## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH CAROLINA CHARLESTON DIVISION

Katie Leigh McDaniel, on behalf of herself and a class of all others similarly situated, Myrna S. Seibel, Robert B. Deaver, Amber Brown, and Catherine B. Burns,

Plaintiffs,

v.

Century Aluminum Company and Century Aluminum of South Carolina, Inc.,

Defendants.

C/A NO. 2:23-cv-05766-RMG

THIRD AMENDED COMPLAINT

Plaintiff Katie Leigh McDaniel, on behalf of herself and a class of all others similarly situated ("Plaintiff McDaniel"), and Plaintiffs Myrna S. Seibel, Robert B. Deaver, Amber Brown, and Catherine B. Burns ("Personal Injury Plaintiffs") (Plaintiff McDaniel and Personal Injury Plaintiffs collectively "Plaintiffs"), by and through their undersigned counsel, complain of Defendants Century Aluminum Company and Century Aluminum of South Carolina, Inc. ("Defendants") as follows:

## **INTRODUCTION**

1. This action seeks property damages in the form of lost rental value on behalf of a class of property owners from Defendants for the egregious, repeated harmful emissions of aluminum oxide, also known as alumina, fluoride, and other particulates from Defendants' Mount Holly aluminum smelter (the "Smelter") into the air and from there into, onto, and causing damages to the real properties of residents of Goose Creek, South Carolina and the surrounding area. This action also seeks personal injury damages on behalf of the Personal Injury Plaintiffs.

2. The Smelter's operations create particulates—both visible to the human eye and microscopic solid particles suspended in the air—that are removed from the Smelter's emissions through an emissions control system.

3. In or around March and April of 2023, the Smelter began emitting significantly greater quantities of particulates, with the substantial quantities of particulates accumulating and remaining suspended in the air in the areas around the Smelter and eventually settling out of the air onto properties in areas around the Smelter.

4. On September 3, 2023, the Smelter's emissions control system failed, and substantial quantities of aluminum oxide, fluoride, and other particulates were emitted from the Smelter and into the air in Goose Creek.

5. The aluminum oxide, fluoride, and other particulates emitted from the Smelter were suspended in the air in the area in Goose Creek around the Smelter where the particulates deposited onto properties and residents came into physical contact with the particulates through touch and inhalation.

6. Depending on the size of the particulates, the particulates were trapped by mucous membranes in Personal Injury Plaintiffs' noses, throats, eyes, and ears, were inhaled into their lungs, or passed through their lungs into their blood, causing them to suffer irritation, itching, swelling, congestion, sinus issues, coughs, bloody noses, shortness of breath, asthma, inflammation, headaches, and/or permanent impairment.

7. Particulates settling out of the air were deposited on owners' real property.

8. Particulates settling out of the air were deposited on owners' lawns.

9. Rather than shut down the Smelter and stop the harmful particulate emissions,

Defendants chose to continue operating the plant and emitting particulates.

10. Defendants knew or learned from examination of the emissions control system that the filter bags were failing and that accelerated scale growth in the Smelter was causing increased pressure in the emissions control system and bag failure.

11. On September 16, 2023, the Smelter's emissions control system again failed on two occasions, and again, Defendants chose to continue operating the plant and emitting particulates.

12. During and following the September 16, 2023 particulate releases from the Smelter, property owners of the areas in Goose Creek around the Smelter were again subjected to injuries to their real property, and the Personal Injury Plaintiffs were subjected to injuries to their persons, caused by the emitted particulates.

13. On September 30, 2023, the Smelter's emissions control system again failed, and again, Defendants chose to continue operating the plant and emitting particulates.

14. During and following the September 30, 2023 particulate releases from the Smelter, property owners of the areas in Goose Creek around the Smelter were again subjected to injuries to their real property, and the Personal Injury Plaintiffs were subjected to injuries to their persons, caused by the emitted particulates.

15. Defendants believed they would have the problems causing the emissions control system to malfunction corrected by October 16 to October 18, yet Defendants continued and continue to operate the Smelter knowing the emissions control system may again malfunction and emit particulates into the atmosphere until such time as a permanent fix for the system failure is achieved.

#### **PLAINTIFFS**

16. Plaintiff Katie Leigh McDaniel is a citizen of South Carolina and resides at 151 Penzance Blvd., in Goose Creek in Berkeley County, South Carolina, where she resided in September 2023. McDaniel's residence is located approximately 1.4 miles from stacks emitting particulate matter from the Smelter. McDaniel suffered damages to her real property caused by Defendants' wrongful particulate emissions. She brings this action for damages in her individual capacity and for real property damages as the proposed representative of a class of property owners defined herein.

17. Plaintiff Myrna S. Seibel is a citizen of South Carolina and resides at 102 Tokeena Court, in Goose Creek in Berkeley County, South Carolina, where she resided in September 2023. Seibel's residence is located approximately 1.5 miles from stacks emitting particulate matter from the Smelter. Seibel suffered personal injuries and damages to her real property caused by Defendants' wrongful particulate emissions. She brings this action for personal injury damages in her individual capacity.

18. Plaintiff Robert B. Deaver is a citizen of South Carolina and resides at 708 East Saltash Alley in Goose Creek in Berkeley County, South Carolina, where he resided in September 2023. Deaver's residence is located approximately 1.3 miles from stacks emitting particulate matter from the Smelter. Robert Deaver suffered personal injuries caused by Defendants' wrongful particulate emissions. He brings this action for personal injury damages in his individual capacity.

19. Plaintiff Amber Brown is a citizen of South Carolina and resides at 409 Amy Drive in Goose Creek in Berkeley County, South Carolina, where she resided in September 2023. Brown's residence is located approximately 2.4 miles from stacks emitting particulate matter from the Smelter. Brown suffered personal injuries caused by Defendants' wrongful particulate emissions. She brings this action for personal injury damages in her individual capacity.

20. Plaintiff Catherine B. Burns is a citizen of South Carolina and resides at 91 Milton Drive in Goose Creek in Berkeley County, South Carolina, where she resided in September 2023. Burns' residence is located approximately 6.6 miles from stacks emitting particulate matter from the Smelter. Burns suffered personal injuries caused by Defendants' wrongful particulate emissions. She brings this action for personal injury damages in her individual capacity.

## **DEFENDANTS**

21. Defendant Century Aluminum Company is a corporation incorporated in and operating under the laws of Delaware and with its principal place of business located at One South Wacker Drive, Suite 1000, Chicago, Illinois.

22. Defendant Century Aluminum of South Carolina, Inc. is a wholly owned subsidiary of Defendant Century Aluminum Company.

23. Defendant Century Aluminum of South Carolina, Inc. is a corporation incorporated in and operating under the laws of Delaware and with its principal place of business located at One South Wacker Drive, Suite 1000, Chicago, Illinois.

24. For many years prior to 2014, Defendant Century Aluminum Company owned an interest in the Smelter through its wholly owned subsidiary Berkeley Aluminum, Inc. and operated the Smelter as a joint venture with Alumax of South Carolina, Inc.

25. On October 23, 2014, Berkeley Aluminum, Inc. entered into a stock purchase agreement with Alumax, Inc. to acquire all the issued and outstanding shares of capital stock of Alumax of South Carolina, Inc. As a term of the stock purchase agreement, Berkeley Aluminum,

Inc. for itself and Defendant Century Aluminum Company released and discharged any liabilities and losses that they had against the seller. As a term of the stock purchase agreement, Berkeley Aluminum, Inc. was to be provided information subject to the terms of a Confidentiality Agreement entered into between Alco and Defendant Century Aluminum Company dated July 11, 2014.

26. On December 1, 2014, Defendant Century Aluminum Company, through its wholly owned subsidiary Berkeley Aluminum, Inc., acquired the remaining ownership stake in the Smelter and became the sole owner of the Smelter.

27. On December 3, 2014, Defendant Century Aluminum Company merged Berkeley Aluminum, Inc. into Alumax of South Carolina, Inc. and changed the surviving entity's name to "Century Aluminum of South Carolina, Inc.," Defendant Century Aluminum of South Carolina, Inc.

28. On December 18, 2014, Defendant Century Aluminum Company entered into a Supplemental Indenture making Defendant Century Aluminum of South Carolina, Inc. a guarantor of Century Aluminum Company's June 4, 2013 Indenture for 7.500% Senior Secured Notes Due 2021.

29. From December 2014 to the present, Defendant Century Aluminum Company has owned and operated the Smelter through its wholly owned subsidiary Defendant Century Aluminum of South Carolina, Inc.

30. In its Form 10-K annual report for the fiscal year ended December 31, 2022, filed with the United States Securities and Exchange Commission on February 27, 2023, Defendant Century Aluminum Company states that it and its subsidiaries together "operate three U.S.

aluminum smelter, in Hawesville, Kentucky ('Hawesville'), currently curtailed, Robards, Kentucky ('Sebree') and Goose Creek, South Carolina ('Mt. Holly'), and one aluminum smelter in Grundartangi, Iceland ('Grundartangi')."

31. In its Form 10-K annual report for the fiscal year ended December 31, 2022, filed with the United States Securities and Exchange Commission on February 27, 2023, Defendant Century Aluminum Company states that it and Defendant Century Aluminum of South Carolina, Inc. together "began a multi-year project to restore previously curtailed capacity at Mt. Holly. The initial phase was completed in the second quarter of 2022 and returned production capacity to approximately 172,000 MT per annum (75% of capacity)."

32. On May 24, 2013, Defendant Century Aluminum Company; Berkeley Aluminum, Inc.; and other subsidiaries of Defendant Century Aluminum Company entered into a Loan and Security Agreement with lenders Wells Fargo Capital Finance, LLC and Credit Suisse AG whereby, as stated in Defendant Century Aluminum Company's Form 8-K filed with the Securities and Exchange Commission on May 24, 2013, the "Borrower's obligations under the New Credit Facility are guaranteed by certain of the Company's domestic subsidiaries and secured by a first priority security interest in all of the Borrowers' accounts receivable, inventory and certain bank accounts." Under the Loan and Security Agreement, Defendant Century Aluminum of South Carolina, Inc., through its predecessor entity Berkeley Aluminum, Inc., is obligated to pay and its assets are collateral for the indebtedness of Defendant Century Aluminum Company and its other subsidiaries.

33. On December 31, 2015, Defendant Century Aluminum Company, Defendant Century Aluminum of South Carolina, Inc., and other subsidiaries of Defendant Century Aluminum Company executed the Sixth Amendment to Amended and Restated Loan and Security Agreement with lender agent Wells Fargo Capital Finance, LLC thereby evidencing Defendant Century Aluminum of South Carolina, Inc.'s obligations on the debts of its parent company Defendant Century Aluminum of South Carolina, Inc. even for loaned funds that were not provided to or used for Defendant Century Aluminum of South Carolina, Inc.'s business.

34. As of the date of the filing of this action, Defendant Century Aluminum Company's website, <u>http://www.centuryaluminum.com/home</u>, states: "We are a global metals and mining company, focused on bauxite, alumina and aluminum. We operate globally, with operations in the U.S., Iceland, Jamaica, and Netherlands."

