STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
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OFFICE OF THE
SECRETARY

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**Secretary's Order No.: 2015-A-0035**

**RE: Approving Final Regulations to Amend 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories,* Section 6: *Chromium Electroplating and Anodizing Tanks***

**Date of Issuance: September 08, 2015**

**Effective Date of the Amendment: October 11, 2015**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") pursuant to 7 *Del.C.* §§6006, 6010, the following findings of fact based on the record, reasons and conclusions are entered as an Order of the Secretary in the above-referenced regulatory proceeding.

**Background, Procedural History and Findings of Fact**

This Order relates to proposed regulation Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks.* The Department's Division of Air Quality ("DAQ") commenced the regulatory development process with Start Action Notice 2015-01 dated February 23, 2015. The Department published its initial proposed regulation Amendments in the July 1, 2015 *Delaware Register of Regulations.* The Department then held a public hearing on August 4, 2015. Consistent with 29 *Del.C.*

§10118(a), the public hearing record remained open for public comment through August 19, 2015.

The purpose of this proposed regulatory promulgation is to adopt as final the aforementioned proposed Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks* ("Amendments"), in order to align Delaware's 7 DE Admin. Code §1138 with the recently added alternative testing methodology that the U.S. Environmental Protection Agency ("EPA") made to the federal chromium electroplating and anodizing standard (40 CFR Part 63 Subpart N) promulgated on February 27, 2014, and also to give owners or operators of Delaware's affected facilities and their testers the additional flexibility to use the EPA's newly approved testing alternative.

The Clean Air Act Amendments of 1990 stipulated a 2-phase rulemaking process that the EPA must use to protect the public health from exposure to hazardous air pollutants ("HAPs"). Consistent with this 2-phase process, the EPA adopted the Maximum Achievable Control Technology ("MACT") standard applicable to chromium electroplating and anodizing operations on January 25, 1995 as Subpart N in 40 CFR Part 63, and later amended the MACT standard requirements and by promulgating the residual risk requirements on September 19, 2012.

On September 1, 1999, the Department's Division of Air Quality ("DAQ") adopted by reference that federal MACT standard (40 CFR Part 63 Subpart N, hereinafter referred to as "Subpart N") into Section 6 of 7 DE Admin. Code §1138. Section 6, like Subpart N, applies to chromium electroplating and anodizing operations. Delaware requested the EPA to delegate authority to Delaware to implement and administer Section

6 in lieu of Subpart N on March 6, 2000 and the EPA delegated that authority effective December 3, 2001. Since that time, the EPA has made a number of minor revisions to said Subpart N. The EPA also promulgated a major revision on September 19, 2012, when the EPA completed their risk assessments and promulgated revisions to the Subpart N to (1) protect the public health "with an ample margin of safety"; and to (2) address changes to the startup, shutdown, and malfunction ("SSM") requirements as a result of *Sierra Club* v. *EPA,* 551 F.3d 1019 (District of Columbia Circuit, 2008), *cert. denied, 130 S. Ct. 1735 (U.S. 2010).*

Following each of the aforementioned revisions, Delaware has adopted the appropriate Federal changes into Section 6 in order to maintain consistency between the national requirements and the Section 6 requirements. The last such change was finalized on September 1, 2013, when Delaware adopted the residual risk and technology review changes that the EPA promulgated on September 19, 2012, as noted above.

On February 27, 2014, the EPA promulgated in a single action over 80 revisions to test methods and testing regulations. The revisions included changes to nearly 60 test methods and 30 standards in 40 CFR Parts 51, 60, 61, and 63. In Part 63, the EPA added the South Coast Air Quality Management District Method 205.1 as an additional testing option for measuring total chromium to Subpart N. In order to maintain consistency between the national requirements and the Section 6 requirements, the Department is proposing to similarly add the option use of Method 205.1 to Section 6 of 7 DE Admin. Code §1138.

This proposed regulatory action would amend 7 DE Admin. Code §1138 by adding the option of using Method 205.1 to Section 6. There are currently two affected

sources in Delaware: Standard Technologies (Marshallton), and Procino Plating (Blades). These two facilities are small businesses, and would benefit from the added testing flexibility. Because of the minimal regulatory impact that this revision poses, DAQ did not believe it necessary to conduct work group meetings or public workshops regarding this proposed promulgation. Alternatively, the Department reached out to both sources directly, and provided them with the all pertinent information on the simple addition and information on Method 205.1.

The aforementioned proposed Amendments were presented and thoroughly vetted by the Department at the public hearing on August 4, 2015. It should be noted that no members of the public attended the August 4, 2015 hearing, and no comment was received by the Department at any time during the course of this proposed promulgation. It should also be noted that all proper notification and noticing requirements concerning this matter were met by the Department. Proper notice of the hearing was provided as required by law.

The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated August 26, 2015 ("Report"). The Report documents the proper completion of the required regulatory amendment process, establishes the record, and recommends the adoption of the proposed Amendments as attached to the Report as Appendix "A".

**Reasons and Conclusions**

Based on the record developed by the Department's experts and established by the Hearing Officer's Report, I find that the proposed regulatory Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source*

*Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*, are well-supported. Therefore, the recommendations of the Hearing Officer are hereby adopted, and I direct that the proposed regulatory Amendments be promulgated as final.

I find that the Department's experts in the Division of Air Quality fully developed the record to support adoption of these regulatory Amendments. The adoption of these regulatory Amendments will allow Delaware to maintain the consistency of Delaware's air regulatory requirements under Section 6 of 7 DE Admin. Code §1138 with the national requirements under 40 CFR Part 63, Subpart N, and also give owners or operators of Delaware's affected facilities and their testers the additional flexibility to use the EPA's newly approved testing alternative.

In conclusion, the following reasons and conclusions are entered:

1. The Department has the statutory basis and legal authority to act with regard to the proposed Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*, pursuant to 7 *Del.C.*, Ch. 60;

2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.* Ch. 60, to issue an Order adopting these proposed regulatory amendments as final;

3. The Department provided adequate public notice of the proposed regulatory amendments and all proceedings in a manner required by the law and regulations, provided the public with an adequate opportunity to comment on the proposed regulatory amendments, including at the time of the public hearing held on August 4, 2015, and held the record open through close of business on August 19, 2015,

consistent with 29 *Del.C.* §10118(a), in order to consider public comment on these proposed regulatory amendments before making any final decision;

4. The Department's Hearing Officer's Report, including its established record and the recommended proposed regulatory Amendments as set forth in Appendix "A", are hereby adopted to provide additional reasons and findings for this Order;

5. Promulgation of the proposed regulatory amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*, will enable the Department to (1) maintain the consistency of Delaware's air regulatory requirements under Section 6 of 7 DE Admin. Code §1138 with the national requirements under 40 CFR Part 63, Subpart N; and (2) to give owners or operators of Delaware's affected facilities and their testers the additional flexibility to use the EPA's newly approved testing alternative;

6. The Department has reviewed these proposed regulatory Amendments in the light of the Regulatory Flexibility Act, consistent with 29 *Del.C.* Ch. 104, and believes the same to be lawful, feasible and desirable, and that the recommendations as proposed should be applicable to all Delaware citizens equally;

7. The Department's proposed regulatory Amendments, as published in the July 1, 2015 *Delaware Register of Regulations*, and as set forth in Appendix "A" as noted above, are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, they are approved as final regulatory amendments, which shall go into effect ten days after their publication in the next available issue of the *Delaware Register of Regulations*; and

8. The Department shall submit this Order approving as final the proposed Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks* to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

David S. Small
Secretary

# HEARING OFFICER'S REPORT

**TO:** The Honorable David S. Small
Cabinet Secretary, Department of Natural Resources and Environmental Control

**FROM:** Lisa A. Vest
Public Hearing Officer, Office of the Secretary
Department of Natural Resources and Environmental Control

**RE:** **Proposed Regulation Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories,* Section 6: *Chromium Electroplating and Anodizing Tanks***

**DATE:** August 26, 2015

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## I. BACKGROUND AND PROCEDURAL HISTORY:

A public hearing was held on Tuesday, August 4, 2015, at 6:00 p.m. at the Department of Natural Resources and Environmental Control ("DNREC", "Department"), 89 Kings Highway, Dover, Delaware to receive comment on proposed amendments ("Amendments") to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*. This proposed action is intended to align Delaware's 7 DE Admin. Code §1138 with the recently added alternative testing methodology that the U.S. Environmental Protection Agency ("EPA") made to the federal chromium electroplating and anodizing standard (40 CFR Part 63 Subpart N) promulgated on February 27, 2014, and to give owners or operators of Delaware's affected facilities and their testers the additional flexibility to use the EPA's newly approved testing alternative.

The Clean Air Act Amendments of 1990 stipulated a 2-phase rulemaking process that the EPA must use to protect the public health from exposure to hazardous air pollutants ("HAPs"). Consistent with this 2-phase process, the EPA adopted the Maximum Achievable

Control Technology ("MACT") standard applicable to chromium electroplating and anodizing operations on January 25, 1995 as Subpart N in 40 CFR Part 63, and later amended the MACT standard requirements and by promulgating the residual risk requirements on September 19, 2012.

