



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

OCT - 3 2014

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John R. Tankovich, President
Diamond Hard Chrome Company, Inc.
6110 Grand Avenue
Cleveland, Ohio 44104

Re: Administrative Order EPA-5-14-113(a)-OH-02

Dear Mr. Tankovich:

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 me at (312) 886-6073.

Sincerely,

A handwritten signature in cursive script that reads "Brian Dickens".

Brian Dickens
Chief
Air Enforcement and Compliance Assurance Section (MN/OH)

Enclosure:

cc: George Baker
Department of Public Health
Division of Air Quality
Cleveland, Ohio

Robert Hodanbosi
Ohio Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

In the Matter of:)	EPA-5-14-113(a)-OH-02
)	
Diamond Hard Chrome Co. Inc.)	Proceeding Under Section 113(a)(3) of the
Cleveland, Ohio)	Clean Air Act, 42 U.S.C. § 7413(a)(3)
)	
<u>Respondent</u>)	

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 Diamond Hard Chrome under Section 113(a)(3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(3).

Statutory and Regulatory Background

2. Section 112(b) of the CAA, 42 U.S.C. § 7412(b), provides a list of hazardous air pollutants developed by Congress and modified in accordance with the CAA.

3. Section 112(c)(1) of the CAA, 42 U.S.C. § 7412(c)(1), requires the Administrator publish, and from time to time revise, if appropriate, a list of source categories and subcategories of major sources and area sources of the air pollutants listed pursuant to Section 112(b).

4. Section 112(c)(2) of the CAA, 42 U.S.C. § 7412(c)(2), requires the Administrator establish emissions standards in accordance with Section 112(d) of the CAA for the categories and subcategories the Administrator lists.

5. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), requires the Administrator promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation.

6. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), also identifies the minimum requirements under which the Administrator is to develop and promulgate such regulations.

7. The Administrator published an initial list of categories and subcategories of major sources and area sources in accordance with Section 112 of the CAA, 42 U.S.C. 7412, on July 16, 1992. 57 Fed. Reg. 31576-31592.

8. The initial list of categories and subcategories includes hard chromium electroplating. 57 Fed. Reg. 31592.

9. The Administrator published the General Provisions of 40 C.F.R. Part 63 on December 29, 1992, as amended. 59 Fed. Reg. 61992 (codified at 40 C.F.R. Part 63, Subpart A).

10. The Administrator promulgated, in accordance with the requirements of Section 112 of the CAA, the National Emission Standards for Chromium Emissions from Hard Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 C.F.R. Part 63, Subpart N) on January 25, 1995, as amended. 60 Fed. Reg. 4963.

11. 40 C.F.R. § 63.1(a)(2) of the General Provisions states this part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the CAA. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the CAA.

12. The definition section of the General Provisions define, among other things, area source as "any stationary source of hazardous air pollutants that is not a major source as defined in this part".

13. The General Provisions of 40 C.F.R. Part 63 require owners and operators of stationary sources subject to a NESHAP listed in 40 C.F.R. Part 63 to, among other things:

- a. Conduct initial performance testing within 180 days of the compliance date of an applicable NESHAP. 40 C.F.R. § 63.7(a)(2).
- b. Performance testing must be conducted under conditions the Administrator specifies to the owner or operator based on representative performance (i.e. performance based on normal operating conditions) of the affected source. 40 C.F.R. § 63.7(e)(1).
- c. Submit an initial notification no later than 120 calendar days after the effective date of the relevant standard. 40 C.F.R. § 63.9(b)(2).
- d. Submit periodic notifications of compliance status reports.
40 C.F.R. § 63.9(h).

14. 40 C.F.R. § 63.340(a) states the affected source to which the provisions of this subpart apply is each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing.

15. 40 C.F.R. § 63.340(b) states owners or operators of affected sources subject to the provisions of this subpart must also comply with the requirements of subpart A of this part (i.e. the General Provisions to 40 C.F.R. Part 63).

16. 40 C.F.R. Part 63, Subpart N imposes the following requirements, among others, on affected sources subject to this regulation.