35. As of the date of the filing of this action, Defendant Century Aluminum Company's website, http://www.centuryaluminum.com/home, states: "Century's wholly owned Mt. Holly aluminum smelter, located in Berkeley County, South Carolina, has a production capacity of approximately 229,000 metric tonnes of aluminum per year."

36. As of the date of the filing of this action, Defendant Century Aluminum Company's website, <u>http://www.centuryaluminum.com/home</u>, states: "Century's wholly owned Mt. Holly aluminum smelter, located in Berkeley County, South Carolina, has a production capacity of approximately 229,000 metric tonnes of aluminum per year."

37. Defendant Century Aluminum Company exercises total control over all aspects of Defendant Century Aluminum of South Carolina, Inc.'s operation of the Smelter.

38. At all relevant times, Defendant Century of Aluminum of South Carolina, Inc. acted within the scope of its agency with Defendant Century Aluminum Company as principal and intended Defendant Century of Aluminum of South Carolina, Inc.'s actions serve the interests of

Defendant Century Aluminum Company, with Defendant Century of Aluminum of South Carolina, Inc.'s actions directed, authorized, or known and approved by Defendant Century of Aluminum Company.

39. At an October 9, 2023 public meeting regarding the particulate emissions, the manager of the Smelter, Dennis Harbath, introduced himself as the manager of "Century Aluminum's" plant, referred to himself and the other employees at the Smelter as employees of "Century Aluminum," stated that "Century Aluminum" had been operating the Smelter for forty years, and made no distinction between Defendant Century Aluminum Company and Defendant Century Aluminum of South Carolina, Inc.

40. According to Dennis Harbath's LinkedIn page, he describes himself as having been employed with "Century Aluminum" from May 2013 to the date of the filing of this action, with his employment from May 2013 to December 2017 have been at a smelter owned by a subsidiary of Defendant Century Aluminum Company in Hawesville, Kentucky. Dennis Harbath considers his employer to be Defendant Century Aluminum Company regardless of whether he is working at a facility owned by a particular subsidiary of Defendant Century Aluminum Company.

41. As of the date of the filing of this action, the physical signage at the entrance to the Smelter on Highway 52 in Berkeley County, South Carolina states "Mt. Holly Century Aluminum" and does not identify Defendant Century Aluminum of South Carolina, Inc.

## JURISDICTION AND VENUE

42. This action seeks recovery for real property damages on behalf of a class of residential property owners resulting from Defendants' wrongful and tortious actions and omissions which occurred at and around the Smelter in Berkeley County, South Carolina. This

action also seeks personal injury damages on behalf the Personal Injury Plaintiffs.

43. At all relevant times, Defendants have conducted business in and have availed themselves of the privilege of conducting business in the State of South Carolina.

44. This action arises out of business transacted in and tortious actions and omissions committed in South Carolina and which caused injuries to Plaintiffs and the Class in South Carolina.

45. The Court has personal jurisdiction over Defendants because the claims asserted in this action arise out of and relate to Defendants' respective and collective purposeful contacts with South Carolina.

46. This Court has jurisdiction pursuant to the Class Action Fairness Act ("CAFA"),28 U.S.C. § 1332(d). CAFA jurisdiction exists because there are more than one-hundred ClassMembers and the aggregate amount in controversy exceeds five million dollars.

47. Independent of and in addition to original jurisdiction under CAFA, this Court has original jurisdiction pursuant to 28 U.S.C. § 1332(a)(1) because there is complete diversity of citizenship between the parties and the amount in controversy exceeds seventy-five thousand dollars.

48. Venue is proper in this Court pursuant to 28 U.S.C. § 1391 because a substantial portion of the events or omissions giving rise to Plaintiffs' claims took place in this judicial District and because the property that is the subject of this action is situated in this District.

49. Venue is proper in this Court pursuant to 28 U.S.C. § 1391 because a substantial portion of the events or omissions giving rise to Plaintiffs' claims took place in this judicial District and because the property that is the subject of this action is situated in this District.

# FACTUAL BACKGROUND

## The Smelter

50. The Smelter is a primary aluminum production facility.

51. Primary aluminum production refers to the production of aluminum directly from mined ore as compared to production of aluminum from scrap. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-1 (5th ed. 1995, rev. 1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0).

52. In the primary production of aluminum, bauxite ore mined from the earth is refined using the Bayer process to separate out the alumina from the other minerals present in the ore. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-1 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-editionvolume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 5 (1998) (https://www.epa.gov/air-emissions-factors-andquantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0).

53. The alumina is then converted to aluminum metal through electrolytic reduction in the Hall-Héroult process. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-1 (1998) (<u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0</u>); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 6 (1998) (<u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0</u>);

54. The molten aluminum produced by the Hall-Héroult process is then subjected to additional processing such as alloying, impurity removal, casting, and sawing. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-1–12.1-3 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 8 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0).

55. The Smelter takes alumina and converts it into aluminum metal through electrolytic reduction and then transports the molten aluminum to a cast house where it undergoes additional processing. Ex. A, Permit TV-04200-0015.

56. In aluminum smelters generally and the Smelter specifically, the electrolytic reduction of alumina occurs in shallow rectangular steel shells lined with carbon, commonly referred to as "pots." U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-1 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 6 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Ex. A, Permit TV-04200-0015.

57. The Smelter uses prebaked anode cells for the electrolytic reduction. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-3 (1998) (<u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-</u> <u>chapter-12-metallurgical-0</u>); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 7 (1998) (<u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0</u>); Ex. A, Permit TV-04200-0015.

58. The Smelter has two "Potlines," each of which is a row of 180 pots. Ex. A, Permit TV-04200-0015.

59. In the Smelter's Green Carbon Plant, coke and pitch are milled to produce a paste which is formed into green anodes. Ex. A, Permit TV-04200-0015.

60. The green anodes are then transported to the Smelter's Baked Carbon Plant where they are baked in ring furnaces. Ex. A, Permit TV-04200-0015.

61. The baked anodes are then transported to the Smelter's Anode Rodding area where metal rods are attached to the baked anodes. Ex. A, Permit TV-04200-0015.

62. Upon attachment of the metal rods to the baked anodes, a pot is ready for use in the Smelter's Potline for the electrolytic reduction of alumina. Ex. A, Permit TV-04200-0015.

63. On the Smelter's Potline, each pot contains the carbon anodes and carbon cathodes with alumina, an electrolytic bath, and additives, and voltage is applied across the pot. Ex. A, Permit TV-04200-0015.

64. During the electrolytic reduction, aluminum is deposited at the cathode, where it remains as molten metal below the surface of the electrolytic bath, and periodically, the molten aluminum is tapped, siphoned out of the pot, and transported to the cast house. Ex. A, Permit TV-04200-0015.

65. Upon completion of use on the Potline, anodes are returned to the Anode Rodding area where the electrolytic bath is removed and returned to the Potline for reuse, the rods are

removed, and the carbon anode is crushed and transported to the Green Carbon Plant for recycling into new green anodes. Ex. A, Permit TV-04200-0015.

66. The electrolytic reduction cells, the "pots" produce particulate emissions including alumina, carbon, aluminum fluoride, calcium fluoride, cryolite, and ferric oxide particulates. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-4 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 8 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-factors-factors-and-quantification/ap-42-fifth-edition-factors-factors-factors-and-quantification/ap-42-fifth-edition-factors-fact

67. The anode baking ovens also emit particulates. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-4 (1998) (<u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0</u>); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 9 (1998) (<u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0</u>); Ex. A, Permit TV-04200-0015.

68. Smelters generally use a variety of emissions control devices to remove from the exhausted air particulate emissions created by the reduction cells and anode baking furnaces. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-4 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 8 (1998) (https://www.epa.gov/air-emissions-factors-and-

<u>quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0</u>); Ex. A, Permit TV-04200-0015.

69. Without emissions control devices removing particulates, a prebaked anode smelter, like the Smelter, emits substantial quantities of PM<sub>10</sub> and PM<sub>2.5</sub>. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-8 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 32 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-factors-and-factors-factors-and-factors-and-factors-f

70. Without emissions control devices removing particulates, fifty-eight percent by mass of the particulates emitted by an aluminum smelter using prebaked anode cells would be smaller than 10 μm in equivalent aerodynamic particle diameter, *i.e.*, PM<sub>10</sub>. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-8 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 32 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0). PM<sub>10</sub> consists of particulate matter such as dust, pollen, and mold. United States Environmental Protection Agency, Particulate Matter (PM) Basics (July 11, 2023) (https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM).

71. Without emissions control devices removing particulates, twenty-eight percent by mass of the particulates emitted by an aluminum smelter using prebaked anode cells would be

smaller than 2.5 µm in equivalent aerodynamic particle diameter, *i.e.*, PM<sub>2.5</sub>. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-8 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 32 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0). PM<sub>2.5</sub> consists of particulate matter such as combustion particles, organic compounds, and metals. United States Environmental Protection Agency, Particulate Matter (PM) Basics (July 11, 2023) (https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM).

72. Without emissions control devices removing particulates, aluminum smelters using prebaked anode cells emit substantial quantities of particulates significantly smaller than PM<sub>2.5</sub>, with eighteen percent by mass of uncontrolled emissions consisting of particulates smaller than 1.25 μm in equivalent aerodynamic particle diameter and thirteen percent by mass of uncontrolled emissions consisting of particulates smaller than 0.625 μm in equivalent aerodynamic particle diameter. U.S. Environmental Protection Agency, AP-42: Compilation of Air Emissions Factors 12.1-8 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0); Pacific Environmental Services, Inc., Background Report AP-42 Section 12.1 Primary Aluminum 32 (1998) (https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-12-metallurgical-0).

73. When the emissions control devices are functioning, the Smelter uses a system of dust collectors, scrubbers, and baghouse to capture particulates and prevent their emissions into the ambient air. Ex. A, Permit TV-04200-0015.

#### **Statutes and Regulations**

74. The Clean Air Act requires the Administrator of the Environmental Protection Agency to propose regulations setting national primary and secondary ambient air quality standards for specified pollutants. 42 U.S.C. § 7409.

75. The Clean Air Act provides the national primary ambient air quality standards "shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. § 7409.

76. The Clean Air Act provides the national secondary ambient air quality standards "shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air." 42 U.S.C. § 7409.

77. The Clean Air Act provides that every five years, the Administrator is to review the national ambient air quality standards using an independent scientific review committee and revise the standards as may be appropriate following that review. 42 U.S.C. § 7409.

78. Setting the National Ambient Air Quality Standards for  $PM_{10}$ , the United States Code of Federal Regulations provides that the "level of the national primary and secondary 24hour ambient air quality standards for particulate matter is 150 micrograms per cubic meter ( $\mu/m^3$ ), 24-hour average concentration." 40 C.F.R. § 50.6(a).

79. Setting the National Ambient Air Quality Standards for  $PM_{2.5}$ , the United States Code of Federal Regulations provides that for  $PM_{2.5}$  the "national primary ambient air quality standards for  $PM_{2.5}$  are 12.0 micrograms per cubic meter ( $\mu g/m^3$ ) annual arithmetic mean concentration and 35  $\mu g/m^3$  24-hour average concentration measured in the ambient air as  $PM_{2.5}$  (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers)." 40 C.F.R. § 50.18(a).