On September 1, 1999, the Department's Division of Air Quality ("DAQ") adopted by reference that federal MACT standard (40 CFR Part 63 Subpart N, hereinafter referred to as "Subpart N") into Section 6 of 7 DE Admin. Code §1138. Section 6, like Subpart N, applies to chromium electroplating and anodizing operations. Delaware requested the EPA to delegate authority to Delaware to implement and administer Section 6 in lieu of Subpart N on March 6, 2000 and the EPA delegated that authority effective December 3, 2001. Since that time, the EPA has made a number of minor revisions to said Subpart N. The EPA also promulgated a major revision on September 19, 2012, when the EPA completed their risk assessments and promulgated revisions to the Subpart N to (1) protect the public health "with an ample margin of safety"; and to (2) address changes to the startup, shutdown, and malfunction ("SSM") requirements as a result of *Sierra Club* v. *EPA,* 551 F.3d 1019 (District of Columbia Circuit, 2008), *cert. denied, 130 S. Ct. 1735 (U.S. 2010).*

Following each of the aforementioned revisions, Delaware has adopted the appropriate Federal changes into Section 6 in order to maintain consistency between the national requirements and the Section 6 requirements. The last such change was finalized on September 1, 2013, when Delaware adopted the residual risk and technology review changes that the EPA promulgated on September 19, 2012, as noted above.

On February 27, 2014, the EPA promulgated in a single action over 80 revisions to test methods and testing regulations. These revisions finalized technical and editorial corrections for source testing of emissions and operations. Some existing Federal testing provisions contain

inaccuracies and outdated procedures. In addition, new alternatives had been identified and were being approved. These revisions were purported to improve the quality of data and gave testers additional flexibility to use the newly approved alternative procedures. The revisions included changes to nearly 60 test methods and 30 standards in 40 CFR Parts 51, 60, 61, and 63. In Part 63, the EPA added the South Coast Air Quality Management District Method 205.1 as an additional testing option for measuring total chromium to Subpart N. In order to maintain consistency between the national requirements and the Section 6 requirements, the Department is proposing to similarly add the option use of Method 205.1 to Section 6 of 7 DE Admin. Code §1138.

This proposed regulatory action would amend 7 DE Admin. Code §1138 by adding the option of using Method 205.1 to Section 6. There are currently two affected sources in Delaware: Standard Technologies (Marshallton), and Procino Plating (Blades). These two facilities are small businesses, and would benefit from the added testing flexibility. Because of the minimal regulatory impact that this revision poses, DAQ did not believe it necessary to conduct work group meetings or public workshops regarding this proposed promulgation. Alternatively, the Department reached out to both sources directly, and provided them with the all pertinent information on the simple addition and information on Method 205.1.

The Department has the statutory basis and legal authority to act with regard to the proposed amendments to 7 DE Admin. Code §1138, pursuant to 7 *Del.C.*, Chapter 60. It should be noted that no members of the public attended the August 4, 2015 hearing, and no comment was received by the Department at any time during the course of this proposed promulgation. It should also be noted that all proper notification and noticing requirements concerning this matter were met by the Department. Proper notice of the hearing was provided as required by law.

## II. SUMMARY OF THE PUBLIC HEARING RECORD:

The public hearing record consists of the following documents: (1) a verbatim transcript; and (2) twenty-four documents introduced by responsible Department staff at the public hearing held on August 4, and marked by this Hearing Officer accordingly as Department Exhibits 1-24 accordingly. The Department's person primarily responsible for the drafting and overall promulgation of these proposed Amendments, Jim Snead, developed the record with the relevant documents in the Department's files.

In the EPA's February 27, 2014 final rule, owners or operators subject to 40 CFR Part 63, Subpart N, were provided with an optional 5th test method to select from by adding the South Coast Air Quality Management District "Test Method 205.1". The Department is proposing to amend Section 6 of 7 DE Admin. Code §1138 by adding this same optional, alternative test method, in order to (1) maintain the consistency of Delaware's air regulatory requirements under Section 6 with the national requirements under Subpart N; and (2) to give owners or operators of Delaware's affected facilities and their testers the additional flexibility to use the EPA's newly approved testing alternative.

The proposed Amendments to 7 DE Admin. Code §1138 were presented and thoroughly vetted by the Department at the public hearing on August 4, 2015. As noted previously, no members of the public attended said public hearing, and no comment was received by the Department at any time with regard to this proposed regulatory promulgation. Pursuant to Delaware law, the record remained open for fifteen (15) additional days subsequent to the date of the public hearing, for the purpose of receiving additional public comment regarding these proposed Amendments, but once again, none was received during the post-hearing phase.

Again, all proper notification and noticing requirements concerning this proposed promulgation were met by the Department in this matter.

## III. RECOMMENDED FINDINGS AND CONCLUSIONS:

Based on the record developed, I find and conclude that the Department has provided appropriate reasoning regarding the need for the proposed Amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*, as noted above. Accordingly, I recommend promulgation of these proposed regulatory amendments in the customary manner provided by law.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has the statutory basis and legal authority to act with regard to the proposed amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*, pursuant to 7 *Del.C.*, Ch. 60;

2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.*, Ch. 60, to issue an Order adopting these proposed regulatory amendments as final;

3. The Department provided adequate public notice of the proposed regulatory amendments and all proceedings in a manner required by the law and regulations, provided the public with an adequate opportunity to comment on the proposed regulatory amendments, including at the time of the public hearing held on August 4, 2015, and held the record open through close of business on August 19, 2015, consistent with 29 *Del.C.* §10118(a), in order to consider public comment on these proposed regulatory amendments before making any final decision;

4. Promulgation of the proposed regulatory amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks*, will enable the Department to (1) maintain the consistency of Delaware's air regulatory requirements under Section 6 of 7 DE Admin. Code §1138 with the national requirements under 40 CFR Part 63, Subpart N; and (2) to give owners or operators of Delaware's affected facilities and their testers the additional flexibility to use the EPA's newly approved testing alternative;

5. The Department has reviewed these proposed regulatory amendments in the light of the Regulatory Flexibility Act, consistent with 29 *Del.C.* Ch. 104, 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. The Department's proposed regulatory amendments, as published in the July 1, 2015 *Delaware Register of Regulations*, and as set forth in Appendix "A" hereto, are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, they should be approved as final regulatory amendments, which shall go into effect ten days after their publication in the next available issue of the *Delaware Register of Regulations*; and

7. The Department shall submit the proposed regulatory amendments as final regulatory amendments to 7 DE Admin. Code §1138, *Emission Standards for Hazardous Air Pollutants for Source Categories*, Section 6: *Chromium Electroplating and Anodizing Tanks* to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

LISA A. VEST
Public Hearing Officer

\ahear\ Reg. 1138 Sect. 6 Amendments.2015

Attachments/Appendix:

Appendix A: Proposed Reg. Amendments

# APPENDIX "A"

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR QUALITY

~~Air Quality Management Section~~

**1138 Emission Standards for Hazardous Air Pollutants for Source Categories**

~~9/11/13~~ 10/11/15

**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 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 6.0 of this regulation shall also comply with the requirements of 3.0 of this regulation, according to the applicability of 3.0 to such sources, as identified in Table 6-3 of this regulation.

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 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 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 or laboratory operations are performed are exempt from the provisions of 6.0 of this regulation when such operations are taking place.

6.1.5 The owner or operator of an area source subject to 6.0 of this regulation is exempt from the obligation to obtain a Title V operating permit under 7 **DE Admin. Code** 1130 of the 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 3.1 of 7 **DE Admin. Code** 1130 for a reason other than the owner or operator's status as an area source under 6.0. Notwithstanding the previous sentence, the owner or operator shall continue to comply with the provisions of 6.0 applicable to area sources.

6.2 Definitions and nomenclature.

6.2.1 Definitions.

Terms used in 6.0 of this regulation are defined in the Act, in 3.2 of this regulation, or in 6.2 of this regulation. For the purposes of 6.0, if the same term is defined in 6.2 and in 3.2, 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.

**"Affirmative defense"** means, in the context of an enforcement proceeding, a response or a defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

**"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 part.

**"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 shall 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 ($CrO_3$).

**"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 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.

**"Contains hexavalent chromium"** means, the substance consists of, or contains 0.1% or greater by weight, chromium trioxide, chromium (VI) oxide, chromic acid, or chromic anhydride.

**"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/$m^2$) for total plating times ranging between 0.5 to five 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 part or for oxidizing the base material.

**"Emission limitation"** means, for the purposes of 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.

**"Existing affected source"** means an affected hard chromium electroplating tank, decorative chromium electroplating tank, or chromium anodizing tank, the construction or reconstruction of which commenced on or before February 8, 2012.

**"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/$m^2$ 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% of the total operating time. The maximum potential operating schedule is based on operating 24 hours per day, seven days per week, 50 weeks per year.

**"New affected source"** means an affected hard chromium electroplating tank, decorative chromium electroplating tank, or chromium anodizing tank, the construction or reconstruction of which commenced after February 8, 2012.

**"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.

**"Perfluorooctane sulfonic acid (PFOS)-based fume suppressant"** means a fume suppressant that contains 1% or greater PFOS by weight.

**"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 minimis 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 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 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 commercially available chemical fume suppressant that materially reduces the surface tension of a liquid.

6.2.2 Nomenclature.

The nomenclature used in 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 regulation in milligrams per dry standard cubic meter (mg/dscm).

6.2.2.4 $IA_{total}$ = the sum of all inlet duct areas from both affected and nonaffected sources in meters squared.

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

6.2.2.6 $IDA_{i,a}$ = 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 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 $VR_{inlet}$ = the total ventilation rate from all inlet ducts associated with affected sources in dscm/min.

6.2.2.9 $VR_{inlet,a}$ = 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 in dscm/min.

6.2.2.10 $VR_{tot}$ = the average total ventilation rate for the three test runs as determined at the outlet by means of the Method 306 or 306A testing specified in Appendix A of 40 CFR Part 63 in dscm/min.