- a. *Standards for open surface hard chromium electroplating tanks:*
Requires, during tank operation, each owner or operator shall control chromium emissions discharged to the atmosphere from each affected source by not allowing the concentration of total chromium in the exhaust

gas stream discharged to the atmosphere to exceed 0.011¹ milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air. 40 C.F.R. § 63.342(c)(1)(i).

- b. *Operation and maintenance practices:* Requires all owners or operators subject to this standard to, at all times, including periods of startup, shutdown, and malfunction, 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. 40 C.F.R. § 63.342(f)(1)(i).
- c. *Compliance dates:* Requires the owner or operator of an existing affected source to comply with the applicable emission limit at 40 C.F.R. § 63.342 no later than September 19, 2014.
- d. *Methods to demonstrate initial compliance:* Requires an owner or operator of an affected source to conduct an initial performance test as required under 40 C.F.R. § 63.7. 40 C.F.R. § 63.343(b)(1).
- e. *Monitoring to demonstrate continuous compliance:* Requires the owner or operator of an affected source complying with applicable emission limits through the use of a composite mesh pad system to establish a site-specific operating parameter for pressure drop across the system. This parameter must be determined during the initial performance testing and is set based on the value that corresponds to compliance with the applicable emission

¹ The residual risk rule promulgated September 19, 2012 (77 Fed. Reg. 5824) revised this emission limit downward, from 0.015 mg/dscm to 0.011 mg/dscm for all open surface hard chromium electroplating tanks that are existing affected facilities and are located at large hard chromium electroplating facilities. The more stringent 0.011 mg/dscm limit becomes effective September 19, 2014.

limitation. 40 C.F.R. § 63.343(c)(1)(i).

- f. *Monitoring to demonstrate continuous compliance:* Requires the owner or operator to monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. The composite mesh-pad system must be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test or within the range of compliant values for pressure drop established during multiple performance tests.

40 C.F.R. § 63.343(c)(1)(ii).

- g. *Packed-bed scrubber/composite mesh-pad system:* Requires the owner or operator of an affected source that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the monitoring requirements for composite mesh-pad systems. 40 C.F.R. § 63.343(c)(3).

- h. *Performance test requirements:* Requires performance testing be conducted using the test methods and procedures in this section and 40 C.F.R. § 63.7. 40 C.F.R. § 63.344(a).

- i. *Recordkeeping requirements:* Requires the owner or operator of an affected source to maintain records for such source including all monitoring data required by 40 C.F.R. § 63.343(c) that are used to demonstrate compliance with the applicable standard including the date and time the data are collected. 40 C.F.R. § 63.346(b).

- j. *Reporting requirements:* States the reporting requirements of this section apply to the owner or operator of an affected source when such source

- becomes subject to the provisions of this subpart. 40 C.F.R. § 63.347(b).
- k. *Reporting requirements:* Requires the owner or operator of each affected source that has an initial startup before January 25, 1995 to notify the Administrator in writing that the source is subject to this subpart no later than 180 calendar days after January 25, 1995. 40 C.F.R. § 63.347(c)(1).
- l. *Reporting requirements:* Requires a notification of compliance status each time an affected source becomes subject to the requirements of this subpart. This information includes, among other things, the applicable emission limitation and the methods used to determine compliance with this limitation, each monitored parameter for which a compliance value is to be established under 40 C.F.R. § 63.343(c) and the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit, and the methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements. 40 C.F.R. § 63.347(e)(1-3),
- m. *Reporting requirements:* Requires the owner or operator of each affected source to report to the Administrator the results of any performance test conducted in accordance with 40 C.F.R. § 63.7 and § 63.343(b). The reports of the performance test results must be submitted as part of the notification of compliance status report no later than 90 days following completion of the performance test. 40 C.F.R. § 63.347(f)(1-2).

17. Section 112(i)(3)(A) of the CAA states that after the effective date of any emissions standard, limitation or regulation promulgated under this section and applicable to a source, no person may operate such source in violation of such standard, limitation or regulation except, in the case of an existing source, the Administrator shall establish a compliance date or dates for each category or subcategory of existing sources, which shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the effective date of such standard. 42 U.S.C. § 7412(i)(3)(A).

