



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

JUN 21 2013

REPLY TO THE ATTENTION OF:

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

David Lesher  
Environmental Health and Safety Manager  
Superior Aluminum Alloys, LLC  
14214 Edgerton Road  
New Haven, Indiana 46774

Re: Notice of Violation and Finding of Violation under 42 U.S.C. § 7413(a)(1) and (a)(3)

Dear Mr. Lesher:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Superior Aluminum Alloys, LLC (Superior) for violations of the Clean Air Act (the Act) identified at the facility located at 14214 Edgerton Road, New Haven, Indiana 46774 (Facility). The NOV/FOV is issued in accordance with Sections 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (a)(3).

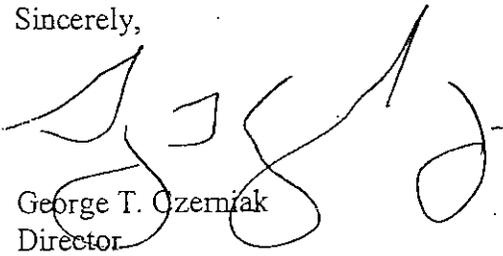
As explained in the NOV/FOV, the EPA finds that Superior has violated the Act, and the Act's implementing regulations. Section 113 of the Act, 42 U.S.C. § 7413, gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order; issuing an administrative penalty order; and bringing a judicial civil action.

We are offering Superior the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide Superior with a chance to present information on the identified violations, any efforts Superior has taken to comply, and the steps Superior will take to prevent future violations. Please plan for the Facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Dakota Prentice. You may call him at 312.886.6761 or email him at [prentice.dakota@epa.gov](mailto:prentice.dakota@epa.gov) if you wish to request a conference. The EPA hopes that this NOV/FOV will encourage you to comply with the requirements of the Act.

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Sincerely,



George T. Czerniak  
Director

Air and Radiation Division

Enclosure

cc: Phil Perry  
Chief  
Air Compliance and Enforcement Branch  
Indiana Department of Environmental Management



4. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3).

~~5. "Hazardous air pollutant" is defined as "any air pollutant listed in or pursuant to" Section 112(b) of the Act. 42 U.S.C. § 7412(a)(6).~~

6. Section 112(i)(3) of the Act, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. *See also* 40 C.F.R. §§ 61.05 and § 63.4.

#### The NESHAP for Secondary Aluminum Production

7. Pursuant to Section 112 of the Act, the EPA promulgated the NESHAP for Secondary Aluminum Production at 40 C.F.R. Part 63, Subpart RRR, 40 C.F.R. §§ 63.1500-1520, on March 23, 2000. 65 Fed. Reg. 15710.

8. The NESHAP at 40 C.F.R. Part 63, Subpart RRR, applies to the owner or operators of each secondary aluminum production facility as defined in 40 C.F.R. § 63.1500(a).

9. 40 C.F.R. § 63.1503 defines a "secondary aluminum production facility" as any establishment using clean charge, aluminum scrap, or dross from aluminum production, as the raw material and performing one or more of the following processes: scrap shredding, scrap drying/delacquering/decoating, thermal chip drying, furnace operations (i.e., melting, holding, sweating, refining, fluxing, or alloying), recovery of aluminum from dross, in-line fluxing, or dross cooling.

10. 40 C.F.R. § 63.1500(b) states that "requirements of this subpart apply to the following affected sources, located at a secondary aluminum production facility that is a major source of hazardous air pollutants (HAPs)." These affected sources include each new and existing thermal chip dryer and each new and existing secondary aluminum processing unit. 40 C.F.R. § 63.1500(b)(2)

11. 40 C.F.R. § 63.1503 defines a "secondary aluminum processing unit (SAPU)" as the following: an "existing SAPU means all existing group 1 furnaces and all existing in-line fluxers within a secondary aluminum production facility. Each existing group 1 furnace or existing in-line fluxer is considered an emission unit within a secondary aluminum processing unit. A new SAPU means any combination of individual group 1 furnaces and in-line fluxers within a secondary aluminum processing facility which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to § 63.1505(k)(6). Each of the group 1 furnaces or in-line fluxers within a new SAPU is considered an emission unit within that secondary aluminum processing unit."

