 If a performance test is required by Section 6.0 of this regulation, the test report documenting the results of the performance test, which contains the elements required in 6.5.1 of this section, including measurements and calculations to support the special compliance provisions in 6.5.5 of this section if these are being followed;

6.8.5.2.3 The type and quantity of hazardous air pollutants emitted by the source reported in mg/dscm or mg/hr if the source is using the special provisions in 6.5.5 of this section to comply with the standards. (If the owner or operator is subject to the construction and reconstruction provisions in 6.6 of this section and had previously submitted emission estimates, the owner or operator shall state that this report corrects or verifies the previous estimate.) For sources not required to conduct a performance test in accordance with 6.4.2 of this section, the surface tension measurement may fulfill this requirement;

6.8.5.2.4 For each monitored parameter for which a compliant value is to be established in 6.4.3 of this section, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;

6.8.5.2.5 The methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements, if methods differ from those identified in Section 6.0 of this regulation;

6.8.5.2.6 A description of the air pollution control technique for each emission point;

6.8.5.2.7 A statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the ~~work practice standards~~ operation and maintenance

practices in 6.3.6 of this section;

6.8.5.2.8 If the owner or operator is determining facility size based on actual cumulative rectifier capacity in accordance with 6.3.3.2 of this section, records to support that the facility is small. For existing sources, records from any 12-month period preceding the compliance date shall be used or a description of how operations will change to meet a small designation shall be provided. For new sources, records of projected rectifier capacity for the first 12-month period of tank operation shall be used;

6.8.5.2.9 A statement by the owner or operator of the affected source as to whether the source has complied with the provisions of Section 6.0 of this regulation.

6.8.5.3 For sources required to conduct a performance test in 6.4.2 of this section, the notification of compliance status shall be submitted to the Department no later than 90 calendar days following completion of the compliance demonstration required by Sec. 63.7 of subpart A of this regulation and 6.4.2 of this section.

6.8.5.4 For sources that are not required to complete a performance test in accordance with 6.4.2 of this section, the notification of compliance status shall be submitted to the Department no later than 30 days after the compliance date specified in 6.4.1 of this section.

6.8.6 Reports of performance test results.

6.8.6.1 If the State in which the source is located has not been delegated the authority to implement the rule, the owner or operator of an affected source shall report to the Administrator (with copy to the Department) the results of any performance test conducted as required by Sec. 63.7 of subpart A of this regulation or 6.4.2 of this section. If the State has been delegated the authority, the owner or operator of an affected source should report performance test results to the Department.

6.8.6.2 Reports of performance test results shall be submitted no later than 90 days following the completion of the performance test, and shall be submitted as part of the notification of compliance status required in 6.8.5 of this section.

6.8.7 Ongoing compliance status reports for major sources.

6.8.7.1 The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Department to document the ongoing compliance status of the affected source. The report shall contain the information identified in 6.8.7.3 of this section, and shall be submitted semiannually except when:

6.8.7.1.1 The Department determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or

6.8.7.1.2 The monitoring data collected by the owner or operator of the affected source in accordance with 6.4.3 of this section show that the emission limit has been exceeded, in which case quarterly reports shall be submitted. Once an owner or operator of an affected source reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency under 6.8.7.2 of this section is approved.

6.8.7.2 Request to reduce frequency of ongoing compliance status reports.

6.8.7.2.1 An owner or operator who is required to submit ongoing compliance status reports on a quarterly (or more frequent basis) may reduce the frequency of reporting to semiannual if all of the following conditions are met:

6.8.7.2.1.1 For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;

6.8.7.2.1.2 The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A and Section 6.0 of this regulation; and

6.8.7.2.1.3 The Department does not object to a reduced reporting frequency for the affected source, as provided in 6.8.7.2.2 and 6.8.7.2.3 of this section.

6.8.7.2.2 The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change, and the Department does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Department may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission

limitations and ~~work practice standards~~ operation and maintenance practices. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the owner or operator's request to reduce reporting frequency, the Department will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

6.8.7.2.3 As soon as the monitoring data required in 6.4.3 of this section show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to quarterly, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Department to reduce the reporting frequency as allowed in 6.8.7.2 of this section.