18. Section 113(a)(3) of the CAA states that 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 any requirement or prohibition of this Subchapter, the Administrator may issue an order requiring such person to comply with such requirement or prohibition. This authority has been delegated to the Director of the Air and Radiation Division. EPA Delegation 7-6-A, 8/9/94; Region 5 Delegation 7-6-A, 2/4/00.

Findings

19. Respondent owns and operates a hard chromium electroplating facility at 6110 Grand Avenue in Cleveland, Ohio (Facility).

20. The Facility is a stationary source as defined in the CAA and 40 C.F.R. § 63.2.

21. The facility includes seven open top hard chromium electroplating tanks and a portable tank which are affected sources as defined at 40 C.F.R. § 63.340(a).

22. The maximum cumulative potential rectifier capacity of the affected sources is greater than 60 million ampere-hours per year.

23. The facility is a large, hard chromium electroplating facility as defined at 40 C.F.R. § 63.341(a).

24. The affected sources are designated Tank 1, Tank 2, Tank 3, Tank 4, Tank 5, Tank 6, Tank 7, and a portable hard chromium electroplating tank with porous pots (portable tank) associated with plating a particular product called "Mining Screens".

25. The affected sources use composite mesh-pad systems and packed scrubbers to control chromium emissions.

26. Tanks 1-3, after the composite mesh-pad system, vent into a common plenum followed by a single, dedicated packed scrubber labeled Scrubber #1.

27. Tanks 4-6, after the composite mesh-pad system, vent into a common plenum followed by a single, dedicated packed scrubber labeled Scrubber #2.

28. Tank 7, after the four composite mesh-pad systems, vents into a dedicated stack [Stack #3, referred to in the performance testing as "Scrubber #3 outlet"]. Emissions from the portable tank, when used, are vented through a 5 inch pipe to either the Tank 6 or Tank 7 ventilation system to control emissions.

29. Performance testing for hexavalent chromium and total chromium emissions from the #1, #2, and #3 scrubber outlets was conducted at the Facility May 9-11, 2012.

30. The performance test report for the May, 2012 test showed the following results:
- a. Emissions from Scrubber #1 exceeded 0.015 mg/dscm for both hexavalent chromium and total chromium emissions.
 - b. Emissions from Scrubber #2 exceeded 0.015 mg/dscm for total chromium emissions.
 - c. Emissions from Scrubber #3 exceeded 0.015 mg/dscm for total chromium emissions.

31. The performance test report for the May, 2012 test includes the following process information:

- a. Tank 1 (5,500 amperes)
- b. Tank 2 (15,000 amperes)
- c. Tank 3 (5,500 amperes)
- d. Tank 4 (5,500 amperes)
- e. Tank 5 (5,500 amperes)
- f. Tank 6 (10,000 amperes)
- g. Tank 7 (10,500 amperes)

32. Performance testing for hexavalent chromium and total chromium emissions from the #1 scrubber outlet was conducted at the Facility August 14-15, 2012.

33. The performance test report for the August, 2012 test showed emissions from Scrubber #1 were below 0.015 mg/dscm for both hexavalent chromium and total chromium (0.00982 mg/dscm for hexavalent chromium and 0.01084 mg/dscm for total chromium).

34. The performance test report for the August, 2012 test included the following process information:

- a. Tank 1 (5,500 amperes)
- b. Tank 2 (14,000 to 15,000 amperes)
- c. Tank 3 (5,400 to 5,800 amperes)

35. Respondent submitted a letter on April 7, 2011, in response to a 114 information request, which provided information on the maximum electrical capacity of each tank in Amp-hours. The letter includes a description of how the maximum electrical capacity was calculated (total rectifier capacity (amperes) multiplied by 8,400 hours/year, multiplied by 0.7).

