



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAR 27 2015

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Richard Blasi  
President  
Chromium, Inc.  
1930 Roosevelt Road  
Racine, Wisconsin 53406

Re: Chromium, Inc.  
Administrative Consent Order EPA 5-15-113(a)-WI-02

Dear Mr. Blasi:

Enclosed is an executed original of the Administrative Consent Order regarding the above captioned case.

If you have any questions about the Order, please contact Ray Cullen at (312) 886-0538 or Kimberly Portnoy, Associate Regional Counsel, at (312) 886-7439.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah G. Marshall".

Sarah G. Marshall  
Chief  
Air Enforcement and Compliance Assurance Section (MI/WI)

Enclosure

cc: Dan Schramm, WDNR  
Bill Baumann, WDNR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5

In the Matter of:	)	EPA-5-15-113(a)-WI-02
	)	
Chromium, Inc.	)	Proceeding Under Sections 113(a)(3) and
Racine, Wisconsin	)	114(a)(1) of the Clean Air Act, 42 U.S.C.
	)	§§ 7413(a)(3) and 7414(a)(1)

Administrative Consent Order

1. The Director of the Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 5, is issuing this Order to Chromium, Inc. (Chromium) under Sections 113(a)(3) and 114(a)(1) of the Clean Air Act (CAA), 42 U.S.C. §§ 7413(a)(3) and 7414(a)(1).

Statutory Authority

2. Under Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), whenever, on the basis of any information available to the Administrator of EPA, the Administrator finds that any person has violated, or is in violation of, *inter alia*, any requirement of Subchapter I of the CAA, the Administrator may issue an order requiring such person to comply with such requirement or prohibition. The Administrator has delegated this authority to the Director of the Air and Radiation Division, Region 5.

3. The Administrator of EPA may require any person who owns or operates an emission source to, among other things, establish and maintain records, make reports, sample emissions, and keep records on control equipment parameters under Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1). The Administrator has delegated this authority to the Director of the Air and Radiation Division, Region 5.

## Statutory and Regulatory Background

4. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), authorizes EPA to promulgate regulations for particular industrial sources that emit one or more of the hazardous air pollutants (HAPs) listed in Section 112(b) of the CAA, 42 U.S.C. § 7412(b), in significant quantities. EPA codifies these regulations at 40 C.F.R. Part 63.

5. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks at 40 C.F.R. Part 63, Subpart N (Subpart N) on January 25, 1995, codified at 40 C.F.R. §§ 63.340-63.348, and the National Emission Standards for Plating and Polishing Operations at 40 C.F.R. Part 63, Subpart WWWW (Subpart 6W) on July 1, 2008, codified at 40 C.F.R. §§ 63.11504-63.11513. 60 *Fed. Reg.* 4948 (January 25, 1995) and 73 *Fed. Reg.* 37741 (July 1, 2008), respectively. On September 19, 2012, EPA amended Subpart N by, among other things, lowering the emission limitations in § 63.342. 77 *Fed. Reg.* 58243 (September 19, 2012).

### Subpart N Applicability

6. Pursuant to 40 C.F.R. § 63.340(a), Subpart N applies, in part, to each chromium-electroplating tank at facilities performing hard-chromium electroplating.

7. 40 C.F.R. § 63.341 defines “hard-chromium electroplating” as the 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.

8. 40 C.F.R. § 63.341 defines a “large, hard chromium-electroplating facility” as 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.

9. 40 C.F.R. § 63.341 defines “maximum cumulative potential rectifier capacity” as the summation of the total installed rectifier capacity associated with the hard chromium-electroplating tanks at a facility, expressed in amperes, multiplied by the maximum potential operating schedule of 8,400 hours per year and 0.7, which assumes that electrodes are energized 70 percent of the operating time.

10. 40 C.F.R. § 63.341 defines “tank operation” as the time in which current and/or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank.

11. 40 C.F.R. § 63.341 defines a “chemical fume suppressant” as any chemical agent that reduces or suppresses fumes or mists at the surface of an electroplating or anodizing bath.

12. 40 C.F.R. § 63.341 defines a “wetting agent” as the type of commercially available chemical fume suppressant that materially reduces the surface tension of a liquid.