6.3 Standards.

6.3.1 Compliance with provisions.

6.3.1.1 Each owner or operator of an affected source subject to the provisions of 6.0 of this regulation shall comply with the requirements of 6.0 on and after the compliance dates specified in 6.4.1 of this regulation.

6.3.1.2 At all times, each owner or operator shall operate and maintain any affected source subject to the requirements of 6.0 of this regulation, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by 6.0 have been achieved. Determination of whether such 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 operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

6.3.2 Applicability of emission limitations.

6.3.2.1 The emission limitations in 6.3 of this regulation apply during tank operation as defined in 6.2 of this regulation, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to 6.0 of this regulation. The emission limitations in 6.3 also apply during periods of malfunction. In response to an action to enforce the standards set forth in 6.0, the owner or operator may assert a defense to a claim for civil penalties for violations of such standards that are caused by a malfunction, as defined in 3.2 of this regulation. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

6.3.2.1.1 To establish the affirmative defense in any action to enforce such a standard, the owner or operator shall timely meet the reporting requirements of 6.3.2.1.2 of this regulation, and shall prove by a preponderance of evidence that:

6.3.2.1.1.1 The violation was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal and usual manner; and could not have been prevented through careful planning, proper design, or better operation and maintenance procedures; and did not stem from any activity or event that could have been foreseen and avoided, or planned for; and was not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

6.3.2.1.1.2 Repairs were made as expeditiously as possible when exceeded violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs;

6.3.2.1.1.3 The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable;

6.3.2.1.1.4 If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

6.3.2.1.1.5 All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health;

6.3.2.1.1.6 All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices;

6.3.2.1.1.7 All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs;

6.3.2.1.1.8 At all times, the affected sources were operated in a manner consistent with good practices for minimizing emissions;

6.3.2.1.1.9 A written root cause analysis was prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using the best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

6.3.2.1.2 Affirmative defense report.

The owner or operator seeking to assert an affirmative defense shall submit a written report to the Department with all necessary supporting documentation, that it has met the requirements set forth in 6.3.2.1.1 of this regulation. This affirmative defense report shall be included in the first periodic compliance report, deviation report, or excess emission report otherwise required after the initial occurrence of the violation of 6.0 of this regulation (which may be the end of any applicable averaging period). If such compliance report, deviation report, or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmation defense report may be included in the second compliance report, deviation report, or excess emission report due after the initial occurrence of the violation of 6.0.

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 regulation apply whenever any one affected source is operated. The emission limitation that applies to the group of affected sources is as follows:

6.3.2.2.1 The emission limitation identified in 6.3.3 through 6.3.5 of this regulation 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 regulation 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 regulation if affected sources are performing different types of operations or if 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 open surface hard chromium electroplating tank shall be in compliance with the applicable requirements of 6.3.3.1.1, 6.3.3.1.2, 6.3.3.1.3, and 6.3.3.1.4 of this regulation.

6.3.3.1.1 Prior to September 19, 2014, each owner or operator of an existing affected open surface hard chromium electroplating tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.3.1.1.1, 6.3.3.1.1.2, or 6.3.3.1.1.3 of this regulation.

6.3.3.1.1.1 Each owner or operator of an existing open surface hard chromium electroplating tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($1.3 \times 10^{-5}$ grains per dry standard cubic foot (gr/dscf)), if the existing open surface hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility;

6.3.3.1.1.2 Each owner or operator of an existing open surface hard chromium electroplating tank shall not allow 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 ($6.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)), if the existing open surface hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility; or

6.3.3.1.1.3 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.3.1.1 of this regulation, each owner or operator of an existing open surface hard chromium electroplating tank shall not allow the surface tension of the electroplating bath contained within the open surface hard chromium electroplating tank to exceed 45 dynes per centimeter (dynes/cm) ($3.1 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 35 dynes/cm ($2.4 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation.

6.3.3.1.2 On and after September 19, 2014, each owner or operator of an existing affected open surface hard chromium electroplating tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.3.1.2.1, 6.3.3.1.2.2, or 6.3.3.1.2.3 of this regulation.

6.3.3.1.2.1 Each owner or operator of an existing open surface hard chromium electroplating tank shall not allow 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 ($6.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)), if the existing open surface hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility;

6.3.3.1.2.2 Each owner or operator of an existing open surface hard chromium electroplating tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.011 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($4.8 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf), if the existing open surface hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility; or

6.3.3.1.2.3 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.3.1.2 of this regulation, each owner or operator of an existing open surface hard chromium electroplating tank shall not allow the surface tension of the electroplating bath contained within the open surface hard chromium electroplating tank to exceed 40 dynes per centimeter (dynes/cm) ($2.8 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation.

6.3.3.1.3 On and after September 11, 2013, each owner or operator of a new or reconstructed affected open surface hard chromium electroplating tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.3.1.3.1 or 6.3.3.1.3.2 of this regulation.

6.3.3.1.3.1 Each owner or operator of a new or reconstructed open surface hard chromium electroplating tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.006 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($2.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)) or

6.3.3.1.3.2 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.3.1.3 of this regulation, each owner or operator of a new or reconstructed open surface hard chromium electroplating tank shall not allow the surface tension of the electroplating bath contained within the open surface hard chromium electroplating tank to exceed 40 dynes per centimeter (dynes/cm) ($2.8 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation.

6.3.3.1.4 On and after September 19, 2015, each owner or operator of an existing, new, or reconstructed affected open surface hard chromium electroplating tank shall not add PFOS-based fume suppressants to any affected open surface hard chromium electroplating tank.

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 enclosed hard chromium electroplating tank shall be in compliance with the applicable requirements of 6.3.3.2.1, 6.3.3.2.2, 6.3.3.2.3, and 6.3.3.2.4 of this regulation.

6.3.3.2.1 Prior to September 19, 2014, each owner or operator of an existing affected enclosed hard chromium electroplating tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.3.2.1.1, 6.3.3.2.1.2, 6.3.3.2.1.3, 6.3.3.2.1.4, or 6.3.3.2.1.5 of this regulation.

6.3.3.2.1.1 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($1.3 \times 10^{-5}$ grains per dry standard cubic foot (gr/dscf)), if the existing enclosed hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility;

6.3.3.2.1.2 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow 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 ($6.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)), if the existing enclosed hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility;

6.3.3.2.1.3 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.3.2.1 of this regulation, each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the surface tension of the electroplating bath contained within the enclosed hard chromium electroplating tank to exceed 45 dynes per centimeter (dynes/cm) ($3.1 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 35 dynes/cm ($2.4 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation;

6.3.3.2.1.4 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the mass emission 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 6.5.6.2 of this regulation, if the existing enclosed hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility; or

6.3.3.2.1.5 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the mass emission 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 of this regulation, if the existing enclosed hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility.

6.3.3.2.2 On and after September 19, 2014, each owner or operator of an existing affected enclosed hard chromium electroplating tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.3.2.2.1, 6.3.3.2.2.2, 6.3.3.2.2.3, 6.3.3.2.2.4, or 6.3.3.2.2.5 of this regulation.

6.3.3.2.2.1 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow 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 ($6.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)), if the existing enclosed hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility;

6.3.3.2.2.2 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.011 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($4.8 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf), if the existing enclosed hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility;

6.3.3.2.2.3 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.3.2.2 of this regulation, each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the surface tension of the electroplating bath contained within the enclosed hard chromium electroplating tank to exceed 40 dynes per centimeter (dynes/cm) ($2.8 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation;

6.3.3.2.2.4 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the mass emission 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 6.5.6.4 of this regulation, if the existing enclosed hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility; or

6.3.3.2.2.5 Each owner or operator of an existing enclosed hard chromium electroplating tank shall not allow the mass emission 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 6.5.6.3 of this regulation, if the existing enclosed hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility.

6.3.3.2.3 On and after September 11, 2013, each owner or operator of a new or reconstructed affected enclosed hard chromium electroplating tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.3.2.3.1, 6.3.3.2.3.2, or 6.3.3.2.3.3 of this regulation.

6.3.3.2.3.1 Each owner or operator of a new or reconstructed enclosed hard chromium electroplating tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.006 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($2.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf));

6.3.3.2.3.2 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.3.2.3 of this regulation, each owner or operator of a new or reconstructed enclosed hard chromium electroplating tank shall not allow the surface tension of the electroplating bath contained within the enclosed hard chromium electroplating tank to exceed 40 dynes per centimeter (dynes/cm) ($2.8 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation; or

6.3.3.2.3.3 Each owner or operator of a new or reconstructed enclosed hard chromium electroplating tank shall not allow the mass emission 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 6.5.6.5 of this regulation.

6.3.3.2.4 On and after September 19, 2015, each owner or operator of an existing, new, or reconstructed affected enclosed hard chromium electroplating tank shall not add PFOS-based fume suppressants to any affected enclosed hard chromium electroplating tank.

6.3.3.2.5 [Reserved]

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 regulation. 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 regulation. 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 regulation 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 6.3.3.3.1 and 6.7.2.12 of this regulation 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 applicable emission limitation identified in 6.3.3.1.1.2, 6.3.3.1.2.2, 6.3.3.2.1.2, 6.3.3.2.1.5, 6.3.3.2.2.2, and 6.3.3.2.2.5 of this regulation, in accordance with the compliance schedule in 6.4.1.5 of this regulation.

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 decorative chromium electroplating tank using a chromic acid bath or affected chromium anodizing tank shall be in compliance with the applicable requirements of 6.3.4.1, 6.3.4.2, 6.3.4.3, and 6.3.4.4 of this regulation.

6.3.4.1 Prior to September 19, 2014, each owner or operator of an existing affected decorative chromium electroplating tank using a chromic acid bath or an existing affected chromium anodizing tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.4.1.1 or 6.3.4.1.2 of this regulation.