80. Setting the Standards of Performance for Primary Aluminum Reduction Plants, the United States Code of Federal Regulations provides that no owner or operator subject to the standards shall cause to be discharged into the atmosphere from any affected facility any gases containing total fluorides in excess of 0.95 kg/MG (1.9 lb/ton) of aluminum produced for pot room groups at prebake plants and 0.05 kg/MG (0.1 lb/ton) of aluminum equivalent for anode bake plants. 40 C.F.R. § 60.192.

81. Setting the National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants, the United States Code of Federal Regulations provides that no owner or operator shall discharge or cause to be discharged into the atmosphere any emissions of total fluorides in excess of 0.95 kg/MG (1.9 lb/ton) of aluminum produced for each center-worked prebake one potline. 40 C.F.R. § 63.843.

82. In 2012, the United States Environmental Protection Agency amended the federal regulations to establish a new annual  $PM_{2.5}$  primary standard of 12 µg/m<sup>3</sup> and retained the 24-hour  $PM_{2.5}$  standard of 35 µg/m<sup>3</sup>.

83. The South Carolina Pollution Control Act declares the State's public policy "to maintain reasonable standards of purity of the air and water resources of the State, consistent with the public health, safety, and welfare of its citizens, ...." S.C. Code Ann. § 48-1-20

84. The South Carolina Pollution Control Act directs the South Carolina Department

of Health and Environmental Control to "adopt standards and determine what qualities and properties of water and air shall indicate a polluted condition and these standards shall be promulgated and made a part of the rules and regulations of the Department." S.C. Code Ann. § 48-1-40.

85. The South Carolina Pollution Control Act provides a civil penalty for violation of the Act and provides that a willful or grossly negligent violation of the Act is a misdemeanor punishable by a fine or imprisonment, but the Act explicitly provides that "[n]o private cause of action is created by or exists pursuant to this chapter." S.C. Code Ann. §§ 48-1-250, -320, & -330.

86. Regulation 61-62.1 § 1 defines "Particulate Matter" as "any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions."

87. Regulation 61-62.1 § 1 defines "Particulate Matter Emissions" as "all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air."

88. Regulation 61-62.3(I) provides that the Commissioner of the South Carolina Department of Health and Environmental Control may declare an air pollution "emergency" when  $PM_{10}$  concentrations reach "500 µg/m<sup>3</sup>, twenty-four (24)-hour average," an air pollution "alert" when  $PM_{10}$  concentrations reach "420 µg/m<sup>3</sup>, twenty-four (24)-hour average," and an air pollution "watch" when  $PM_{10}$  concentrations reach "350 micrograms per cubic meter (µg/m<sup>3</sup>), twenty-four (24)-hour average."

89. Regulation 61-62.3(II) provides that in an air pollution alert, "[i]ndustrial sources including . . . metals . . . which require considerable lead time for shut-down" are to "take all required control actions for this Alert Level to include" the "[m]aximum reduction of air

contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations."

90. Regulation 61-62.3(II) provides that in an air pollution emergency, "primary metals . . . industries shall take the following control actions: Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and operations to the extent possible without causing injury to persons or damage to equipment."

91. Regulation 61-62.5, Standard No. 2 Ambient Air Quality Standards adopts the Code of Federal Regulations particulate primary and secondary ambient air quality standards, setting the following PM standards for South Carolina:

Pollutant	Reference	Measuring Interval	µg/m <sup>3</sup>
			(micrograms per
			cubic meter)
PM <sub>10</sub>	40 C.F.R. 50.6	24 hour	150
PM <sub>2.5</sub>	40 C.F.R. 50.13	24 hour	35
PM <sub>2.5</sub>	40 C.F.R. 50.18	Annual (primary)	12
PM <sub>2.5</sub>	40 C.F.R. 50.18	24 hour	35
PM <sub>2.5</sub>	40 C.F.R. 50.18	Annual (secondary)	15

92. Regulation 61-62.1 § 2(F) provides that a facility discharging air pollution must obtain and comply with an operating permit, a Title V permit, from the South Carolina Department of Health and Environmental Control.

# **<u>Title V Operating Permit</u>**

93. Pursuant to the Pollution Control Act, Section 48-1-50(5), 48-1-100(A), and 48-1-110(a) of the South Carolina Code of Laws and the Air Pollution Control Regulations and

Standards, Regulation 61-62 of the South Carolina Code of Regulations, Chapter 85 of Title 42 of the United States Code, and Title 40 of the Code of Federal Regulations, the South Carolina Department of Health and Environmental Control issued a Title V Operating Permit, Permit Number TV-0420-0015, to Defendants on June 23, 2021, with the permit effective on July 1, 2021 ("Permit TV-0420-0015"). Ex. A, Permit TV-04200-0015.

94. Pursuant to South Carolina and federal statutes and regulations, Defendants were legally required to operate the Smelter in accordance with the terms, limitations, standards, and schedules in Permit TV-0420-0015.

95. On January 23, 2023, and January 27, 2023, Defendants submitted two applications to revise Permit TV-0420-0015. Ex. B, Nov. 2, 2023 Order of Administrator of United States Environmental Protection Agency, Petition No. IV-2023-09 at 7.

96. The South Carolina Department of Health and Environmental Control issued Defendants an amended Permit TV-0420-0015 on April 13, 2023. Ex. B, Nov. 2, 2023 Order of Administrator of United States Environmental Protection Agency, Petition No. IV-2023-09 at 7.

97. On November 2, 2023, the Administrator of the United States Environmental Protection Agency issued an Order Granting in Part and Denying in Part a Petition for Objection to a Title V Operating Permit in Petition No. IV-2023-09 and objected to the issuance of the amended Permit TV-0420-0015. Ex. B, Nov. 2, 2023 Order of Administrator of United States Environmental Protection Agency, Petition No. IV-2023-09.

98. From January of 2023 through October of 2023, Defendants' operation of the Smelter was subject to Permit TV-0420-0015.

99. Permit TV-0420-0015 requires that emissions of filterable particulate matter,

particulate matter of less than 10 microns in size, also known as PM<sub>10</sub>, and particulate matter of less than 2.5 microns in size, also known as PM<sub>2.5</sub>, from the green carbon plant, baked carbon plant, anode rodding, potlines, and cast house at the Smelter "be limited to 0.005 grain/dscf, each pollutant, each source using baghouse controls." Ex. A, Permit TV-0420-0015 at C.7. In the "grain/dscf" specification, a "grain" is a unit of measurement of mass equal to 64.79891 milligrams, and "dscf" is a standard cubic foot of dry gas, meaning Permit TV-04200-0015 requires the particulate emissions be equal to or less than .324 milligrams of particulates per standard cubic foot of dry gas.

100. Permit TV-0420-0015 requires "total fluoride (TF) emissions shall be limited to 0.04 lb./ton aluminum equivalent based on a 12-month rolling average" in accordance with S.C. Regulation 61-62.5, Standard No. 7. Ex. A, Permit TV-0420-0015 at C.21.

101. Permit TV-0420-0015 requires that emissions of filterable particulate matter,  $PM_{10}$ , and  $PM_{2.5}$  from the anode rodding, potlines, and pot repair at the Smelter "be limited to 0.0035 grain/dscf, each source, using baghouse controls." Ex. A, Permit TV-0420-0015 at C.22.

102. Permit TV-0420-0015 requires total fluoride emissions "shall be limited to a plantaverage limit of 1.02 lb./ton of aluminum produced based on a single month average" in accordance with S.C. Regulation 61-62.5, Standard No. 7. Ex. A, Permit TV-0420-0015 at C.27.

103. Permit TV-0420-0015 requires compliance with 40 C.F.R. § 60.192 Standards for Fluorides. Ex. A, Permit TV-0420-0015 at C.30 and C.31.

104. Permit TV-04200-0015 requires that emissions of filterable particulates from the green carbon plant at the Smelter "be limited to 0.75 lb/hr." Ex. A, Permit TV-0420-0015 at C.8.

105. Permit TV-04200-0015 requires that emissions of filterable particulates from each

pot room group "be limited to 28.73 lb/hr." Ex. A, Permit TV-0420-0015 at C.23.

106. Permit TV-04200-0015 requires that particulate emissions from the green carbon plant, baked carbon plant, anode rodding, potlines, and cast house at the Smelter "be limited to the rate specified by the use of the following equations: For process weight rates less than or equal to 30 tons per hour E=(F) 4.10P<sup>0.67</sup> and For process weight rates greater than 30 tons per hour E=(F) 55.0P<sup>0.11</sup>-40 Where E = the allowable emission rate in pounds per hour P=process weight rate in tons per hour F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4." Ex. A Permit TV-0420-0015 at C.9.

107. Permit TV-04200-0015 requires that "[e]ach baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure." Ex. A, Permit TV-0420-0015 at C.7, C.8, C.22, & C.23.

108. Permit TV-04200-0015 requires that the baghouse pressure drop be measured and recorded daily. Ex. A, Permit TV-0420-0015 at C.36.

109. Permit TV-04200-0015 requires that the baghouse collection system be inspected and maintained each month. Ex. A, Permit TV-0420-0015 at C.36.

110. Permit TV-04200-0015 requires that the baghouse pressure drop be a value between 1.0 inch to 9.9 inches of water and defines an "excursion" as "any operating condition where the indicator is outside the approved range" of 1.0 to 9.9 inches of water. Permit TV-04200-0015 requires that upon the detection of an excursion, Defendants "restore operation of the pollutantspecific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions" including "taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion." Ex. A, Permit TV-0420-0015 at C.36.

111. Defendants' particulate emissions on September 3, 16, and 30 and their responses to those emissions violated Permit TV-04200-0015.

112. The South Carolina Department of Health and Environmental Control's Statement of Basis for the 2021 Title V renewal permit stated the Smelter had the potential to emit 485 tons per year of particulate matter and 334 tons per year of  $PM_{10}/PM_{2.5}$ . Such potential particulate emissions equate to 1.3 tons per day of particulate matter and .9 tons per day of  $PM_{10}/PM_{2.5}$ particulate matter, or alternatively, 108 pounds of particulate matter per hour and 75 pounds of  $PM_{10}/PM_{2.5}$  per hour. The majority of the particulate matter the Smelter would emit were the required emissions controls not in place and operating properly would be  $PM_{10}/PM_{2.5}$  emissions (69% of particulates emitted).

113. On December 7, 2022, the South Carolina Department of Health and Environmental Control posted a public notice for PSD Construction Permit No. 0420-0015-CY for modification of the Smelter and stated therein: "Emissions generated by this facility as a result of the proposed project will include: Particulate Matter (PM); Particulate Matter less than 10 micrometers in diameter (PM<sub>10</sub>); Particulate Matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>)." Ex. C, SCDHEC, Bureau of Air Quality, Notice of a Draft Air Prevention of Significant Deterioration (PSD) Construction Permit, Public Notice #22-091-PSD.

# Potential Adverse Health Effects of Particulate Emissions

114. Particle pollution—also called particulate matter (PM)—is made up of particles of solids that are suspended in the air.

115. Assessing the National Air Quality Standards through an independent scientific review committee as required by Section 109(d) of the Clean Air Act, in 2019 the United States Environmental Protection Agency published the Integrated Science Assessment for Particulate Matter (the "ISA"). United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter (2019) (https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935).