13. 40 C.F.R. § 63.341 defines a “composite mesh-pad system” as an add-on pollution control device typically consisting of several mesh-pad stages, where the first stage removes large particles, the second stage, which consists of the composite mesh pad, removes smaller particles, and may include a final stage that removes any reentrained particles not collected by the composite mesh pad.

#### Subpart N Emission Standards

14. 40 C.F.R. § 63.342(c)(1) requires that the owner or operator of an open-surface, hard chromium-electroplating tank located at a large, hard chromium-electroplating facility control chromium emissions from that tank during tank operation by either (i) not allowing the

concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.011 milligrams per dry standard cubic meter (mg/dscm); or (ii) if using a chemical fume suppressant containing a wetting agent, by not allowing the surface tension of the electroplating bath contained within the tank to exceed 40 dynes per centimeter (dynes/cm) as measured by a stalagmometer or 33 dynes/cm as measured by a tensiometer.

#### Subpart N Operation and Maintenance Requirements

15. 40 C.F.R. § 63.342(f) states that all owners and operators subject to the standards in §§ 63.342(c) and (d) of this section are subject to operation and maintenance practices.

16. 40 C.F.R. §§ 63.342(a)(1) and 63.342(f)(1)(i) require that the owner or operator of an affected source operate and maintain that source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices at all times, including periods of startup, shutdown, and malfunction.

17. Table 1 of 40 C.F.R. § 63.342 states that for composite mesh-pad systems, the owner or operator shall: 1) visually inspect the device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device; 2) visually inspect the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist; 3) visually inspect ductwork from the tank to the control device to ensure there are no leaks; and 4) perform washdown of the composite mesh pads in accordance with manufacturer's recommendations.

#### Subpart N Initial Compliance Requirements

18. 40 C.F.R. § 63.343(b)(1) requires that the owner or operator of an affected source conduct an initial performance test as required under § 63.7 using the procedures and test methods listed in §§ 63.7 and 63.344, with exceptions not relevant here.

19. 40 C.F.R. § 63.7(a)(3) provides that the Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by Section 114 of the CAA.

20. 40 C.F.R. § 63.7(b)(1) requires that the owner or operator of an affected source notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

21. 40 C.F.R. § 63.7(c)(2)(i) requires that the test plan include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

22. 40 C.F.R. § 63.343(c)(1)(i) requires that the owner or operator of an affected source complying with the emission limitations in § 63.342 through the use of a composite mesh-pad system determine the outlet chromium concentration using the test methods and procedures in § 63.344(c), and establish as a site-specific operating parameter the pressure drop across the system during the initial performance test, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in § 63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept  $\pm 2$  inches of water column from this value as the compliant range.

### Subpart N Monitoring Requirements

23. 40 C.F.R. § 63.343(c) requires that the owner or operator of an affected source subject to the emission limitations of this subpart conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation.

24. 40 C.F.R. § 63.343(c)(1)(ii) requires that the owner or operator of an affected source complying with the emission limitations in § 63.342 through the use of a composite mesh-pad system monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating, on and after the date on which the initial performance test is required to be completed under § 63.7.

### Subpart N Recordkeeping Requirements

25. 40 C.F.R. § 63.346(b)(1) requires that the owner or operator of an affected source subject to the provisions of this subpart maintain inspection records for the add-on control air pollution control device, if such a device is used, and monitoring equipment, to document that the inspections and maintenance required by the work practice standards of § 63.342(f) and Table 1 of § 63.342 have taken place.

26. 40 C.F.R. § 63.346(b)(8) requires that the owner or operator of an affected source subject to the provisions in this subpart maintain records of monitoring data required by § 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.

### Subpart 6W Applicability

27. Pursuant to 40 C.F.R. § 63.11504(a), Subpart 6W applies to the owner or operator of a plating and polishing facility that: 1) is an area source of HAP emissions; 2) uses or has

emissions of compounds of one or more plating and polishing metal HAPs; and 3) among other things, is engaged in dry mechanical polishing of finished metals and formed products after plating or thermal spraying.