6.3.4.1.1 Each owner or operator of an existing decorative chromium electroplating tank using a chromic acid bath or an existing chromium anodizing tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.01 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($4.4 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)) or

6.3.4.1.2 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.4.1 of this regulation, each owner or operator of an existing decorative chromium electroplating tank using a chromic acid bath or an existing chromium anodizing tank shall not allow the surface tension of the electroplating bath contained within the decorative chromium electroplating tank using a chromic acid bath or the chromium anodizing tank to exceed 45 dynes per centimeter (dynes/cm) ($3.1 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 35 dynes/cm ($2.4 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation.

6.3.4.2 On and after September 19, 2014, each owner or operator of an existing affected decorative chromium electroplating tank using a chromic acid bath or an existing affected chromium anodizing tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.4.2.1 or 6.3.4.2.2 of this regulation.

6.3.4.2.1 Each owner or operator of an existing decorative chromium electroplating tank using a chromic acid bath or an existing chromium anodizing tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.007 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($3.1 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)) or

6.3.4.2.2 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.4.2 of this regulation, each owner or operator of an existing decorative chromium electroplating tank using a chromic acid bath or an existing chromium anodizing tank shall not allow the surface tension of the electroplating bath contained within the decorative chromium electroplating tank using a chromic acid bath or the chromium anodizing tank to exceed 40 dynes per centimeter (dynes/cm) ($2.8 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation.

6.3.4.3 On and after September 11, 2013, each owner or operator of a new or reconstructed affected decorative chromium electroplating tank using a chromic acid bath or a new or reconstructed chromium anodizing tank shall control chromium emissions discharged to the atmosphere from that affected source by being in compliance with 6.3.4.3.1 or 6.3.4.3.2 of this regulation.

6.3.4.3.1 Each owner or operator of a new or reconstructed decorative chromium electroplating tank using a chromic acid bath or a new or reconstructed chromium anodizing tank shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.006 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ($2.6 \times 10^{-6}$ grains per dry standard cubic foot (gr/dscf)) or

6.3.4.3.2 If a chemical fume suppressant containing a wetting agent is used to comply with 6.3.4.3 of this regulation, each owner or operator of a new or reconstructed decorative chromium electroplating tank using a chromic acid bath or a new or reconstructed chromium anodizing tank shall not allow the surface tension of the electroplating bath contained within the decorative chromium electroplating tank using a chromic acid bath or the chromium anodizing tank to exceed 40 dynes per centimeter (dynes/cm) ($2.8 \times 10^{-3}$ pound-force per foot ($lb_f/ft$)) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ $lb_f/ft$) as measured by a tensiometer at any time during tank operation.

6.3.4.4 On and after September 19, 2015, each owner or operator of an existing, new, or reconstructed affected decorative chromium electroplating tank using a chromic acid bath or an existing, new, or reconstructed chromium anodizing tank shall not add PFOS-based fume suppressants to any affected decorative chromium electroplating tank using a chromic acid bath or any affected chromium anodizing 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 regulation, but are not subject to the operation and maintenance procedure requirements in 6.3.6 of this regulation, or the continuous compliance monitoring requirements in 6.4.3 of this regulation. The wetting agent shall be an ingredient in the trivalent chromium bath components purchased as a package.

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 regulation.

6.3.5.3 Each owner or operator of an 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 shall fulfill the reporting requirements in 6.8.9.3 of this regulation and comply with the applicable emission limitation within the timeframe specified in 6.4.1.7 of this regulation.

6.3.5.4 On and after September 19, 2015, each owner or operator of an existing, new, or reconstructed affected decorative chromium electroplating tank that uses a trivalent chromium bath shall not add PFOS-based fume suppressants to any affected decorative chromium electroplating tank that uses a trivalent chromium bath.

6.3.6 Operation and maintenance procedures.

All owners or operators subject to the standards in 6.3.3 and 6.3.4 of this regulation are subject to these operation and maintenance procedures.

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, each owner or operator 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 and consistent with the operation and maintenance plan required in 6.3.6.3 of this regulation.

6.3.6.1.2 Each owner or operator shall correct malfunctions as soon as practicable after their occurrence in accordance with the operation and maintenance plan required in 6.3.6.3 of this regulation.

6.3.6.1.3 The operation and maintenance requirements established in 6.3.6 of this regulation are enforceable independent of emissions limitations or other requirements in 6.0 of this regulation.

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 regulation, 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 regulation 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 process equipment, the air pollution control techniques, or the 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 operation and maintenance procedures in 6.3.6 of this regulation shall prepare an operation and maintenance plan to be implemented no later than 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 limitations), 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 6.0 of this regulation, the plan shall incorporate the operation and maintenance procedures for that device or monitoring equipment, as identified in Table 6-1 of this regulation, if the specific equipment used is identified in Table 6-1;

6.3.6.3.1.3 If the specific equipment used is not identified in Table 6-1 of this regulation, the plan shall incorporate proposed operation and maintenance procedures. These proposed operation and maintenance procedures 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 regulation;

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.

6.3.6.3.1.6 The plan shall include housekeeping procedures, as specified in Table 6-2 of this regulation.

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 regulation. 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 regulation.

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 regulation, the owner or operator shall record the actions taken for that event and shall report by phone such actions within two working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven 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 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 five years after each revision to the plan.

6.3.6.3.6 To satisfy the requirements in 6.3.6.3 of this regulation, 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 regulation.

6.3.7 The standards in 6.3 of this regulation 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 6-1 -- Summary of Operation and Maintenance Procedures**

| Control technique | Operation and maintenance procedures | 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. | 1. Once per quarter. |
| | 2. Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist. | 2. Once per quarter. |
| | 3. Visually inspect ductwork from tank to the control device to ensure there are no leaks. | 3. Once per quarter. |
| | 4. Perform washdown of the composite mesh-pads in accordance with manufacturer's recommendations. | 4. Per manufacturer. |
| 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. | 1. Once per quarter. |
| | 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. | 2. Once per quarter. |
| | 3. Same as number 3 for CMP system. | 3. Once per quarter. |
| | 4. Add fresh makeup water to the top of the packed bed [a, b]. | 4. Whenever makeup is added. |
| PBS/CMP system. | 1. Same as number 1 for CMP system. | 1. Once per quarter. |
| | 2. Same as number 2 for CMP system. | 2. Once per quarter. |
| | 3. Same as number 3 for CMP system. | 3. Once per quarter. |
| | 4. Same as number 4 for CMP system. | 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. | 1. Once per quarter. |
| | 2. Visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks. | 2. Once per quarter. |
| | 3. Perform washdown of fiber elements in accordance with manufacturer's recommendations. | 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. | Once per quarter. |
| Stalagmometer. | Follow manufacturer's recommendations. | |

[a] If greater than 50% 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] Operating and maintenance procedures for the control device installed upstream of the fiber-bed mist eliminator to prevent plugging do not apply as long as the operating and maintenance procedures for the fiber-bed unit are followed.

**Table 6-2 -- Housekeeping Procedures**

| For | The owner or operator shall: | At this minimum frequency |
|---|---|---|
| 1. Any substance used in an affected chromium electroplating or chromium anodizing tank that contains hexavalent chromium. | (a) Store the substance in a closed container in an enclosed storage area or building AND<br><br>(b) Use a closed container when transporting the substance from the enclosed storage area. | At all times, except when transferring the substance to and from the container.<br><br>Whenever transporting substance, except when transferring the substance to and from the container. |
| 2. Each affected tank, to minimize spills of bath solution that result from dragout.<br><br>Note: This measure does not require the return of contaminated bath solution to the tank. This requirement applies only as the parts are removed from the tank. Once away from the tank area, any spilled solution shall be handled in accordance with Item 4 of these housekeeping procedures. | (a) Install drip trays that collect and return to the tank any bath solution that drips or drains from parts as the parts are removed from the tank OR<br><br>(b) Contain and return to the tank any bath solution that drains or drips from parts as the parts are removed from the tank OR<br><br>(c) Collect and treat in an onsite wastewater treatment plant any bath solution that drains or drips from parts as the parts are removed from the tank. | Prior to operating the tank.<br><br>Whenever removing parts from an affected tank.<br><br>Whenever removing parts from an affected tank. |
| 3. Each spraying operation for removing excess chromic acid from parts removed from, and occurring over, an affected tank. | Install a splash guard to minimize overspray during spraying operations and to ensure that any hexavalent chromium laden liquid captured by the splash guard is returned to the affected chromium electroplating or anodizing tank. | Prior to any such spraying operation. |

| | | |
|---|---|---|
| 4. Each operation that involves the handling or use of any substance used in an affected chromium electroplating or chromium anodizing tank that contains hexavalent chromium. | Begin clean up, or otherwise contain, all spills of the substance.<br><br>Note: Substances that fall or flow into drip trays, pans, sumps, or other containment areas are not considered spills. | Within 1 hour of the spill. |
| 5. Surfaces within the enclosed storage area, open floor area, walkways around affected tanks contaminated with hexavalent chromium from an affected chromium electroplating or chromium anodizing tank. | (a) Clean the surfaces using one or more of the following methods:<br>(i) HEPA vacuuming;<br>(ii) Hand-wiping with a damp cloth;<br>(iii) Wet mopping;<br>(iv) Hose down or rinse with potable water that is collected in a wastewater collection system;<br>(v) Other cleaning method approved by the Department;<br><br>OR<br><br>(b) Apply a non-toxic chemical dust suppressant to the surfaces. | At least once every 7 days if one or more chromium electroplating or chromium anodizing tanks were used, or at least after every 40 hours of operating time of one or more affected chromium electroplating or chromium anodizing tank, whichever is later.<br><br>According to manufacturer's recommendations. |
| 6. All buffing, grinding, or polishing operations that are located in the same room as chromium electroplating or chromium anodizing tank. | Separate the buffing, grinding, or polishing operations from any affected electroplating or anodizing operation tank by installing a physical barrier; the barrier may take the form of plastic strip curtains. | Prior to beginning the buffing, grinding, or polishing operation. |
| 7. All chromium or chromium-containing wastes generated from housekeeping procedures. | Store, dispose, recover, or recycle the wastes using practices that do not lead to fugitive dust and in accordance with hazardous waste requirements. | At all times. |

6.4 Compliance provisions.

6.4.1 Compliance dates.

6.4.1.1 The owner or operator of an existing affected source shall be in compliance with the applicable provisions of 6.0 of this regulation, except for the emission limitations in 6.3.3, 6.3.4, and 6.3.5 of this regulation, by no later than September 11, 2013 and shall be in compliance with the emission limitations specified in 6.4.1.1.1 and 6.4.1.1.2 of this regulation by no later than September 11, 2013.