116. The ISA "is a comprehensive evaluation and synthesis of policy-relevant science aimed at characterizing exposures to ambient particulate matter (PM), and health and welfare effects associated with these exposures." United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-1 (2019) (https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935).

117. The ISA concludes that for short term exposure (defined as exposure from hours to one month) to PM<sub>2.5</sub> there is a causal relationship with cardiovascular effects and mortality, a likely causal relationship with respiratory effects, and suggestive of a causal relationship, but not sufficient to infer, with metabolic effects, nervous system effects, and reproductive and developmental effects. United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-9–11 (2019) (https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935).

118. The ISA concludes that for short term exposure to  $PM_{10}$  the results are suggestive of a causal relationship, but not sufficient to infer, with respiratory effects, cardiovascular effects, and mortality. United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-9–11 (2019) (https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935). The ISA's conclusion of a suggestion of causal relationship for  $PM_{10}$ , but not sufficient to infer, is the result of a need for additional research and data on the relationship between exposure to  $PM_{10}$  and human health. United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-23 (2019) (https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935).

119. "Recent epidemiologic studies continue to provide strong evidence for a

relationship between short-term PM<sub>2.5</sub> exposure and several respiratory-related endpoints, including asthma exacerbation, chronic obstructive pulmonary disease (COPD) exacerbation, and combined respiratory-related diseases, particularly from studies examining emergency department (ED) visits and hospital admissions." United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-12 (2019) (https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935).

120. "[T]here is a causal relationship between short-term PM<sub>2.5</sub> exposure and cardiovascular effects." United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-13 (2019) (<u>https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935</u>).

121. "A large body of scientific evidence spanning many decades clearly demonstrates there are health effects attributed to both short- and long-term PM exposure." United States Environmental Protection Agency, Integrated Science Assessment for Particulate Matter at ES-22 (2019) (<u>https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\_download\_id=539935</u>).

122. According to the United States Environmental Protection Agency, PM10 are

"inhalable particles, with diameters that are generally 10 micrometers and smaller" and PM<sub>2.5</sub> are "fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller." United States Environmental Protection Agency, Particulate Matter (PM) Basics (July 11, 2023) (https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM).

123. According to the United States Environmental Protection Agency, "Some particles less than 10 micrometers in diameter can get deep into your lungs and some may even get into your bloodstream. Of these, particles less than 2.5 micrometers in diameter, also known as fine particles or PM<sub>2.5</sub>, pose the greatest risk to health." United States Environmental Protection Agency, Particulate Matter (PM) Basics (July 11, 2023) (<u>https://www.epa.gov/pm-</u> pollution/particulate-matter-pm-basics#PM).

124. According to the United States Environmental Protection Agency, exposure to inhalable particulates "can affect both your lungs and your heart" and "[n]umerous scientific studies have linked particle pollution exposure to a variety of problems, including: premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, [and] increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing." United States Environmental Protection Agency, Health and Environmental Effects of Particulate Matter (PM) (August 23, 2023) (<u>https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm</u>).

125. According to the National Center for Environmental Health in the Centers for Disease Control and Prevention in the United States Department of Health & Human Services, larger particulates, generally PM<sub>10</sub>, irritate mucous membranes in the eyes, nose, and throat. Centers for Disease Control and Prevention, Particle Pollution (Feb. 16, 2023) (https://www.cdc.gov/air/particulate\_matter.html).

126. According to the National Center for Environmental Health in the Centers for Disease Control and Prevention in the United States Department of Health & Human Services, smaller particulates, generally PM<sub>2.5</sub>, can be inhaled into a person's lungs and cause more significant and permanent adverse effects on health. Centers for Disease Control and Prevention, Particle Pollution (Feb. 16, 2023) (https://www.cdc.gov/air/particulate\_matter.html).

127. According to the National Center for Environmental Health in the Centers for Disease Control and Prevention in the United States Department of Health & Human Services, particulates exacerbate and worsen respiratory issues like asthma and can cause trouble breathing. Centers for Disease Control and Prevention, Particle Pollution (Feb. 16, 2023) (https://www.cdc.gov/air/particulate\_matter.html).

128. According to the National Center for Environmental Health in the Centers for Disease Control and Prevention in the United States Department of Health & Human Services, particulates exacerbate heart problems and cause chest pain or tightness, fast heartbeat, shortness of breath, tiredness, and heart attacks. Centers for Disease Control and Prevention, Particle Pollution (Feb. 16, 2023) (<u>https://www.cdc.gov/air/particulate\_matter.html</u>).

129.According to the Agency for Toxic Substances and Disease Registry in the UnitedStates Department of Health & Human Services, "studies suggest that asthma symptoms can beworsened by increases in the levels of  $PM_{10}$ ." Agency for Toxic Substances and Disease Registry,EnvironmentalTriggersofAsthma(Dec. 29, 2014)(https://www.atsdr.cdc.gov/csem/asthma/environmental triggers of asthma.html#pm2).

130. According to the Agency for Toxic Substances and Disease Registry's

Toxicological Profile for Aluminum, the most commonly reported respiratory effect observed in persons exposed to aluminum oxide is pulmonary fibrosis. Agency for Toxic Substances and Disease Registry, Toxicological Profile for Aluminum (Sept. 2008) (https://www.atsdr.cdc.gov/ToxProfiles/tp22.pdf).

131. According to the Agency for Toxic Substances and Disease Registry's Toxicological Profile for Aluminum, "[n]umerous studies have found impaired lung function in a variety of aluminum workers" and "[o]ther effects that have been observed include occupational asthma and pulmonary fibrosis." Agency for Toxic Substances and Disease Registry, Toxicological Profile for Aluminum (Sept. 2008) (https://www.atsdr.cdc.gov/ToxProfiles/tp22.pdf).

132. According to the Agency for Toxic Substances and Disease Registry's Toxicological Profile for Aluminum, "[a]cute-, intermediate-, and chronic-duration animal studies [of alumina inhalation] have also reported respiratory effects. These respiratory effects include increases in alveolar macrophages, granulomatous lesions in the lungs and peribronchial lymph nodes, and increases in lung weight." Agency for Toxic Substances and Disease Registry, Toxicological Profile for Aluminum (Sept. 2008) (https://www.atsdr.cdc.gov/ToxProfiles/tp22.pdf).

133. "By the 1970s, a link between respiratory disease and particulate air pollution and/or sulfur oxide pollution had been well established." C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of Particular Air Pollution, 103 Environmental Health Perspectives 472, 472 (1995).

134. Studies of the impacts of particulates on human health have found particulates

cause decreased lung function, respiratory symptoms, asthma, and cough. C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of Particular Air Pollution, 103 Environmental Health Perspectives 472, 473 (1995).

135. Most studies of acute morbidity effects of particulates have found "[s]tatistically significant associations between hospital/health care visits for respiratory illnesses and particulate pollution." C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of Particular Air Pollution, 103 Environmental Health Perspectives 472, 474–75 (1995).

136. Studies of the impacts of particulates on human health have found increased daily mortality associated with increased particulates, and "[r]espiratory disease deaths were most strongly associated with particulate pollution levels, but statistical associations were also observed for cardiovascular disease deaths." C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of Particular Air Pollution, 103 Environmental Health Perspectives 472, 475–76 (1995).

137. Reviews of scientific studies of the impacts of particulates on human health "have noted considerable consistency across studies." C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of Particular Air Pollution, 103 Environmental Health Perspectives 472, 477 (1995).

138. "Observed health effects of respirable particulate pollution include: increase incidence of respiratory symptoms, decreased lung function, increased hospitalizations and other health care visits for cardiopulmonary disease, increased respiratory morbidity as measured by absenteeism from work or school or other restrictions in activity, and increased cardiopulmonary disease mortality." C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of

Particular Air Pollution, 103 Environmental Health Perspectives 472, 478 (1995).

139. For particulates, "[t]here is no clear evidence of a safe threshold level. Many studies observe that health effects increase monotonically with pollution levels, often with a near-linear dose-response relationship." C. Arden Pope III, David V. Bates, & Mark E. Raizenne, Health Effects of Particular Air Pollution, 103 Environmental Health Perspectives 472, 478–79 (1995).

140. Fluorides are binary compounds or salts of fluorine and another element. Agency for Toxic Substances and Disease Registry, U.S. Dept. of Health and Human Services, Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine 1 (2003).

141. Fluoride particulates enter a person's body through inhalation and orally and then enters the bloodstream. Agency for Toxic Substances and Disease Registry, U.S. Dept. of Health and Human Services, Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine 6 (2003).

142. Sodium fluoride, hydrogen fluoride, and fluorine were declared to be hazardous substances by the EPA. Agency for Toxic Substances and Disease Registry, U.S. Dept. of Health and Human Services, Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine 12 (2003).

143. "Direct contact with fluoride can result in tissue damage. At high concentrations, fluoride can cause irritation and damage to the respiratory tract, stomach, and skin following inhalation, oral, and dermal exposure, respectively." Agency for Toxic Substances and Disease Registry, U.S. Dept. of Health and Human Services, Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine 17 (2003).

144. "Fluoride, hydrogen fluoride, hydrofluoric acid, and fluorine are extremely irritating chemicals and can cause tissue damage after direct contact." Agency for Toxic Substances and Disease Registry, U.S. Dept. of Health and Human Services, Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine 20 (2003).

145. Inhalation, ingestion, or dermal contact with fluoride particulates causes irritation and adverse health effects. Agency for Toxic Substances and Disease Registry, U.S. Dept. of Health and Human Services, Toxicological Profile for Fluorides, Hydrogen Fluoride, and Fluorine 29–186 (2003).

# Plaintiffs' Exposure to the Particulates and Damages Therefrom

146. Plaintiff McDaniel first noticed particulates on her property in September 2023. At times in September of 2023, particulates emitted by the Smelter settled on and interfered with her use and enjoyment of her real property.

147. Plaintiff Seibel first noticed particulates on her property in September 2023. At times in September 2023, particulates emitted by the Smelter settled on and interfered with her use and enjoyment of her real property. She sustained personal injuries caused by physical contact with and inhalation of particulates emitted by the Smelter, including headaches, difficulty breathing, and throat and eye irritation. She developed severe respiratory injuries and complications from her physical contact with and inhalation of particulates emitted by the Smelter, and she is undergoing medical treatment with a pulmonary specialist.

148. Plaintiff Robert Deaver first noticed particulates settling on his property in late August or early September of 2023. He sustained personal injuries caused by physical contact with and inhalation of particulates emitted by the Smelter, including asthma, headaches, difficulty breathing, and throat and eye irritation. He was rushed to the emergency room by ambulance on September 3, 2023, for an asthma episode that caused him to collapse in his driveway while working on his vehicle, and he has been undergoing medical treatment with a pulmonary specialist since September 3, 2023.

149. Plaintiff Brown first noticed particulates settling on her property in August of 2023. At times in September of 2023, particulates emitted by the Smelter settled on and interfered with her use and enjoyment of her real property. She sustained personal injuries caused by physical contact with and inhalation of particulates emitted by the Smelter, including headaches, difficulty breathing, and throat and eye irritation.