12. 40 C.F.R. § 63.1503 defines a "group 1 furnace" as "a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing."

13. 40 C.F.R. § 63.1505(k)(4) provides that the owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with emission limits by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of 40 C.F.R. § 63.1505(i)(4).
14. 40 C.F.R. § 63.1505(i)(4) states that the owner or operator of a group 1 furnace must use 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge to determine the emission standards for a SAPU.
15. 40 C.F.R. § 63.1506(m)(4) provides that for each group 1 furnace with emissions controlled by a lime-injected fabric filter, the owner or operator must maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
16. 40 C.F.R. § 63.1517(b)(4)(ii) provides that for each affected source and emission unit with emissions controlled by a lime-injected fabric filter, records of daily inspections of lime feeder setting shall be maintained, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
17. 40 C.F.R. § 63.1510(g)(1) provides that an affected source using an afterburner to comply with the requirements of this subpart must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner.
18. 40 C.F.R. § 63.1510(g)(2)(ii) states that the temperature monitoring system at the afterburner must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.
19. 40 C.F.R. § 63.1517(b)(2)(i) provides that for each affected source with emissions controlled by an afterburner, records of 15-minute block average afterburner operating temperature shall be maintained, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken.
20. 40 C.F.R. § 63.1510(h)(1) provides that fabric filter inlet temperature monitoring requirements apply to the owner or operator of a group 1 furnace using a lime-injected fabric filter to comply with the requirements of this subpart. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases.
21. 40 C.F.R. § 63.1510(h)(2)(i) states that the fabric filter inlet temperature monitoring system for a group 1 furnace must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
22. 40 C.F.R. § 63.1517(b)(3) provides that for each group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures shall be maintained for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the

compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.

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### Title V Requirements

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23. Title V of the Act, 42 U.S.C. §§ 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d) of the Act, 42 U.S.C. § 7661a(d), provides that each state must submit to the EPA a permit program meeting the requirements of Title V.
24. In accordance with Section 502(b) of the Act, 42 U.S.C. § 7661a(b), the EPA promulgated regulations implementing Title V of the Act. *See* 57 Fed. Reg. 32295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.
25. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit. *See also* 40 C.F.R. § 70.7(b).
26. 40 C.F.R. § 70.6(b)(1) provides that Title V permits are federally enforceable and that all terms and conditions in a Title V permit are enforceable by the EPA.
27. 40 C.F.R. § 70.2 defines “major source” as, among other things, any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit greater than 10 tons per year (tpy) of a single HAP or 25 tpy of all HAP combined. *See also* 42 U.S.C. § 7661(2)(A).
28. The EPA approved of the Indiana’s Title V program on December 4, 2001. 66 Fed. Reg. 62969.
29. The Indiana Department of Environmental Management (IDEM) issued a Part 70 Operating Permit Renewal to Superior Aluminum on December 29, 2008, as Operation Permit No. T003-23683-00286 (December 2008 Title V Permit). This permit incorporates by reference the NESHAP for Secondary Aluminum Production in Section E.
30. IDEM issued an amended Part 70 Operating Permit Renewal on January 11, 2012, as First Administrative Amendment No. T003-31324-00286 (January 2012 Title V Permit). This permit incorporates by reference the NESHAP for Secondary Aluminum Production in Section E.
31. IDEM issued an amended Part 70 Operating Permit Renewal on June 7, 2012, as Second Administrative Amendment No. T003-31838-00286 (June 2012 Title V Permit). This permit incorporates by reference the NESHAP for Secondary Aluminum Production in Section E.