28. 40 C.F.R. § 63.11511 defines a “plating and polishing facility” as a facility engaged in, among other things, dry mechanical polishing of finished metals and formed products after plating or thermal spraying that uses or emits any of the plating and polishing metal HAPs, as defined in this section.

29. 40 C.F.R. § 63.11504(a)(2) defines an “area source of HAP emissions” as any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 10 tons per year (tpy) or more and any combination of HAPs at a rate of 25 tpy or more.

30. 40 C.F.R. §§ 63.11504(a)(3) and 63.11511 define a “plating and polishing metal HAP” as any compound of cadmium, chromium, lead, manganese, and nickel, or any of these metals, other than lead, in the elemental form. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and does not contain manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

31. 40 C.F.R. § 63.11511 defines “dry mechanical polishing” as a process used for removing defects from and smoothing the surface of finished metals and formed products after plating or thermal spraying with any of the plating and polishing metal HAPs, as defined in this section, using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected

process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

32. Pursuant to 40 C.F.R. § 63.11505(a), Subpart 6W applies to each new or existing affected source, which, in part, includes each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAPs.

33. 40 C.F.R. § 63.11505(b) states that an affected source is “existing” if construction or reconstruction of the source occurred on or before March 14, 2008.

#### Subpart 6W Recordkeeping and Reporting Requirements

34. 40 C.F.R. § 63.11509(a) requires that the owner or operator of an existing affected source submit an Initial Notification that includes the information specified in 40 C.F.R. § 63.9(b)(2)(i) through (iv) of the General Provisions of Part 63 and a description of the compliance method for the affected source no later than 120 calendar days after July 1, 2008.

35. 40 C.F.R. §§ 63.11508(a) and 63.11509(b) require that the owner or operator of an affected source submit a Notification of Compliance Status before the close of business on the compliance date specified in 40 C.F.R. § 63.11506 and that includes: 1) a list of affected sources and the plating and polishing metal HAPs used in, or emitted by, those sources; 2) the methods used to comply with the applicable management practices and equipment standards; 3) a description of the capture and emission control systems used to comply with the applicable emission standards; and 4) a statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

36. 40 C.F.R. § 63.11508(d)(2) requires that the owner or operator of an affected source prepare an annual compliance certification to demonstrate continuous compliance, in accordance with the requirements of 40 C.F.R. § 63.11509(c).

37. 40 C.F.R. § 63.11509(c) requires that the owner or operator of an affected source prepare an annual certification of compliance report in accordance with 40 C.F.R.

§ 63.11509(c)(1) through (7).

38. 40 C.F.R. § 63.11509(c)(2)(ii) requires that the owner or operator of a dry mechanical polishing operation that is subject to § 63.11507(e) state in its annual compliance certification that it has operated and maintained the control system according to the manufacturer's specifications and instructions.

39. 40 C.F.R. § 63.11509(c)(7) requires that the owner or operator of an affected source prepare each annual compliance report no later than January 31 of the year immediately following the reporting period, and requires that each annual compliance report be kept in a readily-accessible location for inspector review. The owner or operator is not required to submit these reports unless a deviation from the requirements of Subpart 6W has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report, and postmarked no later than January 31 of the year immediately following the reporting period.

40. 40 C.F.R. §§ 63.11509(e) and (f) requires that the owner or operator of an affected source keep: 1) copies of the Initial Notification and Notification of Compliance Status that it submitted and all documentation supporting these notifications; 2) the records specified in 40 C.F.R. § 63.10(b)(2)(i) through (iii) and (xiv); and 3) the records required to show continuous compliance with each applicable management practice, as specified in 40 C.F.R. § 63.11508(d). These records must be kept for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

## Findings

41. Since June 2001, Chromium has owned and operated a plating facility at 1930 Roosevelt Road, Racine, Wisconsin (Chromium Facility), where it conducts industrial “hard-chromium electroplating” of mostly steel parts, as that term is defined in 40 C.F.R. § 63.341.

42. Chromium owns and operates an “emission source” within the meaning of Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1) and is therefore subject to the requirements of Section 114(a)(1) of the CAA.