36. The current maximum amperages for each chromium electroplating tank at Diamond Hard Chrome are:
- a. Tank 1 (10,000 amperes)
 - b. Tank 2 (15,000 amperes)
 - c. Tank 3 (7,500 amperes)
 - d. Tank 4 (7,500 amperes)
 - e. Tank 5 (7,500 amperes)
 - f. Tank 6 (15,000 amperes)
 - g. Tank 7: (2 x 10,000 amperes)
 - h. Portable Tank: (800 amperes)
37. Respondent submitted an initial notification report to EPA on April 7, 2011.
38. Respondent submitted an annual compliance report to EPA on April 7, 2011.
39. Respondent monitors pressure drop across its packed bed scrubbers.
40. Respondent maintains records of pressure drop across its packed bed scrubbers.
41. Respondent violated the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 C.F.R. Part 63, Subpart N) as follows:

- a. Respondent failed to conduct initial performance testing under representative operating conditions (*i.e.*, maximum permitted design rates), to demonstrate compliance as required at 40 C.F.R. §§ 63.7 and 63.344(a).
- b. Respondent failed to demonstrate compliance with the 0.015 mg/dscm emission limit for open surface hard chromium electroplating tanks as

required at 40 C.F.R. § 63.342(c)(1).

- c. Respondent failed to monitor pressure drop across the system (*i.e.*, across the mesh pads and scrubbers) as required at 40 C.F.R. § 63.343(c)(3).
- d. Respondent failed to maintain records of pressure drop across the system as required at 40 C.F.R. § 63.346(b)(8).
- e. Respondent failed to submit an initial notification report within 180 days after January 25, 1995 as required at 40 C.F.R. § 63.347(c)(1).

42. EPA issued a Finding of Violation (FOV) to Respondent on June 10, 2011.

43. Representatives of Diamond Hard Chrome and EPA met on August 2, 2011 to discuss the Finding of Violation issued June 10, 2011.

Compliance Program

44. Diamond Hard Chrome must achieve, demonstrate, and maintain continuous compliance with the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 C.F.R. Part 63, Subpart N).

Emission Limitations

45. Diamond Hard Chrome must achieve, demonstrate, and maintain continuous compliance with the 0.011 mg/dscm emission limit for large, hard chromium electroplating facilities in 40 C.F.R. Part 63, Subpart N no later than September 19, 2014.

46. Compliance with the limit in Paragraph 45 must be achieved at Scrubber #1 outlet, Scrubber #2 outlet, and #3 stack servicing Diamond Hard Chrome's open top hard chromium electroplating tanks.

47. Diamond Hard Chrome must continuously maintain and operate the existing control systems on all seven of Diamond Hard Chrome's open top hard chromium electroplating tanks as well as the upgrades it made to existing control equipment on Tanks 6 and 7 to ensure emissions of total chromium are reduced and maintained below the 0.011 mg/dscm emission limit. Control equipment and control equipment upgrades which must be continuously maintained and operated include:

- a. The existing mesh pad mist eliminators on Tanks 1, 2, 3, 4, and 5.
- b. The existing packed bed scrubbers on Stacks 1 and 2.
- c. The redesigned and rebuilt mesh pad mist eliminator with the new tri-mesh pads on Tank 6.
- d. The second redesigned and rebuilt mesh pad mist eliminator with the new tri-mesh pads added to Tank 6.
- e. The two redesigned and rebuilt mesh pad mist eliminators with the new tri-mesh pads on Tank 7 (first floor).
- f. The two existing mesh pad mist eliminators on Tank 7 (second floor).

Nothing in this Paragraph prohibits Diamond Hard Chrome from implementing additional upgrades to existing or upgraded mesh pad mist eliminators or packed bed scrubbers to further reduce total chromium emissions below the 0.011 mg/dscm emission limit.

If performance testing conducted in accordance with Paragraph 49 shows emissions of total chromium in excess of the 0.011 mg/dscm emission limit, Diamond Hard Chrome must implement upgrades (or additional upgrades) to one or more of its control systems associated with the violating tank(s) such that the violating tank(s) achieve and maintain continuous compliance with the 0.011 mg/dscm emission limit. Diamond Hard Chrome must, subsequent to

implementation of the control system upgrades required in the above sentence, retest the affected tank(s) in accordance with Paragraph 49 to demonstrate compliance with the 0.011 mg/dscm limit.