6.8.7.3 Contents of ongoing compliance status reports. The owner or operator of an affected source for which compliance monitoring is required in accordance with 6.4.3 of this section shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the following information:

- 6.8.7.3.1 The company name and address of the affected source;
- 6.8.7.3.2 An identification of the operating parameter that is monitored for compliance determination, as required in 6.4.3 of this section;
- 6.8.7.3.3 The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required in 6.8.5 of this section;
- 6.8.7.3.4 The beginning and ending dates of the reporting period;
- 6.8.7.3.5 A description of the type of process performed in the affected source;
- 6.8.7.3.6 The total operating time of the affected source during the reporting period;
- 6.8.7.3.7 If the affected source is a hard chromium electroplating tank and the owner or operator is limiting the maximum cumulative rectifier capacity in accordance with 6.3.3.2 of this section, the actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis;
- 6.8.7.3.8 A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;
- 6.8.7.3.9 A certification by a responsible official, as defined in Sec. 63.2 of subpart A of this regulation, that the ~~work practice standards~~ operation and maintenance practices in 6.3.6 of this section were followed in accordance with the operation and maintenance plan for the source;
- 6.8.7.3.10 If the operation and maintenance plan required in 6.3.6.3 of this section was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission or parameter monitoring exceedances are believed to have occurred, and a copy of the report or reports required in 6.3.6.3.4 of this section documenting that the operation and maintenance plan was not followed;
- 6.8.7.3.11 A description of any changes in monitoring, processes, or controls since the last reporting period;
- 6.8.7.3.12 The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- 6.8.7.3.13 The date of the report.

6.8.7.4 When more than one monitoring device is used to comply with the continuous compliance monitoring required in 6.4.3 of this section, the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of Section 6.0 of this regulation. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

6.8.8 Ongoing compliance status reports for area sources. The requirements in 6.8.8 of this section do not alleviate affected area sources from complying with the requirements of Regulations 1102 and 30 of the State of Delaware "Regulations Governing the Control of Air Pollution".

6.8.8.1 The owner or operator of an affected source that is located at an area source site shall prepare a summary report to document the ongoing compliance status of the affected source. The report shall contain the information identified in 6.8.7.3 of this section, shall be completed annually and retained on site, and made available to the Department upon request. The report shall be completed annually except as provided in 6.8.8.2 of this section.

6.8.8.2 Reports of exceedances.

6.8.8.2.1 If both of the following conditions are met, semiannual reports shall be prepared and submitted to the Department:

6.8.8.2.1.1 The total duration of excess emissions (as indicated by the monitoring data collected by the owner or operator of the affected source in accordance with 6.4.3 of this section) is 1 percent or greater of the total operating time for the reporting period and

6.8.8.2.1.2 The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.

6.8.8.2.2 Once an owner or operator of an affected source reports an exceedance as defined in 6.8.8.2.1 of this section, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency under 6.8.8.3 of this section is approved.

6.8.8.2.3 The Department may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

6.8.8.3 Request to reduce frequency of ongoing compliance status reports.

6.8.8.3.1 An owner or operator who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual or be allowed to maintain the annual report onsite if all of the following conditions are met:

6.8.8.3.1.1 For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;

6.8.8.3.1.2 The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A and Section 6.0 of this regulation; and

6.8.8.3.1.3 The Department does not object to a reduced reporting frequency for the affected source, as provided in 6.8.8.3.2 and 6.8.8.3.3 of this section.

6.8.8.3.2 The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change, and the Department does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Department may review information concerning the source's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and ~~work practice standards~~ operation and maintenance practices. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the owner or operator's request to reduce reporting frequency, the Department will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

6.8.8.3.3 As soon as the monitoring data required in 6.4.3 of this section show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Department to reduce the reporting frequency as allowed in 6.8.8.3 of this section.

6.8.9 Reports associated with trivalent chromium baths. The requirements in 6.8.9 of this section do not alleviate affected sources from complying with the requirements of Regulations 1102 and 30 of the State of Delaware "Regulations Governing the Control of Air Pollution". Owners or operators complying with the provisions in 6.3.5 of this section are not subject to 6.8.1 through 6.8.8 of this section, but must instead submit the following reports:

6.8.9.1 Not later than September 11, 1999, submit an initial notification that includes:

6.8.9.1.1 The same information as is required in 6.8.3.1.1 through 6.8.3.1.5 of this section;

6.8.9.1.2 A statement that a trivalent chromium process that incorporates a wetting agent will be used to comply with 6.3.5 of this section; and

6.8.9.1.3 The list of bath components that comprise the trivalent chromium bath, with the wetting agent clearly identified.