6.4.1.1.1 Prior to September 19, 2014, the owner or operator of an existing affected source shall be in compliance with the applicable emission limitations in 6.3.3.1.1, 6.3.3.2.1, 6.3.3.3, 6.3.4.1, and 6.3.5.1 through 6.3.5.3 of this regulation.

6.4.1.1.2 On and after September 19, 2014, the owner or operator of an existing affected source shall be in compliance with the applicable emission limitations in 6.3.3.1.2, 6.3.3.2.2, 6.3.3.3, 6.3.4.2, and 6.3.5.1 through 6.3.5.3 of this regulation.

6.4.1.2 The owner or operator of a new or reconstructed affected source shall be in compliance with the applicable provisions of 6.0 of this regulation by no later than September 11, 2013 or immediately upon startup of the source, whichever is later.

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 shall comply with the provisions for existing major sources, including the reporting provisions in 6.8.7 of this regulation, 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 February 8, 2012) that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source shall comply with the provisions for new major sources, including the reporting provisions in 6.8.7 of this regulation, 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 shall comply with the appropriate emission limitation identified in 6.3.3.1.1.2, 6.3.3.1.2.2, 6.3.3.2.1.2, 6.3.3.2.1.5, 6.3.3.2.2.2, and 6.3.3.2.2.5 of this regulation no later than one year after the month in which monthly records required by 6.3.3.3.1 and 6.7.2.12 of this regulation 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 the applicable provisions of 3.6.9 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 The owner or operator of an existing affected source who is unable to comply with a relevant standard under 6.0 of this regulation may request that the Department grant an extension allowing the owner or operator up to one additional year to comply with the standard for the affected source. The owner or operator of an affected source who has requested an extension of compliance under 6.4.1.6 of this regulation and is otherwise required to obtain a Title V permit for the source shall apply for such permit or apply to have the Title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under 6.4.1.6 will be incorporated into the owner or operator's Title V permit for the affected source or sources according to the provisions of 7 **DE Admin. Code** 1130.

6.4.1.6.2 Any request for an extension of compliance under 6.4.1.6 of this regulation shall be submitted in writing to the Department not later than 6 months before the affected source's compliance date as specified in 6.4.1 of this regulation.

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, shall comply with the emission limitation now applicable to the tank within one year of switching bath operation.

6.4.1.8 No later than September 11, 2013, the owner or operator of an affected source that is subject to the standards in 6.3.3 or 6.3.4 of this regulation shall implement the housekeeping procedures specified in Table 6-2 of this regulation.

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 regulation, an owner or operator of an affected source subject to the requirements of 6.0 of this regulation is required to conduct an initial performance test as required under 3.7 of this regulation using the procedures and test methods listed in 6.5 and 3.7 of this regulation.

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 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 6.3.3.1.1.3, 6.3.3.1.2.3, 6.3.3.1.3.2, 6.3.3.2.1.3, 6.3.3.2.2.3, 6.3.3.2.3.2, 6.3.4.1.2, 6.3.4.2.2, or 6.3.4.3.2 of this regulation as demonstrated through the continuous compliance monitoring required in 6.4.3.5.2 of this regulation.

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 regulation, an initial performance test is not required to be conducted under 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 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 6.4 of this regulation for the air pollution control techniques expected to be used by the owners or operators of affected sources. As an alternative to the daily monitoring, the owner or operator of an affected source may install a continuous pressure monitoring system.

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 regulation 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 regulation, 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 regulation. 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 3.7 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 6.3 of this regulation 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 regulation. 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 regulation.

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

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

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

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

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 regulation 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 regulation through the use of a packed-bed scrubber system shall determine the outlet chromium concentration using the procedures in 6.5.3 of this regulation, 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 regulation. 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% 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 3.7 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 scrubber 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% 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 regulation shall comply with the monitoring requirements for composite mesh-pad systems as identified in 6.4.3.1 of this regulation.

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 regulation through the use of a fiber-bed mist eliminator shall determine the outlet chromium concentration using the procedures in 6.5.3 of this regulation, 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 regulation. 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 3.7 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 regulation 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 regulation. 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 as the maximum surface tension value the value in 6.4.3.5.1.1, 6.4.3.5.1.2, or 6.4.3.5.1.3 of this regulation, whichever is applicable. However, the owner or operator is exempt from conducting a performance test only if the criteria in 6.4.2.1 of this regulation are met.

6.4.3.5.1.1 Prior to September 19, 2014, the owner or operator of existing affected sources may accept 45 dynes/cm ($3.1 \times 10^{-3}$ lbf/ft) as measured by a stalagmometer or 35 dynes/cm ($2.4 \times 10^{-3}$ lbf/ft) as measured by a tensiometer as the maximum surface tension value.

6.4.3.5.1.2 On and after September 19, 2014, the owner or operator of existing affected sources may accept 40 dynes/cm ($2.8 \times 10^{-3}$ lbf/ft) as measured by a stalagmometer or 33 dynes/cm ($2.3 \times 10^{-3}$ lbf/ft) as measured by a tensiometer as the maximum surface tension value.

6.4.3.5.1.3 The owner or operator of new or reconstructed affected sources may accept 40 dynes/ cm ($2.8 \times 10^{-3}$ lbf/ft) as measured by a stalagmometer or 33 dynes/ cm ($2.3 \times 10^{-3}$ lbf/ft) as measured by a tensiometer as the maximum surface tension value.

6.4.3.5.2 On and after the date on which the initial performance test is required to be completed under 3.7 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 the applicable maximum surface tension value in 6.4.3.5.1.1, 6.4.3.5.1.2, or 6.4.3.5.1.3 of this regulation, if the owner or operator is accepting this value in accordance with 6.4.3.5.1 of this regulation, 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 four 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 four 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 eight 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 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 four hours shall be resumed. A subsequent decrease in frequency shall follow the schedule laid out in 6.4.3.5.2.2 of this regulation. 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 four hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every eight 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 four hours shall 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 regulation.

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 regulation 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 regulation 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 (one inch) as the minimum foam blanket thickness that corresponds to compliance with the applicable emission limitation. All foam blanket measurements shall be taken in close proximity to the part 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 3.7 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 (one inch) if the owner or operator is using this value in accordance with 6.4.3.6.1 of this regulation, 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 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 four hours of tank operation. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every four hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by 6.0 of this regulation is once per four 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 shall be resumed. A subsequent decrease in frequency shall follow the schedule laid out in 6.4.3.6.2.2 of this regulation. For example, if an owner or operator had been monitoring an affected source once every four 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 four hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every four 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 shall 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 regulation.

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 limitation, the applicable monitoring requirements as identified 6.4.3.1 through 6.4.3.6 of this regulation and the operation and maintenance procedures of Table 6-1 of this regulation 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 limitation, the applicable monitoring requirements as identified in 6.4.3.1 through 6.4.3.6 of this regulation and the operation and maintenance procedures of Table 6-1 of this regulation 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 3.8.6.1, 3.8.6.3, 3.8.6.4, and 3.8.6.5 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 6.0 of this regulation 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 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 6.4 of this regulation 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 regulation verifying the performance of the device for reducing chromium emissions to the atmosphere to the level required by 6.0 of this regulation, a copy of the operation and maintenance plan referenced in 6.3.6 of this regulation including operation and maintenance procedures and housekeeping procedures, 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.

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 and 3.7 of this regulation. Performance tests shall be conducted under such conditions as the Department specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Department such records as may be necessary to determine the conditions of performance tests. 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 regulation. 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 existing affected source conducted performance testing within the last five years, the results of such testing may be used to demonstrate compliance with the applicable emission limitations in 6.3.3.1.2, 6.3.3.2.2, 6.3.3.3, and 6.3.4.2 of this regulation if:

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

6.5.2.1.2 The performance test was conducted under operating conditions that are representative of the conditions by which the affected source will be operated on and after September 19, 2014;

6.5.2.1.3 The affected source used the same add-on air pollution control device or devices that will be operated on and after September 19, 2014;

6.5.2.1.4 The performance test report contains the elements required in 6.5.1 of this regulation; and

6.5.2.1.5 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 regulation.

6.5.2.2 [Reserved]

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

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 6.0 of this regulation, sources using chromic acid baths shall demonstrate compliance with the emission limitations of 6.3 of this regulation by measuring the total chromium.

6.5.3.2 The California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, P.O. Box 2815, Sacramento, California 95812) 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 regulation, a minimum of three separate runs shall be conducted. The other requirements of 3.7 of this regulation that apply to affected sources, as indicated in Table 6-3 of this regulation, shall 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 3.7.5 of this regulation.