48. Diamond Hard Chrome, in addition to the control upgrades it has implemented, elects to take federally enforceable operational limitations which physically limit the maximum cumulative potential rectifier capacity of each tank as follows:

- a. Tank 1: 6,000 amp-hours (52,560,000 amp-hrs/12-month rolling period)
- b. Tank 2: 9,000 amp-hours (78,840,000 amp-hrs/12-month rolling period)
- c. Tank 3: 6,500 amp-hours (56,940,000 amp-hrs/12-month rolling period)
- d. Tank 4: 4,500 amp-hours (39,420,000 amp-hrs/12-month rolling period)
- e. Tank 5: 4,000 amp-hours (35,040,000 amp-hrs/12-month rolling period)
- f. Tank 6: 10,500 amp-hours (91,940,000 amp-hrs/12-month rolling period)
- g. Tank 7: 9,500 amp-hours (83,220,000 amp-hrs/12-month rolling period)

The operational limitations will be achieved by using limiters, non-resettable ampere-hour meters, or other means which physically limit the total ampere-hour usage. Diamond Hard Chrome must maintain monthly records of actual ampere-hour usage for each 12-month rolling period following September 19, 2014.

Demonstration of Compliance:

49. Diamond Hard Chrome must demonstrate initial compliance with the applicable emission limit by conducting performance testing for total chromium emissions at each of the three scrubber outlets (Scrubber #1, Scrubber #2, and Stack #3). Performance testing must be completed no later than 180 days after September 19, 2014. At least one of the testing scenarios must include plating activities associated with the portable tank with the portable tank

emissions vented to one of the ventilation and control systems being tested. Performance testing conducted no more than one month prior to the effective date of this Order may be used as the "initial compliance test" for purposes of testing under this Order so long as it meets the requirements of Subpart N and this Order.

50. Diamond Hard Chrome must submit a performance testing protocol for the testing required by Paragraph 49 to EPA for review and approval no later than 60 days after the effective date of this Order. The protocol for performance testing conducted no more than one month prior to the effective date of this Order may be submitted within the 60-day time frame if the associated testing was conducted and intended to be used as the "initial compliance test".

The stack testing protocol must include, at a minimum, the following information:

- a. The proposed testing dates.
- b. The EPA reference method(s) to be used during the test.
- c. The number and duration of runs to be conducted for each test.
- d. A schematic drawing of the test port locations, including the distances to the nearest upstream and downstream disturbances. (If any of the test port locations do not meet any of the disturbance distance requirements in 40 C.F.R. Part 60, Appendix A, Reference Method 1, Section 11.1, this description must include a discussion of the means in which Diamond Hard Chrome will either ensure or verify laminar flow at the testing location).
- e. A schematic drawing of the velocity traverses to be conducted at each testing location.
- f. A description of how the control equipment will be continuously

- monitored during the test.
- g. The production rate (in terms of amperes per hour) at which each tank will be operated during each test. (If any tank is to be operated at less than its rated capacity, the protocol must include a justification for the reduced operation).
 - h. The name, address, and contact information (including e-mail address and telephone number) of the contractor Diamond Hard Chrome will be using to conduct the testing.
 - i. Any potential modifications to the reference methods to be used.
 - j. Any other information regarding the units being tested, operational conditions under which the units will be tested, and testing methods to be used that Diamond Hard Chrome or its chosen contractor feels is necessary to allow EPA to adequately review and evaluate the stack testing protocol.

51. Diamond Hard Chrome must continuously monitor and record pressure drop across the entire control system (mesh pads and scrubber systems) for each stack during the performance testing required by Paragraph 49. If alternative monitoring is proposed by Diamond Hard Chrome in accordance with Paragraph 54, then the alternative monitoring must be conducted during the performance testing required by Paragraph 49 to establish appropriate parametric monitoring to assure ongoing compliance with all applicable limits.