6.8.9.2 Within 30 days of the compliance date specified in 6.4.1 of this section or by September 11, 1999, whichever is later, a notification of compliance status that contains an update of the information submitted in accordance with 6.8.9.1 of this section or a statement that the information is still accurate.

6.8.9.3 Within 30 days of a change to the trivalent chromium electroplating process, a report that includes:

6.8.9.3.1 A description of the manner in which the process has been changed and the emission limitation, if any, now applicable to the affected source;

6.8.9.3.2 If a different emission limitation applies, the applicable information required in 9.8.3.1 of this section; and

6.8.9.3.3 The notification and reporting requirements in 6.8.4 through 6.8.8 of this section, which shall be submitted in accordance with the schedules identified in those requirements.

3 DE Reg. 445 (9/1/99)

11 DE Reg 683 (11-01-07)

6.9 [Reserved]

11 DE Reg 683 (11-01-07)

Table 1 of Section 6.0 of Regulation 1138 -- Subpart A (~~General Provisions~~) of this Regulation Applicability to Section 6.0

General Provisions Reference	Applies to ReferenceSection 6.0	Comments
63.1(a)(1)	Yes	Additional terms defined in 6.2 of this section; when overlap between subpart A and Section 6.0 occurs, Section 6.0 takes precedence.
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	Section 6.0 clarifies the applicability of each paragraph in subpart A to sources subject to Section 6.0.
<u>63.1(a)(5)</u>	<u>No</u>	
63.1(a)(6)	Yes	
63.1(a)(7)	Yes <u>No</u>	
63.1(a)(8)	Yes <u>No</u>	
63.1(a)(9)	<u>No</u>	
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	6.8.1 also allows report submissions via fax and on electronic media
63.1(a)(12) --(14)	Yes	
63.1(b)(1)	No	6.1 specifies applicability.
63.1(b)(2)	Yes	

63.1(b)(3)	No	This provision in subpart A is being deleted. Also, all affected area and major sources are subject to Section 6.0; there are no exemptions.
63.1(c)(1)	Yes	Section 6.0 clarifies the applicability of each paragraph in subpart A to sources subject to Section 6.0.
63.1(c)(2)	Yes	Subpart N specifies permit requirements for area sources 6.1.5 exempts area sources from the obligation to obtain Title V operating permits.
63.1(c)(3) - (4)	Yes No	
63.1(c)(5)	No	Section 6.0 clarifies that an area source that becomes a major source is subject to the requirements for major sources.
63.1(d)	No	
63.1(e)	Yes	
63.2	Yes	Additional terms defined in 6.2; when overlap between subpart A and Section 6.0 occurs, Section 6.0 takes precedence.
63.3	Yes	Other units used in Section 6.0 are defined in Section 6.0.
63.4(a)(1)-(a)(2)	Yes	
63.4(a)(3)-(a)(5)	No	
63.4(b)-(c)	Yes	
63.5(a)	Yes	Except replace the term "source" and "stationary source" in Sec. 63.5(a)(1) and (2) of subpart A with "affected sources."
63.5(b)(1)	Yes	
63.5(b)(2)	No	
63.5(b)(3)	Yes	Applies only to major affected sources.
63.5(b)(4)	No	6.6 specifies requirements for the notification of construction or reconstruction for affected sources that are not major.
63.5(b)(5)	Yes No	
63.5(b)(6)	Yes	
63.5(c)	No	
63.5(d)(1)(i)	No	6.6.2.5 specifies when the application or notification shall be submitted.
63.5(d)(1)(ii)-(ii)(F)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(d)(1)(ii)(G)	No	
63.5(d)(1)(ii)(H)	Yes	
63.5(d)(1)(ii)(I)	No	
63.5(d)(1)(ii)(J)	Yes	
63.5(d)(1)(iii)	Yes	Except information should be submitted with the notification of compliance status required in 6.8.5.
63.5(d)(2)	Yes	Applies to major affected sources that are new or reconstructed except: (1) replace "source" in Sec. 63.5(d)(2) of subpart A with "affected source"; and (2) actual control efficiencies are submitted with the notification of compliance status required in 6.8.5.
63.5(d)(3)-(4)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(e)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(f)(1)	Yes	Except replace "source" in Sec. 63.5(f)(1) of subpart A with "affected source."
63.5(f)(2)	No	New or reconstructed affected sources shall submit the request for approval of construction or reconstruction under Sec. 63.5(f) of subpart A by the deadline specified in 6.6.2.5.
63.6(a)	Yes	