43. EPA inspected the Chromium Facility for compliance with Subparts N and 6W on November 4, 2013.

44. On February 26, 2014, EPA issued an information request to Chromium under Section 114(a) of the CAA, 42 U.S.C. § 7414(a).

45. In its April 16, 2014 response to EPA’s information request, Chromium stated that its facility has a maximum cumulative potential rectifier capacity of 99,960,000 ampere-hours per year, making it a “large, hard chromium-electroplating facility,” as that term is defined in 40 C.F.R. § 63.341.

46. The Chromium Facility consists of two existing hexavalent chromium-electroplating tanks subject to Subpart N, each equipped with a “composite mesh-pad system” for emissions control, as that term is defined in 40 C.F.R. § 63.341.

47. During the inspection, a Chromium representative stated that Chromium never conducted a performance test of either composite mesh-pad system to establish a range of compliant pressure drop values in order to demonstrate compliance with the applicable emission limit in Subpart N.

48. During the inspection, a Chromium representative stated that Chromium never monitored and recorded pressure drops across either of the composite mesh-pad systems.

49. In its April 16, 2014 response to EPA's information request, Chromium also failed to provide records that it inspected the composite mesh-pad systems as required by Subpart N, or provide evidence that it followed the applicable operation and maintenance practices in Table 1 of 40 C.F.R. § 63.342.

50. Chromium also added a "fume suppressant" containing a "wetting agent" to the hard chromium-electroplating tanks for emissions control, as those terms are defined in 40 C.F.R. § 63.341, but failed to monitor and record the surface tension of the tank baths to demonstrate continuous compliance with the applicable emission limit in Subpart N.

51. Chromium is subject to the requirements of Subpart 6W because it: 1) owns and operates a facility that is an "area source of HAP emissions," as that term is defined at 40 C.F.R. § 63.11504(a)(2); 2) uses chromium, which is a "plating and polishing metal HAP," as that term is defined at 40 C.F.R. §§ 63.11504(a)(3) and 63.11511; and 3) owns and operates an "existing" "dry mechanical polisher," as those terms are defined at 40 C.F.R. §§ 63.11505(b) and 63.11511, respectively.

52. On August 19, 2014, EPA issued to Chromium a Finding of Violation (FOV) alleging that it failed to 1) operate and maintain its hard chromium-electroplating tanks and composite mesh-pad systems in a manner consistent with good air pollution control practices; 2) either conduct an initial performance test of its composite mesh-pad systems and monitor and record the established pressure drop across the systems or monitor and record the surface tension of the tank baths; and 3) submit the Initial Notification and Notification of Compliance Status

and prepare annual certification of compliance reports for its dry mechanical polisher as required by Subpart 6W.

53. On October 7, 2014, representatives from Chromium and EPA held a conference to discuss the violations alleged in the August 19, 2014 FOV.

54. Shortly after the October 7, 2014 conference, Chromium's consultant informed EPA that Chromium will comply with the Subpart N emission standards for its hard chromium-electroplating tanks by using the composite mesh-pad systems equipped on the tanks to comply with 40 C.F.R. § 63.342(c)(1)(i).

55. On October 21, 2014, Chromium's consultant emailed to EPA the Initial Notification, the Notification of Compliance Status, and the annual certification of compliance reports for 2010 through 2013 for the dry mechanical polisher as required by Subpart 6W.

#### **Compliance Program**

56. Effective immediately, Chromium shall maintain inspection records for the composite mesh-pad systems equipped on its hard chromium-electroplating tanks and associated monitoring equipment to document the inspections and maintenance required by the work practice standards of § 63.342(f) and Table 1 of § 63.342.

57. Within 30 days of the effective date of this Order, Chromium shall submit a test plan for EPA approval for performance testing to 1) measure chromium emitted to the atmosphere from the composite mesh-pad systems on its hard chromium-electroplating tanks to confirm compliance with the 0.011 mg/dscm emission limit in 40 C.F.R. § 63.342(c)(1)(i); and 2) establish as a site-specific operating parameter the pressure drop across each system, setting the value that corresponds to compliance with the emission limit, using the procedures in 40 C.F.R. § 63.344(d)(5). Chromium shall conduct the performance testing in accordance with

40 C.F.R. Part 63, Appendix A; Methods 306 or 306A. The test plan shall describe at least three sampling runs, with each run lasting at least 120 minutes and having a sample volume of at least 1.70 dscm, and shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance program. Data quality objectives are the pre-test expectations of precision, accuracy, and completeness of data. Chromium shall make any adjustments to the testing protocol or operating conditions required by EPA.