52. Diamond Hard Chrome must submit a final report of the performance test results to EPA no later than 60 days after completing the testing required in Paragraph 49. This final report must include all results obtained during the testing even if some tests were stopped part

way through due to unforeseen errors or upset conditions. The final report must also include, at a minimum, the following information:

- a. All measured results of total chromium emissions in milligrams of total chromium per dry standard cubic meter.
- b. All measured pressure drop readings required by Paragraph 51 for each stack as measured during the stack testing. This must include both the average value recorded during each testing run across each stack system and a copy of the actual data sheet where individual readings are recorded during testing.
- c. A stack specific evaluation of the pressure drop readings obtained during testing to identify and establish a range of pressure drop across which the stack testing shows continuous compliance with the applicable emission limits. This pressure drop range will be used to evaluate and determine ongoing compliance with applicable emission limits at all times, including periods of process unit start up, shut down, and malfunction. Failure to maintain pressure drop within the established range will be considered a failure to maintain continuous compliance with applicable emission limits.
- d. Actual production rates achieved at each tank (in amperes per hour), and at each control system (gas and liquid flow rates), during the test.
- e. The moisture content, temperature, and flow rate of the gases being emitted from the stack being tested, including the raw field data.
- f. Calibration procedures and results of calibrations performed on all testing equipment, including Pitot tube, nozzle, meter box, thermometer, and

barometer.

- g. The name, affiliation, and contact information for all representatives of the testing firm and any regulatory agencies that witnessed or participated in the test.
- h. A description of all maintenance performed on any tank or control system tested from the effective date of this Order until stack testing is completed. This must include major cleaning operations, parts or equipment replacement, repairs made, and modifications of functional components of either the process or control equipment made within this time frame.
- i. An identification, discussion, and explanation of any errors encountered during the testing (both real and apparent) and the causes of such errors.
- j. Raw field data which may include additional operational conditions monitored, readings obtained during testing, and raw data gathered by the contractor as part of the stack testing.

Monitoring:

53. Diamond Hard Chrome must install, calibrate, maintain, and continuously operate a parametric monitoring system capable of continuously monitoring and recording pressure drop across the entire control system (mesh pads and scrubber) on each of the three control device systems no later than 60 days after the effective date of this Order. Each parametric monitoring system must be capable of continuously measuring and recording pressure drop across the entire control system at least once every 15 minutes.

54. In lieu of the continuous monitoring required in paragraph 53 Diamond Hard Chrome may develop and propose an alternative parametric monitoring program for pressure

drop which utilizes its existing pressure drop monitors. Any alternative parametric monitoring program must include monitoring more frequently than once daily as well as clear record keeping and reporting requirements. The proposed alternative monitoring program must be submitted to EPA for review and approval prior to full implementation. Any approved alternative monitoring plan must be incorporated into Diamond Hard Chrome's permits as federally enforceable requirements.

55. Diamond Hard Chrome must install, certify, maintain, and continuously operate a parametric monitoring system for ampere-hour usage on each of the seven open top hard chromium electroplating tanks no later than 60 days after the effective date of this order. Each parametric monitoring system must be capable of continuously measuring and recording the actual ampere-hour usage of each tank (in ampere-hours) at least once every 15 minutes.

56. In lieu of the continuous monitoring required in Paragraph 55 Diamond Hard Chrome may develop and propose an alternative parametric monitoring program which utilizes its existing systems capable of measuring ampere-hour usage or other methods which can clearly document actual ampere-hour usage over a rolling 12-month period. Any alternative parametric monitoring program for ampere-hour usage must include a method that allows direct calculation of a 12-month rolling average usage rate as well as clear record keeping and reporting requirements. The proposed alternative monitoring program must be submitted to EPA for review and approval prior to full implementation. Any approved alternative monitoring plan must be incorporated into Diamond Hard Chrome's permits as federally enforceable requirements.

Record Keeping and Reporting:

57. Diamond Hard Chrome must maintain all applicable records as required by

40 C.F.R. § 63.10(b)(1-2) and (c) as well as 40 C.F.R. Part 63, Subpart N.

58. Diamond Hard Chrome must maintain records of pressure drop across each of the three control device systems (mesh pads and scrubbers) in written or electronic format beginning no later than 60 days after the effective date of this Order. These records must be obtained at least once every 15 minutes and summarized on an hourly basis for all hours (or partial hours) each control device system is operating if Diamond Hard Chrome elects to comply with the continuous monitoring requirements of Paragraph 53. Record keeping under a proposed and approved alternative monitoring program for pressure drop under Paragraph 54 must be maintained in written or electronic format, readily available for review, and provide all information necessary to evaluate and assure ongoing compliance with applicable limits.