150. Plaintiff Burns first noticed particulates on her property on September 2, 2023. At times in September of 2023, particulates emitted by the Smelter settled on and interfered with her use and enjoyment of her real property. She sustained personal injuries caused by physical contact with and inhalation of particulates emitted by the Smelter, including headaches, difficulty breathing, and throat and eye irritation. Due to her coughing caused by her physical contact with and inhalation of particulates emitted by the Smelter, she has been forced to sleep in a different room from her husband. Her physical contact with and inhalation of particulates emitted by the smelter, and inhalation of particulates emitted by the smelter, she has been forced to sleep in a different room from her husband. Her physical contact with and inhalation of particulates emitted by the smelter exacerbated her asthma. She is undergoing medical treatment with a pulmonary specialist.

## **CLASS ACTION ALLEGATIONS**

151. Plaintiff McDaniel realleges the allegations in the preceding paragraphs as if fully set forth herein.

152. Plaintiff McDaniel brings this action as a class action under Rule 23 of the Federal

Rules of Civil Procedure on behalf of the following Class: All persons who at any time in September 2023 held an ownership interest in residential property lying wholly or partially within a wedge-shaped area that extends eight kilometers south-southeast of Defendants' Mount Holly aluminum smelter at an angle of 160° clockwise from north to eight kilometers northwest of the smelter at an angle of 315° clockwise from north (the "Class Area"). The term "residential property" as used herein means one and two family detached dwellings and does not include apartments or condominiums. Excluded from the Class are: (1) any person with an ownership interest of more than 1% of Century Aluminum Corporation; (2) any current or former officer or director of Defendants; (3) any current or former employee of Defendants for particulate alumina exposure and injury that occurred at the Smelter during their employment with Defendants; (4) persons who entered into a settlement agreement with Defendants independent of this action for claims related to the claims asserted in this action; (5) the legal representatives, successors, or assigns of Defendants; and (6) any judge or federal, state, or local government administrative agency official or employee who has or may decide some or all issues in the case, any permit issued to Defendants, or any administrative action related to air emissions from the Smelter, any person related to such a judge, official, or employee in a manner that would create a conflict of interest, any law clerk or chambers staff working for such a judge, and any courthouse staff who perform work related to this action.

153. The Class Area includes locations at which residential property owners observed alumina and fluoride particulates accumulate on their properties.

154. Plaintiff McDaniel reserves the right to revise the Class definition and Class Area based on facts obtained through the continued litigation of this action, including expert investigation and discovery from, among other sources, Defendants and the South Carolina Department of Health and Environmental Control, as well as air and weather monitoring and modeling data. In particular, the Class definition may be amended, expanded, or contracted in certain areas based upon expert evaluation of prevailing wind patterns, emissions factors, and other relevant considerations.

155. This action is proper for resolution as a class action under Rule 23 of the Federal Rules of Civil Procedure.

156. While the exact number and identities of the other Class members are unknown to Plaintiff McDaniel at this time, she is informed and believes that there are thousands of Class members. The United States Environmental Protection Agency calculated "a total population of approximately 39,389 residents within a five-kilometer [(3.1 miles)] radius of the facility." Ex. B, Nov. 2, 2023 Order of Administrator of United States Environmental Protection Agency, Petition No. IV-2023-09 at 7. Thus, the Class includes thousands of residential property owners, and the Class members are so numerous that individual joinder of all Class members is impracticable.

157. Common questions of law and fact arise from Defendants' conduct alleged herein.

158. The common questions of law and fact arising from Defendants' conduct alleged herein are common to all Class members and predominate over any questions affecting individual Class members.

159. The common questions of law and fact arising from Defendants' conduct alleged herein include:

a. Defendants' production of alumina, fluoride, and other particulates at the

Smelter;

- b. The failure of the baghouse and emissions controls at the Smelter in September of 2023;
- c. Defendants' emissions of alumina and fluoride particulate matter and other particulate matter from the Smelter in September of 2023;
- d. Defendants' violations of applicable federal and state laws, regulations, and permits by emitting alumina, fluoride, and other particulates from the Smelter in September of 2023;
- e. Whether Defendants trespassed on Plaintiff McDaniel's and the Class members' properties;
- f. Whether Defendants' particulate emissions were a nuisance;
- g. Whether Defendants were negligent in emitting the particulates as alleged herein; and
- Whether, and to what extent, Class members suffered real property damages in the form of lost rental value from the particulates emitted from the Smelter by Defendants in September of 2023.

160. Plaintiff McDaniel's real property damage claims are typical of those of the Class members because she and the other Class member sustained real property damages arising out of the same wrongful conduct, as detailed herein. Plaintiff McDaniel and Class members sustained similar lost rental value injuries arising out of Defendants' wrongful conduct. Plaintiff McDaniel's and the Class members' injuries were caused directly by Defendants' wrongful conduct.
161. In addition, the factual background of Defendants' wrongful conduct is common to all Class members and represents a common wrongful conduct resulting in injury to all Class members. Plaintiff McDaniel's real property damage claims arise from the same practices and course of conduct that give rise to the claims of Class members and are based on the same legal theories.

162. Plaintiff McDaniel will fairly and adequately represent and pursue the interests of the Class. Plaintiff McDaniel understands the nature of the claims herein, has no disqualifying conditions, and will vigorously represent the interests of the Class members. Neither Plaintiff McDaniel nor her counsel have any interests that conflict with or are antagonistic to the interests of the Class members.

163. Plaintiff McDaniel retained competent and experienced attorneys to represent her interests and those of the Class members. Plaintiff McDaniel's counsel have the necessary financial, staff, and technology resources to litigate this class action adequately and vigorously. Plaintiff McDaniel and her counsel are aware of their fiduciary responsibility to the Class members and will diligently discharge those duties by vigorously seeking the maximum possible recovery for the Class members.

164. The prerequisites of maintaining a class action pursuant Rule 23(b)(3) are met, as questions of law or fact common to the Class predominate over any questions affecting only individual members, and a class action is superior to other available methods for fairly and efficiently adjudicating the controversy. Judicial and party resources will be conserved and the dispute will be more efficiently resolved by concentrating the litigation of the claims in this forum and this action and providing for the single adjudication of common issues. The adjudication of

this controversy through a class action will avoid the potential for inconsistent and conflicting adjudications of the claims asserted herein.

### **FOR A FIRST CAUSE OF ACTION** Trespass (Plaintiff McDaniel and the Class Against Defendants)

165. Plaintiff McDaniel realleges the allegations in the preceding paragraphs as if fully set forth herein.

166. Plaintiff McDaniel brings this claim on behalf of herself and the other members of the Class for real property damages for trespass under South Carolina law.

167. On multiple occasions in September of 2023, the baghouse and emissions control systems at the Smelter failed to function as intended and required.

168. In September of 2023, the failures of the baghouse and emissions control systems permitted the emission of substantial quantities of alumina, fluoride, and other particulates from the stacks at the Smelter and into the ambient air in the area around Goose Creek.

169. Defendants intentionally continued operation of the Smelter and the emission of particulates after Defendants learned of the failure of the baghouse and emissions control systems.

170. After learning of the failure of the baghouse and emissions control systems, Defendants emitted particulates with the knowledge that the particulates would enter the ambient air and then settle out of the air onto real property owned by persons and entities other than Defendants.

171. Defendants' emissions of alumina, fluoride, and other particulates from the Smelter in September of 2023, violated the applicable federal and state statutes, regulations, and permits.

172. The particulates emitted from the Smelter in September of 2023 entered the air on

Plaintiff McDaniel's and the Class members' properties and settled out of the air onto their real property.

173. The alumina, fluoride and other particulates emitted from the Smelter were physical, tangible objects that invaded Plaintiff McDaniel's and the Class members' properties.

174. The alumina, fluoride, and other particulates emitted from the Smelter that settled out of the air onto Plaintiff McDaniel's and the Class members' real property interfered with Plaintiff McDaniel's and the Class members' exclusive possession of their properties.

175. Plaintiff McDaniel and the Class members are entitled to recover actual damages, nominal damages, compensatory damages, consequential damages, punitive damages, attorney's fees and costs, and any other relief the Court deems appropriate.

### FOR A SECOND CAUSE OF ACTION Nuisance (Plaintiff McDaniel and the Class Against Defendants)

176. Plaintiff McDaniel realleges the allegations in the preceding paragraphs as if fully set forth herein.

177. Plaintiff McDaniel brings this claim on behalf of herself and the other members of the Class for real property damages for private nuisance under South Carolina law.

178. Defendants' emissions of alumina and fluoride particulates and other particulates from the Smelter in September of 2023, was the unlawful and unreasonable operation of the Smelter in a manner producing injury, annoyance, and unreasonable interference with the lawful use and enjoyment of the real property of others.

179. The particulates emitted from the Smelter in September of 2023 entered the air on Plaintiff McDaniel's and the Class members' properties and settled out of the air onto their real

property.

180. The alumina, fluoride, and other particulates emitted from the Smelter that were present in the air on and settled out of the air onto Plaintiff McDaniel's and the Class members' real property substantially and unreasonably interfered with Plaintiff McDaniel's and the Class members' use and enjoyment of their properties.

181. Plaintiff McDaniel and the Class members are entitled to recover compensatory damages, consequential damages, punitive damages, attorneys' fees and costs, and other relief the Court deems appropriate.

### FOR A THIRD CAUSE OF ACTION Negligence, Gross Negligence, Recklessness, and Willful Conduct (Plaintiff McDaniel and the Class Against Defendants)

182. Plaintiff McDaniel realleges the allegations in the preceding paragraphs as if fully set forth herein.

183. Defendants are liable for common law negligence because they breached duties owed to Plaintiff McDaniel and the Class members.

184. At all relevant times, Defendants owed a duty of care to Plaintiff McDaniel and the Class members to prevent the emission of particulates generated by the Smelter into the ambient air.

185. At all relevant times, Defendants also owed duties to Plaintiff McDaniel and the

Class members through the following statutes, regulations, standards, and permits:

a. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, and 50.18 of Title 50 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the

South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates harmful to human health or property;

- b. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, and 50.18 of Title 50 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates, PM<sub>10</sub>, or PM<sub>2.5</sub> in excess of the amounts permitted in the Title V Operating Permit for the Smelter; and
- c. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, and 50.18 of Title 50 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit PM<sub>10</sub> or PM<sub>2.5</sub> in such quantity as to cause the ambient air to exceed the National Ambient Air Quality Standards for PM<sub>10</sub> or PM<sub>2.5</sub>.

186. Defendants negligently breached the duty of care by failing to act with reasonable care in operating the Smelter.

187. Defendants negligently breached the duty of care by failing to act with reasonable

care to prevent the particulate emissions from the Smelter.

188. Defendants negligently breached the duty of care by emitting substantial quantities of particulates into the ambient air from the Smelter.

189. Defendants negligently breached the duty of care by continuing operation of the Smelter after learning of the failures of the baghouse and emissions control systems.

190. Defendants are liable for common law negligence because their breaches of duties owed to Plaintiff McDaniel and the Class members directly and proximately caused damage to Plaintiff McDaniel's and the Class members' real properties.