63.6(b)(1)-(2)	Yes	Except replace "source" in Sec. 63.6(b)(1)-(2) of subpart A with "affected source."
63.6(b)(3)-(4)	Yes	
63.6(b)(5)	Yes	Except replace "source" in Sec. 63.6(b)(5) of subpart A with "affected source."
63.6(b)(6)	No	
63.6(b)(7)	No	Provisions for new area sources that become major sources are contained in 6.4.1.4.
63.6(c)(1)-(2)	Yes	Except replace "source" in Sec. 63.6(c)(1)-(2) of subpart A with "affected source."
63.6(c)(3)-(4)	No	
63.6(c)(5)	No	Compliance provisions for existing area sources that become major sources are contained in 6.4.1.3.
63.6(d)	No	
63.6(e)	No	6.3.6 contains work practice standards (operation and maintenance <u>practice</u> requirements) that override these provisions.
63.6(f)(1)	No	6.3.2 specifies when the standards apply.
63.6(f)(2)(i)-(ii)	Yes	
63.6(f)(2)(iii)	No	6.5.2 specifies instances in which previous performance test results for existing sources are acceptable.
63.6(f)(2)(iv)	Yes	
63.6(f)(2)(v)	Yes	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Section 6.0 does not contain any opacity or visible emission standards.
63.6(i)(1)	Yes	
63.6(i)(2)	No	
63.6(i)(3)	Yes	
63.6(i)(4)(i)	No	
63.6(i)(4)(ii)	Yes	
63.6(i)(5)	No	
63.6(i)(6)(i)	Yes	This paragraph only references "paragraph (i)(4)(ii) of this section" for compliance extension provisions.
63.6(i)(6)(ii)	No	
63.6(i)(7)	Yes	
63.6(i)(8)	Yes	This paragraph only references "paragraph (i)(4)(ii) of this section" for compliance extension provisions.
63.6(i)(9)	Yes	This paragraph only references "paragraph (i)(4)(ii) of this section" for compliance extension provisions.
63.6(i)(10)(i)-(iv)	Yes	
63.6(i)(10)(v)(A)	Yes	This paragraph only references "paragraph (i)(4)(ii) of this section" for compliance extension provisions.
63.6(i)(10)(v)(B)	No	
63.6(i)(11)	Yes	
63.6(i)(12)(i)	No	
63.6(i)(12)(ii)-(iv)	No	
63.6(i)(13)	Yes	
63.6(i)(14)	Yes	
63.6(i)(15)	No	

63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	
63.7(a)(2)(i)-(viii)	Yes No	
63.7(a)(2)(ix)	Yes	
63.7(a)(3)	Yes	
63.7(b)(1)	No	6.8.4 requires notification prior to the performance test. 6.5.1 requires submission of a site-specific test plan upon request.
63.7(b)(2)	Yes	
63.7(c)	No	6.5.1 specifies what the test plan should contain, but does not require test plan approval or performance audit samples.
63.7(d)	Yes	Except replace "source" in the first sentence of Sec. 63.7(d) of subpart A with "affected source."
63.7(e)	Yes	Section 6.0 also contains test methods specific to affected sources covered by Section 6.0.
63.7(f)	Yes	6.5.3.2 identifies CARB Method 425 as acceptable under certain conditions.
63.7(g)(1)	No	Section 6.0 identifies the items to be reported in the compliance test [6.5.1] and the timeframe for submitting the results [6.8.6].
63.7(g)(2)	No	
63.7(g)(3)	Yes	
63.7(h)(1)-(2)	Yes	
63.7(h)(3)(i)	Yes	This paragraph only references "Sec. 63.6(i)" for compliance extension provisions. But, 6.4.1.6 also contains provisions for requesting a compliance extension.
63.7(h)(3)(ii)-(iii)	Yes	
63.7(h)(4)-(5)	Yes	
63.8(a)(1)	Yes	
63.8(a)(2)	No	Work practice standards <u>Operation and maintenance practices</u> are contained in 6.3.6.
63.8(a)(3)	No	
63.8(a)(4)	No	
63.8(b)(1)	Yes	
63.8(b)(2)	No	6.5.4 specifies the monitoring location when there are multiple sources.
63.8(b)(3)	No	6.8.7.4 identifies reporting requirements when multiple monitors are used.
63.8(c)(1)(i)	No	Section 6.0 requires proper maintenance of monitoring devices expected to be used by sources subject to Section 6.0.
63.8(c)(1)(ii)	No	6.3.6.3.4 specifies reporting when the O&M plan is not followed.
63.8(c)(1)(iii)	No	6.3.6.2 identifies the criteria for whether O&M procedures are acceptable.
63.8(c)(2)-(3)	No	6.5.4.2 requires appropriate use of monitoring devices.
63.8(c)(4)-(8)	No	
63.8(d)	No	Maintenance of monitoring devices is required in 6.3.6 and 6.5.4.2.
63.8(e)	No	There are no performance evaluation procedures for the monitoring devices expected to be used to comply with Section 6.0.
63.8(f)(1)	Yes	
63.8(f)(2)	No	Instances in which the Administrator may approve alternatives to the monitoring methods and procedures of Section 6.0 are contained in 6.4.3.8.