59. Diamond Hard Chrome must maintain records of the periods of time each of the seven open top hard chromium electroplating tanks are operated. These records must be obtained daily for each of the seven open top hard chromium electroplating tanks.

60. Diamond Hard Chrome must maintain records of the actual ampere-hour usage for each of the seven open top hard chromium electroplating tanks during operation in written or electronic format beginning no later than 60 days after the effective date of this Order. These records must be obtained at least once every 15 minutes and summarized on a daily basis for all hours (or partial hours) each of the seven open top hard chromium electroplating tanks is operating if Diamond Hard Chrome elects to comply with the continuous monitoring requirements of Paragraph 55. Record keeping under a proposed and approved alternative monitoring program for ampere-hour usage under Paragraph 56 must be maintained in written or electronic format, readily available for review, and provide all information necessary to evaluate and assure ongoing compliance with applicable limits.

61. All records required by this Order must be maintained in a reviewable form for a minimum of five years. The most recent two years of records must be maintained on site and readily available for review upon request.

62. Diamond Hard Chrome must submit quarterly reports to EPA for review and evaluation of compliance with this Order and 40 C.F.R. Part 63, Subpart N. The quarterly reports must include, at a minimum, applicable information required by 40 C.F.R. § 63.10(d) and (e), 40 C.F.R. Part 63, Subpart N, and this Order.

63. Diamond Hard Chrome must submit quarterly reports which identify each hour (or partial hour) when the pressure drop, as monitored in accordance with Paragraph 53 or 54, falls outside the pressure drop range established in accordance with Paragraph 52(c) of this Order. This report must include any period when one or more tanks associated with the respective control device system is operating, including periods of process unit start up, shut down, and malfunction. This report must include, at a minimum, the following information:

- a. The date of each period when the pressure drop falls outside the established pressure drop range.
- b. The time (beginning and end time) of each period when the pressure drop falls outside the established pressure drop range.
- c. The actual pressure drop measured each period when the pressure drop falls outside the established pressure drop range.
- d. The cause of each period when the pressure drop falls outside the established pressure drop range.
- e. The corrective action(s) taken or preventative measure(s) adopted to prevent the pressure drop from falling outside the established pressure

drop range in the future.

64. Diamond Hard Chrome must submit quarterly reports which identify the total hours of operation and the total actual ampere-hour usage of each of the seven open top hard chromium electroplating tanks, as monitored in accordance with Paragraph 55 or 56. This report must summarize the information on a monthly basis for the first four quarterly reports (the first 12 months of operating the parametric monitoring systems required by Paragraph 55 or 56). Each quarterly report thereafter must summarize the total hours of operation and the actual ampere-hour usage of each electroplating tank on a monthly and 12-month rolling average basis.

65. Diamond Hard Chrome may submit a single quarterly report for each reporting quarter which covers all the requirements in Paragraphs 57-64 of this Order.

66. The time frame covered by the quarterly reports is January – March, April – June, July – September, and October – December of the respective calendar year. The first quarterly report will be for October-December, 2014 and due, in accordance with Paragraph 67, by January 30, 2015.

67. Diamond Hard Chrome must submit each quarterly report no later than 30 days after the end of the respective reporting quarter. (January 30th, April 30th, July 30th, and October 30th).

Permit Revisions:

68. Diamond Hard Chrome must apply for revisions to its existing installation and operating permits no later than 60 days after the effective date of this Order. The revisions must incorporate the requirements of this Order as federally enforceable terms and conditions, as explained in Paragraphs 69-72 below.

69. Diamond Hard Chrome must apply for revisions to its existing installation and operating permits to incorporate its election to take operational limitations in accordance with Paragraph 48. The operational limitations must be established on a per unit basis (per open top hard chromium electroplating tank) as federally enforceable limitations. The federally enforceable limitations must assure the cumulative total rectifier capacity of each tank is continuously maintained below the operational limitations on a 12-month rolling average basis (determined monthly).