58. Within 30 days from the date of receipt of EPA's approval of the performance test plan, Chromium shall implement the approved performance test.

59. Within 30 days of completion of the performance testing, Chromium shall document and submit to EPA the results of the tests in complete test reports that contain at least the following information: 1) a brief process description; 2) sampling location description(s); 3) a description of sampling and analytical procedures and any modifications to standard procedures; 4) test results; 5) quality assurance procedures and results; 6) records of operating conditions during the test; preparation of standards, and calibration procedures; 7) raw data sheets for field sampling and field and laboratory analyses; 8) documentation of calculations; and 9) any other information required by the test methods.

60. Chromium must send all reports required by this Order to:

Attention: Compliance Tracker (AE-17J)  
Air Enforcement and Compliance Assurance Branch  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

### **General Provisions**

61. This Order does not affect Chromium's responsibility to comply with other federal, state, and local laws.

62. This Order does not restrict EPA's authority to enforce Section 112 of the CAA, 42 U.S.C. § 7412, or any other section of the CAA.

63. Nothing in this Order limits EPA's authority to seek appropriate relief, including penalties, under Section 113 of the CAA, 42 U.S.C. § 7413, for Chromium's violations of Subparts N and 6W or any other violations of the CAA.

64. Failure to comply with this Order may subject Chromium to penalties of up to \$37,500 per day for each violation under Section 113 of the CAA, 42 U.S.C. § 7413, and 40 C.F.R. Part 19.

65. The terms of this Order are binding on Chromium, its assignees, and successors. Chromium must give notice of this Order to any successors in interest prior to transferring ownership and must simultaneously verify to EPA, at the above address, that it has given the notice.

66. Chromium may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information it submits to EPA. Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If Chromium fails to assert a business confidentiality claim, EPA may make all submitted information available, without further notice, to any member of the public who requests it. Emission data provided under Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, Subpart B. "Emission data" is defined at 40 C.F.R. § 2.301.

67. This Order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation. To aid in our electronic recordkeeping

efforts, please furnish an electronic copy on physical media such as compact disk, flash drive, or other similar item. If it is not possible to submit the information electronically, submit the response to this Order without staples; paper clips and binder clips, however, are acceptable.

68. EPA may use any information submitted under this Order in an administrative, civil judicial, or criminal action.

69. Chromium agrees to the terms of this Order.

70. This Order is effective on the date of signature by the Director of the Air and Radiation Division. This Order will terminate two years from the effective date, provided that Chromium has complied with all terms of the Order throughout its duration.

3-20-15  
Date

Richard Blasi  
Richard Blasi  
President  
Chromium, Inc.

3/27/15  
Date

George T. Czerniak  
George T. Czerniak  
Director  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region 5

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent the Administrative Consent Order, EPA-5-15-113(a)-WI-02, by certified mail, return receipt requested, to:

Richard Blasi  
President  
Chromium, Inc.  
1930 Roosevelt Road  
Racine, Wisconsin 53406

I also certify that I sent a copy of the Administrative Consent Order, EPA-5-15-113(a)-WI-02, by first-class mail to:

Dan Schramm  
Supervisor  
Wisconsin Department of Natural Resources  
2300 North Dr. Martin Luther King Jr. Drive  
Milwaukee, Wisconsin 53212

Bill Baumann  
Chief  
Compliance and Enforcement Section  
Bureau of Air Management  
Wisconsin Department of Natural Resources  
101 South Webster Street  
P.O. Box 7921 (AM/7)  
Madison, Wisconsin 53707-7921

on the 30<sup>th</sup> day of March, 2015.

*for* Kathy Shaeffer  
Loretta Shaffer  
Program Technician  
AECAB/PAS

CERTIFIED MAIL RECEIPT NUMBER: 7014 2870 0001 9580 5326