6.5.3.5 The South Coast Air Quality Management District (SCAQMD) Method 205.1, dated August 1991, may be used to determine the total chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks.

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 regulation.

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 3.2 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 regulation, 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 two 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 ductwork 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 (p) values for the velocity points and record. Determine the square root of the individual velocity point 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 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 regulation 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 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 6.0 of this regulation are identified in 6.5 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 regulation shall 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 regulation:

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 two hours. The calculated time is the minimum sample time required per test run.

6.5.5.3.3 Perform Method 306 or 306A 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 6-1:

$$VR_{inlet} = VR_{tot} * IDA_i / IA_{total} \qquad (6\text{-}1)$$

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 or 306A 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 6-2:

$$AMR_{sys} = VR_{inlet} * EL * 60 \text{ minutes/hour} \quad (6\text{-}2)$$

where:

$AMR_{sys}$ = the allowable mass emission rate of the system in mg/hr;

$VR_{inlet}$ = the total ventilation rate from the affected sources in dscm/min; and

EL = the applicable emission limitation in 6.3 of this regulation in mg/dscm.

The allowable mass emission rate ($AMR_{sys}$) calculated from equation 6-2 of this regulation should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 or 306A 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 regulation:

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

6.5.5.4.2 Determine the total ventilation rate for each type of affected source ($VR_{inlet,a}$) using equation 6-3:

$$VR_{inlet,a} = VR_{tot} * IDA_{i,a} / IA_{total} \quad (6\text{-}3)$$

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 or 306A 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

$A_{total}$ = 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 equations 6-4, 6-5, 6-6 or 6-7 as appropriate:

$$AMR_{hc1} = VR_{hc1} * EL_{hc1} * 60 \text{ minutes/hour} \quad (6\text{-}4)$$

$$AMR_{hc2} = VR_{hc2} * EL_{hc2} * 60 \text{ minutes/hour} \quad (6\text{-}5)$$

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

$$AMR_{ca} = VR_{ca} * EL_{ca} * 60 \text{ minutes/hour} \quad (6\text{-}7)$$

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 regulation 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 milligrams of total chromium per hour (mg/hr) using equation 6-8, including each type of affected source as appropriate:

$$AMR_{sys} = AMR_{hc1} + AMR_{hc2} + AMR_{dc} + AMR_{ca} \qquad (6\text{-}8)$$

The allowable mass emission rate calculated from equation 6-8 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 or 306A 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 regulation to demonstrate compliance with the emission limitations in 6.3 of this regulation shall submit the measurements and calculations to support these compliance methods with the notification of compliance status required in 6.8.5 of this regulation.

6.5.5.6 Each owner or operator that uses the special compliance provisions in 6.5 of this regulation to demonstrate compliance with the emission limitations in 6.3 of this regulation 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 emission rate 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 6.3.3.2.1.5 of this regulation prior to September 19, 2014.

6.5.6.1.1 The owner or operator of an existing enclosed hard chromium electroplating tank that is an affected source who chooses to meet the mass emission rate standard in 6.3.3.2.1.5 of this regulation 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 6-9, if the existing enclosed hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility:

$$MAMER = ETSA * K * 0.015 \text{ mg/dscm} \qquad (6\text{-}9)$$

where:

MAMER = the maximum allowable mass emission rate for enclosed hard chromium electroplating tanks in mg/hr;

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

K = the conversion factor, 425 dscm/($ft^2$-hr).

6.5.6.1.2 Compliance with the mass emission rate standard 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 6-9.

6.5.6.2 Procedures for calculating the maximum allowable mass emission rate for owners or operators who choose to meet the mass emission rate standard in 6.3.3.2.1.4 of this regulation prior to September 19, 2014.

6.5.6.2.1 The owner or operator of an existing enclosed hard chromium electroplating tank that is an affected source who chooses to meet the mass emission rate standard in 6.3.3.2.1.4 of this regulation 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 6-10, if the existing enclosed hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility:

$$MAMER = ETSA * K * 0.03 \text{ mg/dscm} \qquad (6\text{-}10)$$

where:

MAMER = the maximum allowable mass emission rate for enclosed hard chromium electroplating tanks in mg/hr;

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

K = the conversion factor, 425 dscm/($ft^2$-hr).

6.5.6.2.2 Compliance with the mass emission rate standard 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 6-10.

6.5.6.3 Procedures for calculating the maximum allowable mass emission rate for owners or operators who choose to meet the mass emission rate standard in 6.3.3.2.2.5 of this regulation on and after September 19, 2014.

6.5.6.3.1 The owner or operator of an existing enclosed hard chromium electroplating tank that is an affected source who chooses to meet the mass emission rate standard in 6.3.3.2.2.5 of this regulation 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 6-11, if the existing enclosed hard chromium electroplating tank had an initial startup after December 16, 1993 or is located at a large, hard chromium electroplating facility:

MAMER = ETSA * K * 0.011 mg/dscm (6-11)

where:

MAMER = the maximum allowable mass emission rate for enclosed hard chromium electroplating tanks in mg/hr;

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

K = the conversion factor, 425 dscm/($ft^2$-hr).

6.5.6.3.2 Compliance with the mass emission rate standard 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 6-11.

6.5.6.4 Procedures for calculating the maximum allowable mass emission rate for owners or operators who choose to meet the mass emission rate standard in 6.3.3.2.2.4 of this regulation on and after September 19, 2014.

6.5.6.4.1 The owner or operator of an existing enclosed hard chromium electroplating tank that is an affected source who chooses to meet the mass emission rate standard in 6.3.3.2.2.4 of this regulation 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 6-12, if the existing enclosed hard chromium electroplating tank had an initial startup on or before December 16, 1993 and is located at a small, hard chromium electroplating facility:

MAMER = ETSA * K * 0.015 mg/dscm (6-12)

where:

MAMER = the maximum allowable mass emission rate for enclosed hard chromium electroplating tanks in mg/hr;

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

K = the conversion factor, 425 dscm/($ft^2$-hr).

6.5.6.4.2 Compliance with the mass emission rate standard 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 6-12.

6.5.6.5 Procedures for calculating the maximum allowable mass emission rate for owners or operators of a new or reconstructed affected source who choose to meet the mass emission rate standard in 6.3.3.2.3.3 of this regulation.

6.5.6.5.1 The owner or operator of a new or reconstructed enclosed hard chromium electroplating tank that is an affected source who chooses to meet the mass emission rate standard in 6.3.3.2.3.3 of this regulation shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 6-13:

MAMER = ETSA * K * 0.006 mg/dscm. 6-13)

where:

MAMER = the maximum allowable mass emission rate for enclosed hard chromium electroplating tanks in mg/hr;

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

K = the conversion factor, 425 dscm/( $ft^2$-hr).

6.5.6.5.2 Compliance with the mass emission rate standard is demonstrated if the three-run average mass emission rate determined from testing using Method 306 or 306A in Appendix A of 40 CFR Part 63 is less than or equal to the maximum allowable mass emission rate calculated from equation 6-13.

6.6 Provisions for new and reconstructed sources.

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

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 3.5 of this regulation, as noted in Table 6-3 of this regulation, as well as the provisions of 6.6.2 of this regulation.

6.6.2.1 After September 11, 1999, no person may construct a new affected source or reconstruct an affected source subject to 6.0 of this regulation, or reconstruct a source such that it becomes an affected source subject to 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 regulation, as appropriate.

6.6.2.2 The notification of construction or reconstruction required in 6.6.2.1 of this regulation 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 3.2 of this regulation;

6.6.2.2.4 An identification of 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 limitations of 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 regulation shall include the following in addition to the information required in 6.6.2.2 of this regulation:

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 regulation;

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 6.0 of this regulation 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 6.0 of this regulation, the owner or operator need not submit the information required in 6.6.2.3.3 through 6.6.2.3.5 of this regulation.

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 regulation 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. Notwithstanding the previous sentence, construction or reconstruction can not commence prior to receipt of the Department's approval of the 7 **DE Admin. Code** 1102 permit to construct application.

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 regulation and an application for approval of construction or reconstruction in accordance with requirements of 3.5 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 7 **DE Admin. Code** 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 7 **DE Admin. Code** 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 regulation or the application for approval of construction or reconstruction required by 3.5 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.

6.7 Recordkeeping requirements.

6.7.1 The owner or operator of each affected source subject to these standards shall fulfill all recordkeeping requirements of 6.7 of this regulation and of 3.0 of this regulation as identified in Table 6-3 of this regulation.

6.7.2 The owner or operator of an affected source subject to the provisions of 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 operation and maintenance procedures in 6.3.6 of this regulation and Table 6-1 of this regulation 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 to minimize emissions in accordance with 6.3.1.2 of this regulation, including corrective actions to restore malfunctioning process, air pollution control equipment, and monitoring equipment to its normal or usual manner of operation;

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 regulation;

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 provisions in 6.5.5 of this regulation;

6.7.2.8 Records of monitoring data required in 6.4.3 of this regulation 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 6.3.3.3 of this regulation;

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 and records of the fume suppressant manufacturer and product name;

6.7.2.14 For sources complying with 6.3.5 of this regulation, 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 3.10.6 of this regulation; and

6.7.2.16 All documentation supporting the notifications and reports required by 6.8 of this regulation and by 3.9 and 3.10 of this regulation, as identified in Table 6-3 of this regulation.

6.7.2.17 There are no recordkeeping requirements associated with the housekeeping procedures in Table 6-2 of this regulation.