70. Diamond Hard Chrome must apply for revisions to its existing installation and operating permits to incorporate the pressure drop range, established during performance testing, which assures continuous compliance with applicable limits. The pressure drop ranges across the entire control system (mesh pads and scrubber) must be established on a per unit basis as a federally enforceable limit. The established pressure drop ranges will be used to determine compliance with applicable emission limits. Failure to maintain pressure drop within the established ranges will be considered failure to comply with applicable emission limits.

71. Diamond Hard Chrome must apply for revisions to its existing installation and operating permits to incorporate the monitoring requirements of Paragraphs 53 through 56 of this Order.

72. Diamond Hard Chrome must apply for revisions to its existing installation and operating permits to incorporate the recordkeeping and reporting requirements of Paragraphs 57 through 67 of this Order.

73. Diamond Hard Chrome 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 W. Jackson Boulevard
Chicago, Illinois 60604

General Provisions

74. This Order does not affect Diamond Hard Chrome's responsibility to comply with other federal, state, and local laws.

75. This Order does not restrict EPA's authority to enforce the Ohio State Implementation Plan, Section 111 or 112 of the CAA, or any other section of the CAA.

76. Nothing in this Order limits the EPA's authority to seek appropriate relief, including penalties, under Section 113 of the CAA, 42 U.S.C. § 7413, for Diamond Hard Chrome's violation of 40 C.F.R. Part 63, Subpart N.

77. Failure to comply with this Order may subject Diamond Hard Chrome 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.

78. The terms of this Order are binding on Diamond Hard Chrome, its assignees, and successors. Diamond Hard Chrome 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.

79. Diamond Hard Chrome 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 Diamond Hard Chrome 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 this Order 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.

80. 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, three ring binders are acceptable.

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

82. Diamond Hard Chrome agrees to the terms of this Order.

83. Diamond Hard Chrome neither admits nor denies the specific factual allegations set forth above in this Order.

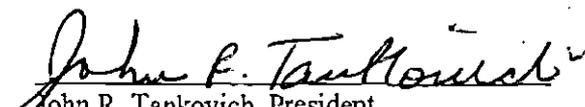
84. Diamond Hard Chrome must achieve compliance with all requirements of this Order no later than one year after the effective date of this Order.

85. This Order will terminate one year after the effective date of this Order or at an earlier date if Diamond Hard Chrome requests EPA to terminate this Order after Diamond Hard Chrome achieves compliance with all requirements of this Order. To request termination of the Order, Diamond Hard Chrome must submit to EPA a "final notification" which describes

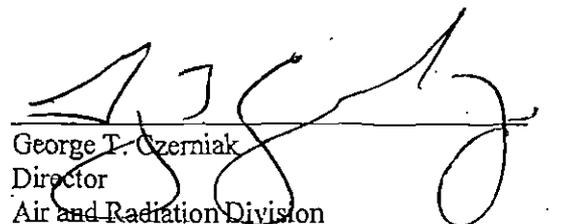
Diamond Hard Chrome's compliance actions and basis for believing that such actions have met the requirements of this Order. The notification will be reviewed by EPA and, if EPA agrees with Diamond Hard Chrome's assessment, the Order will be terminated through a letter from EPA to Diamond Hard Chrome.

86. This order is effective on the date of signature by the Director of the Air and Radiation Division.

10-2-14
Date


John R. Tankovich, President
Diamond Hard Chrome Company, Inc.

10/3/14
Date


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-5-14-113(a)-OH-02, by certified mail, return receipt requested, to:

John R. Tankovich,
President
Diamond Hard Chrome
Company, Inc.
6110 Grand Avenue
Cleveland, Ohio 44104

I also certify that I sent a copy of the Administrative Consent Order, EPA-5-14-113(a)-OH-02, by first-class mail to:

Robert Casarona
Roetzel & Andress
1375 E. Ninth Street
One Cleveland Center
Ninth Floor
Cleveland, OH 44114

George Baker
Department of Public Health
Division of Air Quality
75 Erieview Plaza, 2nd Floor
Cleveland, Ohio 44114

Robert Hodanbosi
Ohio Environmental
Protection Agency
50 West Town Street
Suite 700
P.O. Box 1049
Columbus, Ohio 43215

On the 13 day of November 2014.

for Cathy Jones
Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7011 1150 0000 2639-3113