**Relevant Factual Background**

32. Superior Aluminum owns and operates the Facility located in New Haven, Indiana.
33. The Facility is a secondary aluminum production facility.
34. The Facility is a major source of HAPs.
35. Superior Aluminum is subject to the requirements of the NESHAP for Secondary Aluminum Production (40 C.F.R. Part 63, Subpart RRR).
36. The Superior Aluminum operates four group 1 furnaces at the Facility. These reverberatory furnaces are identified as Furnaces #1, #2, #3, and #4, approved for construction in 2002, 2002, 2004, and 2000, respectively.
37. Furnaces #1, #2, #3, and #4, meet the definition of Secondary Aluminum Processing Unit (SAPU).
38. Superior Aluminum uses four lime-injected fabric filter baghouses (Baghouse #1, #2, #3, and #4) to control emissions from Furnaces #1 through #4.
39. Superior Aluminum operates one thermal chip dryer at the Facility.
40. Superior Aluminum uses an afterburner to control emissions from the thermal chip dryer.
41. On August 29, 2012, EPA performed a CAA inspection of the Facility.
42. On December 17, 2012, EPA issued an information request (2012 Information Request) to the Company pursuant to Section 114 of the Act, 42 U.S.C. § 7414.
43. Superior Aluminum provided responses to the information request on February 20, 2013.
44. In response to the 2012 Information Request, Superior Aluminum provided an October 2011 Performance test, completed for the purposed of regulatory compliance (October 2011 Performance Test). The results of this performance test demonstrated compliance with the HCl emission rate at Furnace #3. The lime feed rate during the test was 45 Hz at Baghouse #3.
45. In response to the 2012 Information Request, Superior Aluminum provided a table with the minimum lime feed rate established for Baghouse #3 during the October 2011 Performance Test. Lime Feeder Daily Logs (Logs) for the period of July 2012 through December 2012 were provided for review. The Logs included records of lime feed rate from Baghouse #3 taken during every 8 hour period. Lime feed rates from Baghouse #3 during this time period ranged:

Month	Lime Feed Rate Range (Hz)
July 2012	0.05 – 1.9

August 2012	.05 – 2.5
September 2012	.05 – 4.06
October 2012	.075 – 1.2
November 2012	DOWN
December 2012	Recorded in lb/hour

46. The Logs used by Superior Aluminum to record lime feed rate demonstrate that lime feed rates into Baghouse #3 are consistently below the lime feeder setting established during the October 2011 performance test. The Logs used by Superior Aluminum did not indicate that these rates were deviations nor did it provide a brief explanation of the cause of deviation and the corrective action taken.
47. The December 2012 Log used by Superior Aluminum indicates a change in the method of measuring lime feed rates for Baghouse #1 - #4, from Hz to lb per hour. The change in method of measuring Lime Feed Rates has interfered with the facility's ability to determine compliance with the lime feeder setting established during the October 2011 performance test.
48. The 2012 Information Request requested 3-hour block average operating temperatures at the thermal chip dryer afterburner from December 2007 to the present (Request 13.a). In response to the information request, Superior Aluminum stated that, "Circle charts were used for the entire five-year period referenced in Question #13.a.", Circle charts for the period of July 2012 through December 2012 were provided for review.
49. The circle charts used by Superior Aluminum to record the temperature at the afterburner do not record the temperature in 15-minute block averages, nor do the circle charts determine and record the average temperature for each 3-hour block period.
50. In response to the 2012 Information Request, Superior Aluminum stated that the Facility has utilized a computer-based recording system to continuously record the fabric filter baghouse inlet temperatures at the four baghouses used to control emissions from Furnaces #1 through #4. Daily temperature records from Furnace #1 were provided for review for the period of July 2012 through December 2012.
51. The computer-based monitoring system used by Superior Aluminum to record the inlet temperature at the four baghouses used to control emissions from Furnaces #1 through #4 does not record the temperature in 15-minute block averages, nor does this system calculate and record the average temperature for each 3-hour block period.