6.7.3 All records shall be maintained for a period of five years in accordance with 3.10.2.1 of this regulation.

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 regulation and in 3.0 of this regulation as identified in Table 6-3 of this regulation. These reports shall be made to the Department and to the Administrator, in accordance with 3.10.1.4 of this regulation.

6.8.1.1 Reports required by 6.8 and 3.0 of this regulation 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 submittal date.

6.8.1.1.2 Submittals sent by other methods shall be received by the Department and the Administrator on or before the specified submittal 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 regulation apply to the owner or operator of an affected source when such source becomes subject to the provisions of 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 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 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 6.3.3.3 of this regulation 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 3.2 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 regulation, 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 3.7.2.2 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 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 3.2 of this regulation) who shall certify its accuracy, attesting to whether the affected source has complied with 6.0 of this regulation. If the State has been delegated the authority, the notification of compliance status shall be submitted to the Department (with copy to the Administrator). 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 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 regulation, including measurements and calculations to support the special compliance provisions in 6.5.5 of this regulation 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 regulation to comply with the standards. (If the owner or operator is subject to the construction and reconstruction provisions in 6.6 of this regulation 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 regulation, 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 regulation, 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 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 operation and maintenance procedures in 6.3.6 of this regulation;

6.8.5.2.8 If the owner or operator is determining facility size based on actual cumulative rectifier capacity in accordance with 6.3.3.3 of this regulation, 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 6.0 of this regulation.

6.8.5.3 For sources required to conduct a performance test in 6.4.2 of this regulation, 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 6.4.2 and 3.7 of this regulation.

6.8.5.4 For sources that are not required to complete a performance test in accordance with 6.4.2 of this regulation, 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 regulation.

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 6.4.2 and 3.7 of this regulation. If the State has been delegated the authority, the owner or operator of an affected source should report performance test results to the Department (with copy to the Administrator).

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 regulation.

6.8.6.3 Within 60 days after the date of completing each performance test (defined in 3.2 of this regulation) the owner or operator shall submit the results of the performance tests, including any associated fuel analyses, required by 6.0 of this regulation to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data shall be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive, or other commonly used electronic storage media to the EPA. The electronic media shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted shall be submitted to the EPA via CDX as described earlier in 6.8.6.3 of this regulation. At the discretion of the Department, the owner or operator shall also submit these reports, including the confidential business information, to the Department in the format specified by the Department. For any performance test conducted using test methods that are not listed on the ERT website, the owner or operator shall submit the results of the performance test to the Administrator and the Department at the appropriate addresses listed in 3.13 of this regulation.

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 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 regulation, 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 regulation show that the emission limitation 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 regulation 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 one full year (e.g., four quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limitation;

6.8.7.2.1.2 The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of 6.0 and 3.0 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 regulation.

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 five-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 operation and maintenance procedures. 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 regulation show that the source is not in compliance with the relevant emission limitation, the frequency of reporting shall revert to quarterly, and the owner or operator shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limitation 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 regulation.

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 regulation shall prepare a summary report to document the ongoing compliance status of the source. The report shall 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 regulation;

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 regulation;

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 6.3.3.3 of this regulation, 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 The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 6.3.1.2 of this regulation, including actions taken to correct a malfunction;

6.8.7.3.10 A certification by a responsible official, as defined in 3.2 of this regulation, that the operation and maintenance procedures in 6.3.6 of this regulation were followed in accordance with the operation and maintenance plan for the source;

6.8.7.3.11 If the operation and maintenance plan required in 6.3.6.3 of this regulation 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 regulation documenting that the operation and maintenance plan was not followed;

6.8.7.3.12 A description of any changes in monitoring, processes, or controls since the last reporting period;

6.8.7.3.13 The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

6.8.7.3.14 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 regulation, 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 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 regulation do not alleviate affected area sources from complying with the requirements of 7 **DE Admin. Code** 1102 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 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 regulation, shall be completed and retained on site, and shall be made available to the Department upon request. The report shall be completed annually except as provided in 6.8.8.2 of this regulation.

6.8.8.2 Reports of exceedances.

6.8.8.2.1 If either of the following conditions is 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 regulation) is 1% or greater of the total operating time for the reporting period or

6.8.8.2.1.2 The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5% 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 regulation, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency under 6.8.8.3 of this regulation 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 one full year (e.g., two semiannual or four quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limitation;

6.8.8.3.1.2 The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of 6.0 and 3.0 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 regulation.

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 five-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 operation and maintenance procedures. 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 regulation show that the source is not in compliance with the relevant emission limitation, the frequency of reporting shall revert to semiannual, and the owner or operator shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limitation 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 regulation.

6.8.9 Reports associated with trivalent chromium baths. The requirements in 6.8.9 of this regulation do not alleviate affected sources from complying with the requirements of 7 **DE Admin. Code** 1102 and 1130 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 regulation are not subject to 6.8.1 through 6.8.8 of this regulation, but shall instead submit the following reports:

6.8.9.1 No 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 regulation;

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 regulation; 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 regulation 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 regulation 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 6.8.3.1 of this regulation; and

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

6.9 [Reserved]

**Table 6-3 - Applicability of 3.0 to 6.0 of this regulation**

| General Provisions Reference | Applies to 6.0 | Comments |
|---|---|---|
| 3.1.1.1 | Yes | Additional terms defined in 6.2 of this regulation; when overlap between 6.2 and 3.2 of this regulation occurs, 6.2 takes precedence. |
| 3.1.1.2 | Yes | |
| 3.1.1.3 | Yes | |
| 3.1.1.4 | Yes | 6.0 of this regulation clarifies the applicability of each provision in 3.0 of this regulation to sources subject to 6.0. |
| 3.1.1.5 | No | Reserved. |
| 3.1.1.6 | Yes | |
| 3.1.1.7 | No | Reserved. |
| 3.1.1.8 | No | Reserved. |
| 3.1.1.9 | No | Reserved. |
| 3.1.1.10 | Yes | |
| 3.1.1.11 | Yes | 6.8.1 of this regulation also allows report submissions via fax and on electronic media. |
| 3.1.1.12 | Yes | |
| 3.1.2.1 | No | 6.1 of this regulation specifies applicability. |
| 3.1.2.2 | No | Reserved. |
| 3.1.2.3 | No | This provision in 3.0 of this regulation is being deleted. Also, all affected area and major sources are subject to 6.0 of this regulation; there are no exemptions. |
| 3.1.3.1 | Yes | 6.0 of this regulation clarifies the applicability of each provision in 3.0 of this regulation to sources subject to 6.0. |
| 3.1.3.2 | Yes | 6.1.5 of this regulation exempts area sources from the obligation to obtain Title V operating permits. |
| 3.1.3.3-3.1.3.4 | No | Reserved. |
| 3.1.3.5 | No | 6.0 of this regulation clarifies that an area source that becomes a major source is subject to the requirements for major sources. |
| 3.1.4 | No | Reserved. |
| 3.1.5 | Yes | |
| 3.2 | Yes | Additional terms defined in 6.2 of this regulation; when overlap between 6.2 and 3.2 of this regulation occurs, 6.2 takes precedence. |
| 3.3 | Yes | Other units used in 6.0 of this regulation are defined in 6.0. |
| 3.4.1.1-3.4.1.2 | Yes | |
| 3.4.1.3-3.4.1.5 | No | Reserved. |
| 3.4.2-3.4.3 | Yes | |
| 3.5.1 | Yes | Except replace the term "source" and "stationary source" in 3.5.1.1 and 3.5.1.2 of this regulation with "affected sources." |
| 3.5.2.1 | Yes | |
| 3.5.2.2 | No | Reserved. |
| 3.5.2.3 | Yes | Applies only to major affected sources. |
| 3.5.2.4 | No | 6.6 of this regulation specifies requirements for the notification of construction or reconstruction for affected sources that are not major sources. |
| 3.5.2.5 | No | Reserved. |
| 3.5.2.6 | Yes | |
| 3.5.3 | No | Reserved. |
| 3.5.4.1.1 | No | 6.6.2.5 of this regulation specifies when the application or notification shall be submitted. |
| 3.5.4.1.2-3.5.4.1.2.6 | Yes | Applies to major affected sources that are new or reconstructed. |
| 3.5.4.1.2.7 | No | Reserved. |
| 3.5.4.1.2.8 | Yes | |
| 3.5.4.1.2.9 | No | Reserved. |
| 3.5.4.1.2.10 | Yes | |