191. Defendants knew or should have known that their failure to use reasonable care in controlling, monitoring, maintaining, and operating the Smelter, including capturing particulates generated by the Smelter rather than emitting those particulates into the ambient air, would cause harm to Plaintiff McDaniel and the Class members.

192. Defendants' violations of the duty of care were grossly negligent, willful and wanton, reckless, and calculated to cause harm to persons and property, including Plaintiff McDaniel and the Class Members and their real properties.

193. Plaintiff McDaniel and the Class members are entitled to recover general, compensatory, special, and punitive damages and such other relief as the Court deems appropriate.

### FOR A FOURTH CAUSE OF ACTION Negligence Per Se (Plaintiff McDaniel and the Class Against Defendants)

194. Plaintiff McDaniel realleges the allegations in the preceding paragraphs as if fully set forth herein.

195. Defendants negligently violated the Federal Clean Air Act, the South Carolina

Pollution Control Act, and the federal and state regulations and permits implementing those statutes.

196. At all relevant times, Defendants owed duties to Plaintiff McDaniel and the Class members through the following statutes, regulations, standards, and permits:

- a. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, 50.18, 60.192, and 63.843 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates harmful to human health or property;
- b. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, 50.18, 60.192, and 63.843 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates, PM<sub>10</sub>, or PM<sub>2.5</sub> in excess of the amounts permitted in the Title V Operating Permit for the Smelter; and
- c. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, and 50.18 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the

South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit  $PM_{10}$  or  $PM_{2.5}$  in such quantity as to cause the ambient air to exceed the National Ambient Air Quality Standards for  $PM_{10}$  or  $PM_{2.5}$ .

197. Plaintiff McDaniel and the Class members are members of the classes of persons the foregoing statutes and regulations were enacted to protect.

198. The essential purposes of the foregoing statutes, regulations, and permits are to protect persons from the same or similar kind of harm inflicted upon Plaintiff McDaniel and the Class members as a direct and proximate result of Defendants' breaches of those statutory and regulatory duties.

199. Plaintiff McDaniel and the Class members are members of the public that utilize the air covered by and protected from pollution by the Clean Air Act, South Carolina Pollution Control Act, and the implementing regulations and permits.

200. Defendants breached the duty of care by continuing to operate the Smelter after learning of the failure of the baghouse and emissions control systems and resulting emissions of particulates.

201. Defendants breached the duty of care by emitting quantities of particulates in excess of those permitted under the applicable statutes, regulations, and permits.

202. Defendants breached the duty of care by emitting particulates harmful to human health and property.

203. Defendants' breaches of their duties directly and proximately caused damage to

Plaintiff McDaniel's and the Class members' real properties.

204. Plaintiff McDaniel and the Class members are entitled to recover general, compensatory, special, and punitive damages and such other relief as the Court deems appropriate.

### FOR A FIFTH CAUSE OF ACTION Negligence, Gross Negligence, Recklessness, and Willful Conduct (Personal Injury Plaintiffs Against Defendants)

205. Plaintiffs Seibel, Deaver, Brown, and Burns reallege the allegations in the preceding paragraphs as if fully set forth herein.

206. Defendants are liable for common law negligence because they breached duties owed to Personal Injury Plaintiffs.

207. At all relevant times, Defendants owed a duty of care to Personal Injury Plaintiffs to prevent the emission of particulates generated by the Smelter into the ambient air.

208. At all relevant times, Defendants also owed duties to Personal Injury Plaintiffs through the following statutes, regulations, standards, and permits:

- a. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, 50.18, 60.192, and 63.843 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates harmful to human health or property;
- b. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, 50.18, 60.192, and 63.843

of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates, PM<sub>10</sub>, or PM<sub>2.5</sub> in excess of the amounts permitted in the Title V Operating Permit for the Smelter; and

c. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, and 50.18 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit PM<sub>10</sub> or PM<sub>2.5</sub> in such quantity as to cause the ambient air to exceed the National Ambient Air Quality Standards for PM<sub>10</sub> or PM<sub>2.5</sub>.

209. Defendants negligently breached the duty of care by failing to act with reasonable care in operating the Smelter.

210. Defendants negligently breached the duty of care by failing to act with reasonable care to prevent the particulate emissions from the Smelter.

211. Defendants negligently breached the duty of care by emitting substantial quantities of particulates into the ambient air from the Smelter.

212. Defendants negligently breached the duty of care by continuing operation of the Smelter after learning of the failures of the baghouse and emissions control systems.

213. Defendants are liable for common law negligence because their breaches of duties owed to Personal Injury Plaintiffs directly and proximately caused them personal injuries.

214. Defendants knew or should have known that their failure to use reasonable care in controlling, monitoring, maintaining, and operating the Smelter, including capturing particulates generated by the Smelter rather than emitting those particulates into the ambient air, would cause harm to Personal Injury Plaintiffs.

215. Defendants' violations of the duty of care were grossly negligent, willful and wanton, reckless, and calculated to cause harm to persons, including Personal Injury Plaintiffs.

216. Personal Injury Plaintiffs are entitled to recover general, compensatory, special, and punitive damages and such other relief as the Court deems appropriate.

### FOR A SIXTH CAUSE OF ACTION Negligence *Per Se* (Personal Injury Plaintiffs Against Defendants)

217. Plaintiffs Seibel, Deaver, Brown, and Burns reallege the allegations in the preceding paragraphs as if fully set forth herein.

218. Defendants negligently violated the Federal Clean Air Act, the South Carolina Pollution Control Act, and the federal and state regulations and permits implementing those statutes.

219. At all relevant times, Defendants owed duties to Personal Injury Plaintiffs through the following statutes, regulations, standards, and permits:

a. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, 50.18, 60.192, and 63.843 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320,

and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates harmful to human health or property;

b. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, 50.18, 60.192, and 63.843 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit particulates, PM<sub>10</sub>, or PM<sub>2.5</sub> in excess of the amounts permitted in the Title V Operating Permit for the Smelter; and

c. Pursuant to Section 7409 of Title 42 of the United States Code; the National Ambient Air Quality Standards and Sections 50.6, 50.13, and 50.18 of Title 40 of the Code of Federal Regulations; Sections 48-1-20, -40, -250, -320, and -330 of the South Carolina Code of Laws; Regulations 61-62.1, 61-62.3, and 61-62.5 of the South Carolina Code of Regulations; and Title V Operating Permit No. TV-0420-0015, Defendants owed a duty to not emit PM<sub>10</sub> or PM<sub>2.5</sub> in such quantity as to cause the ambient air to exceed the National Ambient Air Quality Standards for PM<sub>10</sub> or PM<sub>2.5</sub>.

220. Personal Injury Plaintiffs are members of the classes of persons the foregoing statutes and regulations were enacted to protect.

221. The essential purposes of the foregoing statutes, regulations, and permits are to protect persons from the same or similar kind of harm inflicted upon Personal Injury Plaintiffs as a direct and proximate result of Defendants' breaches of those statutory and regulatory duties.

222. Personal Injury Plaintiffs are members of the public that utilize the air covered by and protected from pollution by the Clean Air Act, South Carolina Pollution Control Act, and the implementing regulations and permits.

223. Defendants breached the duty of care by continuing to operate the Smelter after learning of the failure of the baghouse and emissions control systems and resulting emissions of particulates.

224. Defendants breached the duty of care by emitting quantities of particulates in excess of those permitted under the applicable statutes, regulations, and permits.

225. Defendants breached the duty of care by emitting particulates harmful to human health and property.

226. Defendants' breaches of their duties directly and proximately caused personal injuries to Personal Injury Plaintiffs.

227. Personal Injury Plaintiffs are entitled to recover general, compensatory, special, and punitive damages and such other relief as the Court deems appropriate.

WHEREFORE, Plaintiffs demand a jury trial and pray for judgment against Defendants for actual, nominal, consequential, compensatory, general, special, and punitive damages, attorney's fees, costs, and for such other and further relief as this Court deems just and proper. By: <u>s/ James L. Ward, Jr.</u> James L. Ward, Jr. (Fed. ID No.: 6956) <u>jward@mcgowanhood.com</u> **McGOWAN, HOOD, FELDER & PHILLIPS, LLC** 10 Shem Drive, Suite 300 Mount Pleasant, SC 29464 (843) 388-7202 - office (843) 388-3194 - facsimile

F. Elliotte Quinn IV (Fed. ID No.: 12563) equinn@steinberglawfirm.com Michael J. Jordan (Fed. ID No.: 10304) mjordan@steinberglawfirm.com William S. Jackson IV (Fed. ID No.: 13047) wjackson@steinberglawfirm.com THE STEINBERG LAW FIRM, LLC 61 Broad Street Charleston, SC 29401 (843) 720-2800 - office (843) 722-1900 - facsimile

Attorneys for Plaintiffs



# Bureau of Air Quality Title V Operating Permit

# Century Aluminum of South Carolina, Inc. 3575 Highway 52 Goose Creek, South Carolina 29445 Berkeley County

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5), 48-1-100(A), and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Title V permit application received on February 27, 2004, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: TV-0420-0015 v1.1 Agency Air Number: 0420-0015

Issue Date: Effective Date: June 23, 2021 July 1, 2021

**Expiration Date:** 

June 30, 2026

Steve McCaslin, P. E., Director Air Permitting Division Bureau of Air Quality

# Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 2 of 44

RECORD OF REVISIONS			
Date	Туре	Description of Changes	
04-13-2023	AA	Incorporate construction permit CY, replace conditions C.23 and C.24 with new Condition C.23, Updated modeling	
04-13-2023	MM	Revised Condition C.15 to include mass balance algorithms for monthly average $SO_2$ calculations	
AA	Administ	rative Amendment	

MM Minor Modification

SM Significant Modification

# Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 3 of 44

#### A. EMISSION UNIT DESCRIPTION

Emission Unit ID	Emission Unit Description
	Green Carbon Plant
01	(The Green Carbon Plant consists of processes involved in the production of green anodes. Raw materials used in the Green Carbon Plant include coke and pitch. Additionally, recycled green and baked anode material and spent anode butts are also used as raw materials. These raw materials are processed in various milling operations, sized, and mixed to produce a paste which is then formed into green anodes. After forming, the green anodes are transported to the Baked Carbon Plant. The paste production process and Anode Former Scrubber are subject to 40 CFR 63 Subparts
	A and LL. The Hot OII Heaters are subject to 40 CFR 63 Subparts A and DDDDD.)
02	(In the Baked Carbon Plant, the green anodes are baked in ring furnaces. The green anodes are stacked in rows, covered with a layer of insulating material to reduce heat loss, and fired. After the completion of the firing cycle, the anodes are uncovered, removed from the furnace, and allowed to cool. When cooled, the anodes are transported to the Anode Rodding operation. The Bake Ovens are subject to 40 CFR 60 Subparts A and S and 40 CFR 63 Subparts A and LL.)
	Anode Rodding
03	(The Anode Rodding area is involved with the rodding of new anodes and the processing of spent anodes. Metal rods are attached to the baked anodes received from the Baked Carbon Plant. The rodded anodes are then sent to the Potlines for use in the aluminum reduction process. Following use in the Potlines, the spent anodes are returned to the Anode Rodding area. Accumulated bath is removed from the spent rodded anodes received from the Potlines. The removed bath is returned to the Potlines for reuse. The remaining carbon anode is removed from the rods, crushed, and sent to the Green Carbon Plant to be recycled in the manufacture of green anodes. The rods are then cleaned, straightened, and used to rod new anodes.)
	Potlines
04	(The two Potlines consist of 180 aluminum reduction pots each that produce aluminum using the Hall-Heroult electrolytic process. Carbon anodes and carbon cathodes are inserted into each pot which contains alumina, electrolytic bath, and additives. Voltage is then applied across the pot. During the reduction process, molten aluminum forms in the pot, is removed from the pot, and transported to the Cast House. Spent anodes are removed from the aluminum reduction pots, allowed to cool, and transported to the Anode Rodding area where bath is removed and returned to the Potlines. Any excess bath may be sold. The Potlines are subject to 40 CFR 60 Subparts A and S and 40 CFR 63 Subparts A and LL.)
	Pot Repair
05	(Aluminum reduction pots from the Potlines are periodically taken out of production and refurbished due to the accumulation of spent materials. The Pot Repair process involves removing any remaining solidified metal and bath material from the bottom of the pots and subsequently rebuilding the cathode lining of the pots.)

# Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 4 of 44

#### A. EMISSION UNIT DESCRIPTION

Emission Unit ID	Emission Unit Description
	Cast House
	(Molten aluminum is transported to the Cast House where various forms of processing can occur.
	These typically involve alloying, impurities removal, casting to a specific shape, homogenizing, sawing,
06	packaging, etc., as dictated by the customer or product specifications. Some of the impurities
	removed are called "dross." Depending on market conditions, the dross is usually sent offsite for
	reclamation. As market conditions dictate, solid aluminum ingot and aluminum scrap produced
	outside of the facility may be purchased for processing in the Cast House. The Holding Furnaces and
	In-Line Metal Treatment Units (MTUs) are subject to 40 CFR 63 Subparts A and RRR.)

#### B. EQUIPMENT AND CONTROL DEVICE(S)

### B.1 EQUIPMENT FOR EMISSION UNIT 01 – Green Carbon Plant

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
71077	Pitch Unloading Station (23 tons/hr, unload pitch from railcars)	1979/ 1995, 2006	None	158
73501	Hot Oil Heater for Pitch Unloading Station and Storage Tanks (1.6 million BTU/hr, heat pitch, burns natural gas and propane)	1979	None	84
73502	Hot Oil Heater for Anode Forming Process (5.0 million BTU/hr, heat pitch, burns natural gas and propane)	1979	None	83
80201	Coke Unloading Station (100 tons/hr, unload coke from railcars)	1979	50058	12
80222	Aggregate Blending Equipment (30 tons/hr, mix and blend sized material)	1979	50016	18
80503	Storage Reclaim Equipment (15 tons/hr, convey and store materials classified by size)	1979	50015	16
81401	Coke Crushing Equipment (16 tons/hr, coke crushing)	1979	50012	19
81402	Classifier Material Handling Equipment (12 tons/hr, convey and store materials classified by size)	1979	50014	13
81403A	Butt Classifying Equipment (10 tons/hr, classify spent anode butts by size)	1979	50013	15

### Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 5 of 44

### B.1 EQUIPMENT FOR EMISSION UNIT 01 – Green Carbon Plant

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
81403B	Secondary Butt Crushing Equipment (10 tons/hr, crush butts)	1979	50057	10
81605	Anode Forming Equipment (150,000 tons/yr, combine pitch, coke, and spent anode butts to produce green anodes)	1979/ 1996	50054	85
83003	Fluid Coke Storage Tank (250 tons, store fluid coke)	1979	50020	11
83016	Pitch Storage Tank #1 (490 tons, store pitch)	1979/ 2006	Coke Canister1	82
83017	Pitch Storage Tank #2 (490 tons, store pitch)	1979/ 2006	Coke Canister1	82
83018	Pitch Storage Tank #3 (490 tons, store pitch)	1979/ 2006	Coke Canister1	82
83019	Butts Storage Tank #1 (200 tons, store spent anode butts)	1979	50056	09
83022A	Coke Storage Tank #1 (4,500 tons, store coke)	1979	50020	11
83022B	Coke Storage Tank #2 (4,500 tons, store coke)	1979	50020	11
83055	Butts Storage Tank #2 (200 tons, store spent anode butts)	1996	50056	09
89004	Ball Mill Classifying Equipment (13 tons/hr, produce fines)	1979	50005	14
89005	Intermediate Classifying Equipment (12 tons/hr, produce intermediates)	1979	50006	17
89056	Fines Recovery Equipment (3 tons/hr, recover fines)	1982	50051	20
89065	Fluid Coke Handling and Housekeeping System	2006	BV	BV

#### B.2 CONTROL DEVICE(S) FOR EMISSION UNIT 01 – Green Carbon Plant

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
50005	Dust Collector for Ball Mill Classifying System 254 DC-6 (3,200 cfm, 0.005 grain/scf)	1979/ 1993	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50006	Dust Collector for Intermediate Classifying System 254 DC-7 (1,000 cfm, 0.005 grain/scf)	1979	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>

### Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 6 of 44

#### B.2 CONTROL DEVICE(S) FOR EMISSION UNIT 01 – Green Carbon Plant

Control	Control Device Description	Installation/	Pollutant(s)
Device ID	Dust Collector for Coke Crushing System 254 DC-1	would all bate	Filterable PM PM <sub>10</sub>
50012	(11.735 cfm, 0.005 grain/scf)	1979	PM25
	Dust Collector for Butts Classifier System 254 DC-2		Filterable PM, PM <sub>10</sub> ,
50013	(2,020 cfm, 0.005 grain/scf)	1979	PM <sub>2.5</sub>
5004.4	Dust Collector for Classifier Material Handling System	1070	Filterable PM, PM <sub>10</sub> ,
50014	254 DC-3 (4,065 cfm, 0.005 grain/scf)	1979	PM <sub>2.5</sub>
F001F	Dust Collector for Storage Reclaim System 254 DC-4	1070	Filterable PM, PM <sub>10</sub> ,
50015	(5,805 cfm, 0.005 grain/scf)	1979	PM <sub>2.5</sub>
	Dust Collector for Aggregate Blending System 254 DC-		Filterable PM . PM.
50016	5	1979	
	(4,500 cfm, 0.005 grain/scf)		1 1012.5
	Dust Collector for Coke Storage Tanks #1, #2, and		Filterable PM_PM <sub>10</sub>
50020	Fluid Coke Storage Tank 252A DC-1	1979/ 1994	PM <sub>2.5</sub>
	(3,600 cfm, 0.005 grain/scf)		
50051	Dust Collector for Fines Recovery System 254 DC-10	1982	Filterable PM, PM <sub>10</sub> ,
	(600 cfm, 0.005 grain/scf)		PM <sub>2.5</sub>
F00F4	Comultary for Anode Forming Dupped	1002	Filterable PM, PM <sub>10</sub> ,
50054	Scrubber for Anode Forming Process	1992	PIM <sub>2.5</sub> , polycyclic
	Duct Collector for Butte Storage Tanke #1 and #2 2E4V		Filterable DM DM
50056	Dust collector for Bulls storage ranks #1 and #2 2541 $DC_{-9}$ (10,000 cfm, 0,005 grain/ccf)	1979/ 1996	$PM_{-}$
	Dust Collector for Secondary Butt Crushing System		Filterable PM PM
50057	254 DC-8 (10 700 cfm 0 005 grain/scf)	1979	
	Dust Collector for Coke Unloading Station 252 DC-2		Filterable PM, PM <sub>10</sub>
50058	(2.200 cfm, 0.005 grain/scf)	1979	PM <sub>2.5</sub>
Coke	Coke Canister	2005	
Canister1	(controls emissions from Pitch Storage Tanks)	2006	VOC, POM
	Bin Vent Filter 254 DC-11	2000	Filterable PM, PM <sub>10</sub> ,
BA	(exhausts inside the building)	2006	PM <sub>2.5</sub>

### B.3 EQUIPMENT FOR EMISSION UNIT 02 – Baked Carbon Plant

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
53001	Anode Bake Furnace (North and South Bake Ovens, bake green anodes, burn natural gas and propane)	1979	53001	01
73050-N,	Anode Baking Operations and Equipment	1979	None	01A

# Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 7 of 44

### B.3 EQUIPMENT FOR EMISSION UNIT 02 – Baked Carbon Plant

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
73051-S	(ridge vent, bake green anodes, emissions to ambient plant air)			
80912, 80913	Anode Block Cleaning and Material Transfer Equipment (130,000 tons/yr, clean eyes of baked anode blocks and transfer materials to trucks)	1979	50023	08
83044	Fresh Alumina Transfer and Storage Equipment (150 tons, store fresh alumina and transfer to bake oven dry scrubber)	1979	50024	06
83045	Fluoride Enriched Alumina Transfer and Storage Equipment (50 tons, store fluoride enriched alumina and transfer to potlines)	1979/ 2008	50025	07
89054	Housekeeping Equipment - Vacuum and Dust Collector (1,080 cfm, general housekeeping)	1986	89054	100

#### B.4 CONTROL DEVICE(S) FOR EMISSION UNIT 02 – Baked Carbon Plant

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
50023	Dust Collector for Anode Block Cleaning and Material Transfer Operations 261 DC-1 (5,200 cfm, 0.005 grain/scf)	1979/ 1995	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50024	Dust Collector for Fresh Alumina Storage and Transfer 261G DC-1 (4,100 cfm, 0.005 grain/scf)	1979/ 1993	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50025	Dust Collector for Fluoride Enriched Alumina Storage and Transfer 261G DC-2 (800 cfm, 0.005 grain/scf)	1979/ 2008	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
53001	Dry Scrubber System/Baghouse for North and South Bake Ovens (alumina used as scrubbing media)	1979	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Fluorides, POM
89054	Housekeeping Dust Collector 261 DC-2 (1,080 cfm, 0.005 grain/scf)	1986	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>

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#### B.5 EQUIPMENT FOR EMISSION UNIT 03 – Anode Rodding

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
73201	Induction Furnace (110 anodes/hr, melt iron and additives for anode rodding process)	1979/ 2009	50010	25
73202	Induction Furnace (110 anodes/hr, melt iron and additives for anode rodding process)	1979/ 2009	50010	25
73203	Induction Furnace (110 anodes/hr, melt iron and additives for anode rodding process)	1979/ 2009	50010	25
80811	Anode Eye Cleaning Equipment (110 anodes/hr, clean anode eyes before rods are attached)	1979	50050	27
81002, 81003	Butt Stripping, Conveying, and Crushing Equipment (110 anodes/hr, strip spent anode butts from rods, crush spent anode butts)	1979	50008	22
81801	Bath Removal Station (40 tons/hr, remove bath from spent anode butts)	1979/ 1982	50032	30
81802	Butt Blasting Equipment (110 anodes/hr, remove remaining bath from spent anode butts)	1979	50007	24
81804	Rod and Stub Blasting and Brushing Equipment (110 rods/hr, clean rods and stubs after spent anodes are removed)	1979/ 2009	50059	23
86022	Truck Loading Station (0.5 ton/hr, station for loading butt blast material, carbon dust to trucks)	1979	50064	26
89055	Anode Eyehole Cleaner Vacuum	1992	89055	125