### Explanation of Violations

52. Superior Aluminum has failed to operate Baghouse #3 at the lime feed rate established during the most recent performance test demonstrating compliance as required by the June 2012 Title V Permit and 40 C.F.R. § 63.1506(m)(4), from at least July 2012 to the present.
53. Superior Aluminum has failed to maintain records of the cause of deviation and the corrective action taken as required by the June 2012 Title V Permit and 40 C.F.R. § 63.1517(b)(4)(ii), from at least July 2012 to the present.
54. By operating Furnace #3 with a lime feed rate less than the rate established during the most recent performance test demonstrating compliance, Superior Aluminum has failed to demonstrate continuous compliance with the HCl emission limits at Furnace #3 as required by the January 2012 Title V Permit, June 2012 Title V Permit, and 40 C.F.R. § 63.1505(k)(4) from at least June 2012 to the present.
55. By recording the lime feed addition rate in pounds per hour rather than in hertz as it was recorded during the most recent performance test demonstrating compliance, Superior Aluminum has failed to demonstrate continuous compliance with the HCl emission limits at Furnace #1 - #4, as required by the June 2012 Title V Permit and 40 C.F.R. § 63.1505(k)(4) from at least December 2012 to the present.
56. Superior Aluminum has continuously failed to monitor the temperature at the afterburner as required by the December 2008 Title V Permit, the January 2012 Title V Permit, the June 2012 Title V Permit, and 40 C.F.R. § 63.1510(g)(2)(ii) from December 2008 to the present.
57. Superior Aluminum has continuously failed to record the temperature at the afterburner as required by the December 2008 Title V Permit, the January 2012 Title V Permit, the June 2012 Title V Permit, and 40 C.F.R. § 63.1517(b)(2)(i) from December 2008 to the present.
58. Superior Aluminum has continuously failed to monitor the inlet temperature at four baghouses used to control the emissions from Furnaces #1 through #4 as required by the June 2012 Title V Permit and 40 C.F.R. § 63.1510(h)(2)(ii) from at least July 2012 to the present.
59. Superior Aluminum has continuously failed to record the inlet temperature at four baghouses used to control the emissions from Furnaces #1 through #4 as required by the June 2012 Title V Permit and 40 C.F.R. § 63.1517(b)(3) from at least July 2012 to the present.

### Environmental Impact of Violations

60. Superior Aluminum's violations of the above-referenced NESHAP have interfered with the Facility's ability to demonstrate compliance with emission limits from the four reverberatory furnaces, as well as the thermal chip dryer. This may have resulted in

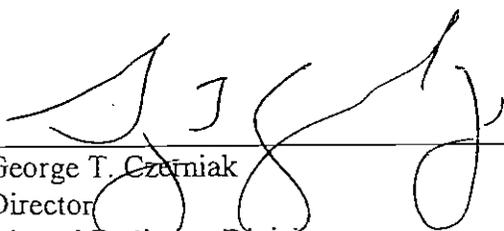
increased emissions of hydrogen chloride (HCl) and dioxins and furans (D/F) from the reverberatory furnaces and increased emissions of volatile organic compounds (VOCs), HAPs, and D/F from the thermal chip dryer.

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61. HCl can cause numerous inhalation and pulmonary issues in humans. Acute inhalation exposure may cause coughing, hoarseness, inflammation and ulceration of the respiratory track, chest pain, and pulmonary edema. Chronic occupational exposure to hydrochloric acid has been reported to cause gastritis, chronic bronchitis, dermatitis, and photosensitization in workers.
62. D/F can cause a number of health effects. The most well known member of the dioxins/furans family is 2,3,7,8 TCDD, which is suspected of being a cancer causing substance to humans. In addition, people exposed to dioxins and furans have experienced changes in hormone levels. Animal studies show that animals exposed to dioxins and furans experienced changes in their hormone systems, changes in the development of the fetus, decreased ability to reproduce and suppressed immune system.
63. VOC, along with NOx, are major precursors in the formation of atmospheric and ground-level ozone, a photochemical oxidant associated with a number of detrimental health effects, including birth defects and cancer, and environmental and ecological effects. In the presence of sunlight, and influenced by a variety of meteorological conditions, VOC and HAP react with oxygen in the air to produce ozone.
64. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

Date

6/21/13

  
George T. Czerniak  
Director  
Air and Radiation Division

**CERTIFICATE OF MAILING**

I, Loretta Shaffer, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-13-IN-10, by Certified Mail, Return Receipt Requested, to:

David Lesher  
Environmental Health and Safety Manager  
Superior Aluminum Alloys, LLC  
14214 Edgerton Road  
New Haven, Indiana 46774

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

Phil Perry, Chief  
Air Compliance and Enforcement Branch  
Indiana Department of Environmental Management  
100 N. Senate Ave.  
Mail Code 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

On the 24<sup>th</sup> day of JUNE 2013.

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 7676 0584