| | | |
|---|---|---|
| 3.5.4.1.3 | Yes | Except information should be submitted with the notification of compliance status required in 6.8.5 of this regulation. |
| 3.5.4.2 | Yes | Applies to major affected sources that are new or reconstructed except: (1) replace "source" in 3.5.4.2 of this regulation with "affected source"; and (2) actual control efficiencies are submitted with the notification of compliance status required in 6.8.5 of this regulation. |
| 3.5.4.3-3.5.4.4 | Yes | Applies to major affected sources that are new or reconstructed. |
| 3.5.5 | Yes | Applies to major affected sources that are new or reconstructed. |
| 3.5.6.1 | Yes | Except replace "source" in 3.5.6.1 of this regulation with "affected source." |
| 3.5.6.2 | No | New or reconstructed affected sources shall submit the request for approval of construction or reconstruction under 3.5.6 of this regulation by the deadline specified in 6.6.2.5 of this regulation. |
| 3.6.1 | Yes | |
| 3.6.2.1-3.6.2.2 | Yes | Except replace "source" in 3.6.2.1 and 3.6.2.2 of this regulation with "affected source." |
| 3.6.2.3-3.6.2.4 | Yes | |
| 3.6.2.5 | Yes | Except replace "source" in 3.6.2.5 of this regulation with "affected source." |
| 3.6.2.6 | No | Reserved. |
| 3.6.2.7 | No | Provisions for new area sources that become major sources are contained in 6.4.1.4 of this regulation. |
| 3.6.3.1-3.6.3.2 | Yes | Except replace "source" in 3.6.3.1 and 3.6.3.2 of this regulation with "affected source." |
| 3.6.3.3-3.6.3.4 | No | Reserved. |
| 3.6.3.5 | No | Compliance provisions for existing area sources that become major sources are contained in 6.4.1.3 of this regulation. |
| 3.6.4 | No | Reserved. |
| 3.6.5 | No | 6.3.6 of this regulation contains work practice standards (operation and maintenance requirements) that override these provisions. |
| 3.6.6.1 | No | 6.3.2 of this regulation specifies when the standards apply. |
| 3.6.6.2.1-3.6.6.2.2 | Yes | |
| 3.6.6.2.3 | No | 6.5.2 of this regulation specifies instances in which previous performance test results for existing sources are acceptable. |
| 3.6.6.2.4 | Yes | |
| 3.6.6.2.5 | Yes | |
| 3.6.6.3 | Yes | |
| 3.6.7 | Yes | |
| 3.6.8 | No | 6.0 of this regulation does not contain any opacity or visible emission standards. |
| 3.6.9.1 | Yes | |
| 3.6.9.2 | Yes | Except replace "source" in 3.6.9.2.1 and 3.6.9.2.2 of this regulation with "affected source". |
| 3.6.9.3 | Yes | |
| 3.6.9.4.1 | No | 6.4.1.6 of this regulation specifies the procedures for obtaining an extension of compliance and the date by which such requests shall be submitted. |
| 3.6.9.4.2 | Yes | |
| 3.6.9.5 | Yes | |
| 3.6.9.6.1 | Yes | This paragraph only references "3.6.9.4 of this regulation" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. |
| 3.6.9.6.2 | Yes | |
| 3.6.9.7 | Yes | |
| 3.6.9.8 | Yes | This paragraph only references "3.6.9.4 through 3.6.9.6 of this regulation" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. |
| 3.6.9.9 | Yes | This paragraph only references "3.6.9.4 through 3.6.9.6 of this regulation" and "3.6.9.4 and 3.6.9.5 of this regulation" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. |
| 3.6.9.10.1-3.6.9.10.4 | Yes | |
| 3.6.9.10.5.1 | Yes | This paragraph only references "3.6.9.4 of this regulation" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. |
| 3.6.9.10.5.2 | Yes | |
| 3.6.9.11 | Yes | |
| 3.6.9.12.1 | Yes | This paragraph only references "3.6.9.4.1 or 3.6.9.5 of this regulation" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. |
| 3.6.9.12.2-3.6.9.12.4 | Yes | |
| 3.6.9.13 | Yes | |
| 3.6.9.14 | Yes | |
| 3.6.9.15 | No | Reserved. |
| 3.6.9.16 | Yes | |

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| 3.6.10 | Yes | |
| 3.7.1.1-3.7.1.2 | Yes | |
| 3.7.1.2.1-2.7.1.2.8 | No | Reserved. |
| 3.7.1.2.9 | Yes | |
| 3.7.1.3 | Yes | |
| 3.7.2.1 | No | 6.8.4 of this regulation requires notification prior to the performance test. 6.5.1 of this regulation requires submission of a site-specific test plan upon request. |
| 3.7.2.2 | Yes | |
| 3.7.3 | No | 6.5.1 of this regulation specifies what the test plan should contain, but does not require test plan approval or performance audit samples. |
| 3.7.4 | Yes | Except replace "source" in the first sentence of 3.7.4 of this regulation with "affected source." |
| 3.7.5.1 | No | See 6.5.1 of this regulation. Any cross reference to 3.7.5.1 of this regulation in any other general provision incorporated by reference shall be treated as a cross-reference to 6.5.1. |
| 3.7.5.2-3.7.5.4 | Yes | 6.0 of this regulation also contains test methods specific to affected sources covered by 6.0. |
| 3.7.6 | Yes | 6.5.3.2 of this regulation identifies CARB Method 425 as acceptable under certain conditions. |
| 3.7.7.1 | No | 6.0 of this regulation identifies the items to be reported in the compliance test [6.5.1 of this regulation] and the timeframe for submitting the results [6.8.6 of this regulation]. |
| 3.7.7.2 | No | Reserved. |
| 3.7.7.3 | Yes | |
| 3.7.8.1-3.7.8.2 | Yes | |
| 3.7.8.3.1 | Yes | This paragraph only references "3.6.9" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. |
| 3.7.8.3.2-3.7.8.3.3 | Yes | |
| 3.7.8.4-3.7.8.5 | Yes | |
| 3.8.1.1 | Yes | |
| 3.8.1.2 | No | Work practice standards are contained in 6.3.6 of this regulation. |
| 3.8.1.3 | No | Reserved. |
| 3.8.1.4 | No | |
| 3.8.2.1 | Yes | |
| 3.8.2.2 | No | 6.5.4 of this regulation specifies the monitoring location when there are multiple sources. |
| 3.8.2.3 | No | 6.8.7.4 of this regulation identifies reporting requirements when multiple monitors are used. |
| 3.8.3.1.1 | No | 6.0 of this regulation requires proper maintenance of monitoring devices expected to be used by sources subject to 6.0. |
| 3.8.3.1.2 | No | 6.3.6.3.4 of this regulation specifies reporting when the O&M plan is not followed. |
| 3.8.3.1.3 | No | 6.3.6.2 of this regulation identifies the criteria for whether O&M procedures are acceptable. |
| 3.8.3.2-3.8.3.3 | No | 6.5.4.2 of this regulation requires appropriate use of monitoring devices. |
| 3.8.3.4-3.8.3.8 | No | |
| 3.8.4 | No | Maintenance of monitoring devices is required in 6.3.6 and 6.5.4.2 of this regulation. |
| 3.8.5 | No | There are no performance evaluation procedures for the monitoring devices expected to be used to comply with 6.0 of this regulation. |
| 3.8.6.1 | Yes | |
| 3.8.6.2 | No | Instances in which the Administrator may approve alternatives to the monitoring methods and procedures of 6.0 of this regulation are contained in 6.4.3.8 of this regulation. |
| 3.8.6.3 | Yes | |
| 3.8.6.4 | Yes | |
| 3.8.6.5 | Yes | |
| 3.8.6.6 | No | 6.0 of this regulation does not require the use of CEM's. |
| 3.8.7 | No | Monitoring data does not need to be reduced for reporting purposes because 6.0 of this regulation requires measurement once/day. |
| 3.9.1 | Yes | |
| 3.9.2.1.1-3.9.2.1.2 | 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. |
| 3.9.2.1.3 | No | 6.8.3.2 of this regulation specifies initial notification requirements for new or reconstructed affected sources. |
| 3.9.2.2 | No | 6.8.3.1 of this regulation specifies the information to be contained in the initial notification. |
| 3.9.2.3 | No | 6.8.3.2 of this regulation specifies notification requirements for new or reconstructed sources that are not major affected sources. |
| 3.9.2.4 | No | |
| 3.9.2.5 | No | |

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| 3.9.3 | Yes | This paragraph only references "3.6.9.4 through 3.6.9.6" for compliance extension provisions. But, 6.4.1.6 of this regulation also contains provisions for requesting a compliance extension. 6.0 of this regulation provides a different timeframe for submitting the request than 3.6.9.4 of this regulation. |
| 3.9.4 | Yes | This paragraph only references "the notification dates established in 3.9.7 of this regulation". But, 6.8 of this regulation also contains notification dates. |
| 3.9.5 | No | Notification of performance test is required in 6.8.4 of this regulation. |
| 3.9.6 | No | |
| 3.9.7 | No | 6.0 of this regulation does not require a performance evaluation or relative accuracy test for monitoring devices. |
| 3.9.8.1-3.9.8.3 | No | 6.8.5 of this regulation specifies information to be contained in the notification of compliance status and the timeframe for submitting this information. |
| 3.9.8.4 | No | Reserved. |
| 3.9.8.5 | No | Similar language has been incorporated into 6.8.5.2.3 of this regulation. |
| 3.9.8.6 | Yes | |
| 3.9.9 | Yes | |
| 3.9.10 | Yes | |
| 3.10.1 | Yes | |
| 3.10.2.1 | Yes | |
| 3.10.2.2 | No | 6.7.2 of this regulation specifies the records that shall be maintained. |
| 3.10.2.3 | No | 6.0 of this regulation applies to major and area sources. |
| 3.10.3 | No | Applicable requirements of 3.10.3 of this regulation have been incorporated into 6.7.2 of this regulation. |
| 3.10.4.1 | Yes | |
| 3.10.4.2 | No | 6.8.6 of this regulation specifies the timeframe for reporting performance test results. |
| 3.10.4.3 | No | 6.0 of this regulation does not contain opacity or visible emissions standards. |
| 3.10.4.4 | Yes | |
| 3.10.4.5 | No | 6.3.6.3.4 and 6.8.7.3 of this regulation specify reporting associated with malfunctions. |
| 3.10.5 | No | 6.8.7 and 6.8.8 of this regulation specify the frequency of periodic reports of monitoring data used to establish compliance. Applicable requirements of 3.10.5 of this regulation have been incorporated into 6.8.7 and 6.8.8. |
| 3.10.6 | Yes | |
| 3.11 | No | Flares will not be used to comply with the emission limitations. |
| 3.12-3.15 | Yes | |

**11 DE Reg. 683 (11/01/07)**
**17 DE Reg. 328 (09/01/13)**