



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

SEP 12 2013

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Howard Kirby
Plant Manager
Empire Hard Chrome, Inc.
1537 S. Wood Street
Chicago, Illinois 60608

Re: Finding of Violation
Empire Hard Chrome, Inc.
Wood Street Facility, Chicago, Illinois

Dear Mr. Kirby:

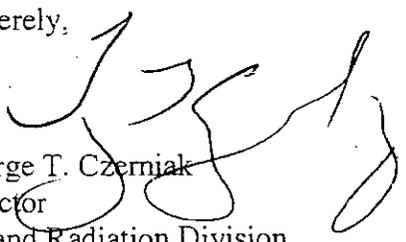
The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Empire Hard Chrome, Inc. for violations of Section 112 of the Clean Air Act (CAA), 42 U.S.C. § 7412, at your Wood Street Facility in Chicago, Illinois. As discussed more specifically in the enclosed FOV, we find that you have operated in violation of the applicable regulations at 40 C.F.R. Part 63, Subpart N, the National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

EPA has several enforcement options under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3). These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. A conference should be requested within ten days following your receipt of this FOV and should be held within thirty days following your receipt of this FOV. The conference will give you the opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contacts in this matter are Roshni Brahmhatt and Ray Cullen. If you wish to request a conference, you may call Ms. Brahmhatt at (312) 886-6793 or Mr. Cullen at (312) 886-0538. EPA hopes that this FOV will encourage Empire Hard Chrome's compliance with the requirements of the CAA.

Sincerely,



George T. Czerniak
Director
Air and Radiation Division

cc: Ray Pilapil
Manager
Bureau of Air, Compliance, and Enforcement Section
Illinois Environmental Protection Agency

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

Empire Hard Chrome, Inc.
Chicago, Illinois

)
)
) Proceeding Pursuant to Section
) 113(a)(3) of the Clean Air Act
) 42 U.S.C. § 7413(a)(3)
)
)
)

) **EPA-5-13-IL-42**
)

FINDING OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Finding of Violation (FOV) to Empire Hard Chrome, Inc. (EHC) for violations of the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.*, at its facility located at 1537 S. Wood Street, Chicago, Illinois.

This FOV is issued pursuant to Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3). The authority to issue this FOV has been delegated to the Director, Air and Radiation Division, Region 5.

STATUTORY AND REGULATORY BACKGROUND

National Emission Standards for Hazardous Air Pollutants

1. Pursuant to Section 112(b) of the CAA, 42 U.S.C. § 7412(b), EPA designates hazardous air pollutants (HAPs), which present or may present a threat of adverse effects to human health or the environment.

2. Sections 112(c) and (d) of the CAA, 42 U.S.C. § 7412(c) and (d), require EPA to publish a list of categories of sources that EPA finds present a threat of adverse effects to human health or the environment due to emissions of HAPs, and to promulgate emission standards for each source category. These standards are known as “national emission standards for hazardous air pollutants” or “NESHAPs.” EPA codifies these requirements at 40 C.F.R. Part 63.

3. Section 112(d) of the CAA requires EPA to establish NESHAPs for both major and area sources of HAPs that are listed for regulation under CAA section 112(c). A major source emits or has the potential to emit 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAPs. An area source is a stationary source that is not a major source. Section 112(a) of the CAA, 42 U.S.C. § 7412(a).

4. The NESHAPs are national technology-based performance standards for HAP sources in each category and become effective on specified dates. The purpose of these standards is to ensure that all sources achieve the maximum degree of reduction in emissions of HAPs that EPA determines is achievable for each source category.

5. Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3), and 40 C.F.R. § 63.4, prohibit the owner or operator of any source from operating such source in violation of any NESHAP applicable to such source.

40 C.F.R. Part 63, Subpart N

6. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), effective January 25, 1995, EPA promulgated the NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks ("Chrome Plating NESHAP"). 60 Fed. Reg. 4948. These regulations are codified at 40 C.F.R. §§ 63.340-63.348.¹

7. The Chrome Plating NESHAP, at 40 C.F.R. § 63.340(a), provides that the affected source to which the NESHAP applies is each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing.