63.8(f)(3)	Yes	
63.8(f)(4)	Yes	
63.8(f)(5)	Yes	
63.8(f)(6)	No	Section 6.0 does not require the use of CEM's.
63.8(g)	No	Monitoring data does not need to be reduced for reporting purposes because Section 6.0 requires measurement once/day.
63.9(a)	Yes	
63.9(b)(1)(i)-(ii)	No	6.4.1.3 requires area sources to comply with major source provisions if an increase in HAP emissions causes them to become major sources.
63.9(b)(1)(iii)	No	6.8.3.2 of specifies initial notification requirements for new or reconstructed affected sources.
63.9(b)(2)	No	6.8.3.1 specifies the information to be contained in the initial notification.
63.9(b)(3)	No	6.8.3.2 specifies notification requirements for new or reconstructed sources that are not major affected sources.
63.9(b)(4)	No	
63.9(b)(5)	No	
63.9(c)	Yes	This paragraph only references "Sec. 63.6(i)(4) through Sec. 63.6(i)(6)" for compliance extension provisions. But, 6.4.1.6 also contains provisions for requesting a compliance extension. Section 6.0 provides a different timeframe for submitting the request than Sec. 63.6(i)(4).
63.9(d)	Yes	This paragraph only references "the notification dates established in paragraph (g) of this section." But, 6.8 also contains notification dates.
63.9(e)	No	Notification of performance test is required in 6.8.4.
63.9(f)	No	
63.9(g)	No	Section 6.0 does not require a performance evaluation or relative accuracy test for monitoring devices.
63.9(h)(1)-(3)	No	6.8.5 specifies information to be contained in the notification of compliance status and the timeframe for submitting this information.
63.9(h)(4)	No	
63.9(h)(5)	No	Similar language has been incorporated into 6.8.5.2.3.
63.9(h)(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)	No	6.7.2 specifies the records that must be maintained.
63.10(b)(3)	No	Section 6.0 applies to major and area sources.
63.10(c)	No	Applicable requirements of Sec. 63.10(c) have been incorporated into 6.7.2.
63.10(d)(1)	Yes	
63.10(d)(2)	No	6.8.6 specifies the timeframe for reporting performance test results.
63.10(d)(3)	No	Section 6.0 does not contain opacity or visible emissions standards.
63.10(d)(4)	Yes	
63.10(d)(5)	No	6.3.6.3.4 and 6.8.7.3 specify reporting associated with malfunctions.

63.10(e)	No	6.8.7 and 6.8.8 specify the frequency of periodic reports of monitoring data used to establish compliance. Applicable requirements of Sec. 63.10(e) have been incorporated into 6.8.7 and 6.8.8.
63.10(f)	Yes	
63.11	No	Flares will not be used to comply with the emission limits.
63.12-63.15	Yes	

3 DE Reg. 445 (9/1/99)
11 DE Reg 683 (11-01-07)

7.0 [Reserved]

11 DE Reg 683 (11-01-07)(Final)