8. The Chrome Plating NESHAP, at 40 C.F.R. § 63.341(a), defines "chromium electroplating tank" as 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.

9. The Chrome Plating NESHAP, at 40 C.F.R. § 63.341(a), defines "open surface hard chromium electroplating tank" as a chromium electroplating tank that is ventilated at a rate consistent with good ventilation practices for open tanks.

10. The Chrome Plating NESHAP, at 40 C.F.R. § 63.342(c)(1) provides, *inter alia*, that, during tank operation, each owner or operator of an existing open surface hard chromium electroplating tank shall control emissions discharged to the atmosphere from that tank by:

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

11. The Chrome Plating NESHAP, at 40 C.F.R. § 63.343(a)(1), requires the owner or operator of an existing hard chromium electroplating or anodizing tank to achieve compliance

¹ Effective September 19, 2012, EPA amended the Chrome Plating NESHAP to include, among other things, revised emission limits for total chromium, with a compliance date for existing sources of September 19, 2014. 77 Fed. Reg. 58220.

with the applicable emission limitations of the NESHAP no later than two years after January 25, 1995.

12. The Chrome Plating NESHAP, at 40 C.F.R. § 63.343(c), provides that the owner or operator of an open surface hard chromium electroplating tank subject to the requirements of the Chrome Plating NESHAP is required to conduct an initial performance test as required under 40 C.F.R. § 63.7, using the procedures and test methods listed in 40 C.F.R. §§ 63.7 and 63.344.

13. The Chrome Plating NESHAP, at 40 C.F.R. § 63.343(c), provides that the owner or operator of an open surface hard chromium electroplating tank subject to the emission limitations of the Chrome Plating NESHAP shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation.

14. The Chrome Plating NESHAP, at 40 C.F.R. § 63.343(c)(1)(i), provides that the owner or operator of an open surface hard chromium electroplating tank complying with the emission limitations in 40 C.F.R. § 63.342 through the use of a composite mesh pad system shall determine the outlet chromium concentration using the test methods and procedures in 40 C.F.R. § 63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in 40 C.F.R. § 63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 2 inches of water column from this value as the compliant range.

15. The Chrome Plating NESHAP, at 40 C.F.R. § 63.343(c)(1)(ii), provides that the owner or operator of an open surface hard chromium electroplating tank, on and after the date on which the initial performance test is required to be completed under 40 C.F.R. § 63.7, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

FINDINGS OF FACT

16. EHC owns and operates a plating facility located at 1537 S. Wood Street, Chicago, Illinois ("facility").

17. On October 18, 2012, EPA conducted an inspection of the facility.

18. On March 12, 2013, EPA issued EHC a Request for Information under Section 114 of the CAA, 42 U.S.C. § 7414, seeking additional information about the facility's compliance with the Act. On April 29, 2013, EHC submitted a response to EPA ("Response").

19. EHC performs hard chromium electroplating at the facility. EHC owns and operates four "chromium electroplating tanks" as that term is defined at 40 C.F.R. § 63.341(a). EHC identifies these tanks as Chrome Tanks C1, C2, C3, and C4. The four tanks were installed

at the facility in 1992, and the facility therefore is an “existing source” under the Chrome Plating NESHAP.

20. EHC’s hard chromium electroplating tanks are subject to the requirements of the Chrome Plating NESHAP at 40 C.F.R. Part 63, Subpart N.

21. EHC’s Response indicated that emissions from Chrome Tank C1 are vented to two composite mesh pad systems, identified as S1 and S2. Thus, EHC controls chromium emissions from Chrome Tank C1 through the use of a composite mesh pad system.

22. Chrome Tank C1 is a ventilated tank and is, therefore, an “open surface hard chromium electroplating tank” as that term is defined in 40 C.F.R. § 63.341(a), and subject to the emission standards at 40 C.F.R. § 63.342(c)(1).

23. EHC’s Response indicated that on September 29-30, 1998, EHC completed a performance test on Chrome Tank C1 to establish compliance with the emission limit of 0.015 mg/dscm, as provided in 40 C.F.R. § 63.342(c)(1)(i). The performance test emission rate was 0.013 mg/dscm. However, pressure drop information was not included in the stack test report.

24. Supplemental information provided by an EHC representative to EPA on June 17, 2013, stated that the pressure drop parameter for the composite mesh-pad system S1 on Chrome Tank C1 during the stack test conducted on September 29-30, 1998, was 0.9” of water column.

25. EHC’s Response indicated that the composite mesh-pad system S1 was operated outside of the pressure drop range established during the September 29-30, 1998, performance test for a period of 79 days during the time period from August 24, 2009, to June 10, 2010, indicating noncompliance with the 0.015 mg/dscm emission limit.

26. EHC’s Response indicated that emissions from Chrome Tanks C3 and C4 are vented to one composite mesh pad systems, identified as S5. Thus, EHC controls chromium emissions from Chrome Tanks C3 and C4 through the use of a composite mesh pad system.

27. Chrome Tanks C3 and C4 are ventilated tanks and are, therefore, “open surface hard chromium electroplating tanks” as that term is defined in 40 C.F.R. § 63.341(a), and subject to the emission standards at 40 C.F.R. 63.342(c)(1).

28. EHC’s Response indicated that on July 23-24, 1998, EHC completed a performance test on Chrome Tanks C3 and C4 to establish compliance with the emission limit of 0.015 mg/dscm, as provided in 40 C.F.R. § 63.342(c)(1)(i). The performance test emission rate was 0.013 mg/dscm. The pressure drop parameter for the composite mesh-pad system S5 was 1.6” of water column.

29. EHC’s Response indicated that the composite mesh-pad system S5 was operated outside of the pressure drop range established during the July 23-24, 1998, performance test for a period of 76 days during the time period from August 10, 2009, to December 4, 2009, indicating noncompliance with the 0.015 mg/dscm emission limit.

VIOLATIONS

30. On numerous occasions during the time period from August 10, 2009, to June 10, 2010, EHC failed to operate composite mesh-pad systems S1 and S5--controlling Chrome Tanks C1, C3, and C4--in continuous compliance with the Chrome Plating NESHAP, by not maintaining a pressure drop within ± 2 inches of water column of the pressure drop value established during the performance tests conducted on July 23-24, 1998, and September 29-30, 1998, in violation of 40 C.F.R. § 63.343(c)(1)(ii) and Section 112 of the CAA, 42 U.S.C. § 7412.

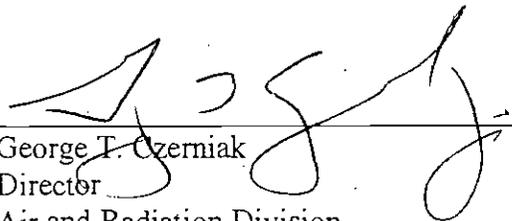
31. On numerous occasions during the time period from August 10, 2009, to June 10, 2010, EHC failed to adequately control chromium emissions discharged to the atmosphere from Chrome Tanks C1, C3, and C4 by allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf), in violation of 40 C.F.R. § 63.342(c)(1)(i) and Section 112 of the CAA, 42 U.S.C. § 7412.

ENVIRONMENTAL IMPACT OF VIOLATIONS

32. Violations of the Chrome Plating NESHAP can result in excess chromium emissions that may cause serious health effects, such as birth defects and cancer, and harmful environmental and ecological effects.

Date

9/12/13


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

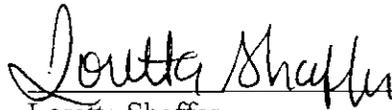
I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-13-MI-04, by Certified Mail, Return Receipt Requested, to:

Howard Kirby, Plant Manager
Empire Hard Chrome, Inc.
1537 S. Wood Street
Chicago, Illinois 60608

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Emilio Salis, Regional Manager
Region I
Illinois Environmental Protection Agency
9511 West Harrison Street
Des Plaines, Illinois 60016

On the 13 day of September 2013.



Loretta Shaffer
Administrative Program Assistant
AECAB, Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7669 5626