#### B.6 CONTROL DEVICE(S) FOR EMISSION UNIT 03 – Anode Rodding

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
50007	Dust Collector for Spent Anode Butt Blasting/Anode Cleaning Equipment 232 DC-3 (10,000 cfm, 0.005 grain/scf)	1979/ 2010	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50008	Dust Collector for Spent Anode Crushing Equipment 232H DC-1 (21,970 cfm, 0.005 grain/scf)	1979	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50010	Dust Collector for the 3 Induction Furnaces 232 DC-4	1979/ 2009	Filterable PM, PM <sub>10</sub> ,

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#### B.6 CONTROL DEVICE(S) FOR EMISSION UNIT 03 – Anode Rodding

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
	(4,200 cfm, 0.005 grain/scf)		PM <sub>2.5</sub>
50032	Dust Collector for Bath Crusher and Storage 136 DC-1 (135,400 cfm, 0.0035 grain/scf)	1980/ 1983, 2004	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50050	Dust Collector for the Anode Eye Cleaner System 232 DC-6 (7,000 cfm, 0.005 grain/scf)	1979	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50059	Dust Collector for the Rod and Stub Blasting and Brushing Equipment 232 DC-2 (8,350 cfm, 0.005 grain/scf)	1979	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50064	Dust Collector for the Butt Blast Discharge and Truck Loading Station 232 DC-5 (600 cfm, 0.005 grain/scf)	1979	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
89055	Anode Hole Cleaner Vacuum Exhaust 232 DC-8 (1,080 cfm, 0.005 grain/scf)	1992	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>

### **B.7 EQUIPMENT FOR EMISSION UNIT 04 – Potlines**

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
	General Operation in Potroom Buildings			
40101	#101/#102 East	1980	None	02A
	(ridge vent exhaust)			
	General Operation in Potroom Buildings			
40102	#101/#102 West	1980	None	03A
	(ridge vent exhaust)			
	General Operation in Potroom Buildings			
40103	#103/#104 East	1980	None	04A
	(ridge vent exhaust)			
	General Operation in Potroom Buildings			
40104	#103/#104 West	1980	None	05A
	(ridge vent exhaust)			
	Alumina Reduction Pots on Potline #1 - 161E			
70010A	(electrolytic reduction of alumina to elemental	1980/ 2002	53002	02
	aluminum)			
	Alumina Reduction Pots on Potline #1 - 161W			
70010B	(electrolytic reduction of alumina to elemental	1980/ 2002	53003	03
	aluminum)			
700100	Alumina Reduction Pots on Potline #2 - 162E	1080/ 2002	E2004	04
/00100	(electrolytic reduction of alumina to elemental	1980/2002	180/ 2002 53004	04

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#### B.7 EQUIPMENT FOR EMISSION UNIT 04 – Potlines

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
	aluminum)			
70010D	Alumina Reduction Pots on Potline #2 - 162W (electrolytic reduction of alumina to elemental aluminum)	1980/ 2002	53005	05
70026	Bath Feed Station at Potroom #101 (22 tons/hr, supply bath for use on potline)	1980/ 1982	50033	35
70027	Bath Feed Station at Potroom #102 (22 tons/hr, supply bath for use on potline)	1980/ 1982	50034	36
70028	Bath Feed Station at Potroom #103 (22 tons/hr, supply bath for use on potline)	1980/ 1982	50035	37
70029	Bath Feed Station at Potroom #104 (22 tons/hr, supply bath for use on potline)	1980/ 1982	50036	38
74711	Track Hopper (200 tons/hr, unload alumina and fluoride rail cars)	1980	50053	29
80015	Screening Tower (200 tons/hr, convey alumina and fluoride)	1980	50026	28
81202	Bath Crusher and Storage; Crucible Cleaner (40 tons/hr, crush and store bath, clean crucibles)	1980	50032	30
83024	Lift Tower, Alumina and Fluoride Storage Tanks (200 tons/hr, second of 3 dust collectors "separator vent," convey and store alumina and fluoride)	1980	50027	33
83025	Lift Tower, Alumina and Fluoride Storage Tanks (200 tons/hr, third of 3 dust collectors "separator vent," convey and store alumina and fluoride)	1980	50028	34
83026	Lift Tower, Alumina and Fluoride Storage Tanks (35,000 tons, first of 3 dust collectors "lift tower," convey and store alumina and fluoride)	1980	50029	32
83027	Fresh Alumina & Fluoride Storage Tanks - Potline #1 (2,000 tons, store fresh alumina and fluoride)	1980	50030	40
83030	Fresh Alumina & Fluoride Storage Tanks - Potline #2 (2,000 tons, store fresh alumina and fluoride)	1980/ 2006	50031	39
83031	Screen and Bath Storage Tank (40 tons/hr, classify and store bath)	1980/ 2005	50052	31
83032	Screen and Bath Storage Tank (40 tons/hr, classify and store bath)	1980/ 2005	50052	31

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#### B.7 EQUIPMENT FOR EMISSION UNIT 04 – Potlines

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
83033	Screen and Bath Storage Tank (40 tons/hr, classify and store bath)	1980/ 2005	50052	31
83034	Screen and Bath Storage Tank (40 tons/hr, classify and store bath)	1980/ 2005	50052	31
83035	Screen and Bath Storage Tank (40 tons/hr, classify and store bath)	1980/ 2005	50052	31
83036	Screen and Bath Storage Tank (40 tons/hr, classify and store bath)	1980/ 2005	50052	31
83041	Enriched Alumina Conveying System "Air Slides and Tanks" – Potline #1 (2,000 tons, second of 3 dust collectors, store enriched alumina)	1980	50039	42
83051	Enriched Alumina Conveying System "Air Slides and Tanks" – Potline #2 (2,000 tons, second of 3 dust collectors, store enriched alumina)	1980	50042	45
84040	Enriched Alumina Conveying System "Pneumatic Conveyors" Potline #1 East (15 tons/hr, third of 3 dust collectors, convey enriched alumina from scrubber to storage tank)	1980	50040	43
84050	Enriched Alumina Conveying System "Pneumatic Conveyors" Potline #1 West (15 tons/hr, first of 3 dust collectors, convey enriched alumina from scrubber to storage tank)	1980	50041	41
84060	Enriched Alumina Conveying System "Pneumatic Conveyors" Potline #2 East (15 tons/hr, first of 3 dust collectors, convey enriched alumina from scrubber to storage tank)	1980	50044	44
84070	Enriched Alumina Conveying System "Pneumatic Conveyors" Potline #2 West (15 tons/hr, third of three dust collectors, convey enriched alumina from scrubber to storage tank)	1980	50043	46

#### B.8 CONTROL DEVICE(S) FOR EMISSION UNIT 04 – Potlines

Control	Control Device Description	Installation/	Pollutant(s)
Device ID		Modification Date	Controlled
50026	Dust Collector for Screening Tower 140 DC-2 (6,300 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>

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#### **B.8** CONTROL DEVICE(S) FOR EMISSION UNIT 04 – Potlines

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
50027	Dust Collector for Separator Vent - Second of Three 140Y DC-3 (4,100 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50028	Dust Collector for Separator Vent - Third of Three 140Y DC-4 (4,100 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50029	Dust Collector for Lift Tower - First of Three 140A DC-5 (6,250 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50030	Dust Collector for Fresh Alumina and Fluoride Storage Tanks (Potline #1) 141M DC-6 (1,600 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50031	Dust Collector for Fresh Alumina & Fluoride Storage Tanks (Potline #2) 142M DC-7 (6,200 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50032	Dust Collector for Bath Crusher and Storage 136 DC-1 (135,400 cfm, 0.0035 grain/scf)	1980/ 1983, 2004	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50033	Dust Collector for Bath Feed Station at Potroom #101 DC-101K (1,600 cfm, 0.005 grain/scf)	1980/ 1982	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50034	Dust Collector for Bath Feed Station at Potroom #102 DC-102K (1,600 cfm, 0.005 grain/scf)	1980/ 1982	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50035	Dust Collector for Bath Feed Station at Potroom #103 DC-103K (1,600 cfm, 0.005 grain/scf)	1980/ 1982	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50036	Dust Collector for Bath Feed Station at Potroom #104 DC-104K (1,600 cfm, 0.005 grain/scf)	1980/ 1982	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50039	Dust Collector for Potline #1 Enriched Alumina Conveying System - Air Slides and Tanks 141R DC-8 (8,200 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50040	Dust Collector for Potline #1 Enriched Alumina Conveying System - Pneumatic Conveyors 141R DC-9 (2,400 cfm, 0.005 grain/scf)	1980/ 1996	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50041	Dust Collector for Potline #1 Enriched Alumina Conveying System - Pneumatic Conveyors 141R DC-10 (2,400 cfm, 0.005 grain/scf)	1980/ 1996	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50042	Dust Collector for Potline #2 Enriched Alumina Conveying System - Air Slides and Tanks142R DC-11 (8,200 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50043	Dust Collector for Potline #2 Enriched Alumina Conveying System - Pneumatic Conveyors 142R DC-12 (2,400 cfm, 0.005 grain/scf)	1980/ 1996	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50044	Dust Collector for Potline #2 Enriched Alumina Conveying System - Pneumatic Conveyors 142R DC-13	1980/ 1996	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>

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#### B.8 CONTROL DEVICE(S) FOR EMISSION UNIT 04 – Potlines

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
	(2,400 cfm, 0.005 grain/scf)		
50052	Dust Collector for Screens and Bath Storage Tanks 136 DC-2 (3,031 cfm, 0.005 grain/scf)	1980/ 2005	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50053	Dust Collector for Track Hopper 140 DC-1 (15,600 cfm, 0.005 grain/scf)	1980/ 1985	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
53002	Scrubber and Dust Collector for Alumina Reduction Pots on Potline #1 (161E, fresh alumina used as scrubbing media)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Fluoride
53003	Scrubber and Dust Collector for Alumina Reduction Pots on Potline #1 (161W, fresh alumina used as scrubbing media)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5,</sub> Fluoride
53004	Scrubber and Dust Collector for Alumina Reduction Pots on Potline #2 (162E, fresh alumina used as scrubbing media)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5,</sub> Fluoride
53005	Scrubber and Dust Collector for Alumina Reduction Pots on Potline #2 (162W, fresh alumina used as scrubbing media)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub> , Fluoride

#### B.9 EQUIPMENT FOR EMISSION UNIT 05 – Pot Repair

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
	General Operations - Pot Digging, Blasting,		50061,	
40138	Loading, and Other Misc. Operations	1980/ 1997	50062,	21A
	(208 pots/yr, repair and reline pots)		50063	

#### B.10 CONTROL DEVICE(S) FOR EMISSION UNIT 05 – Pot Repair

Control	Control Device Description	Installation/	Pollutant(s)
Device ID		Modification Date	Controlled
50061,	Pot Repair Dust Collection System 138 DC-2	1997	Filterable PM, PM <sub>10</sub> ,
50062,	(75.000 cfm, 0.0035 grain/scf)		PM <sub>25</sub>
50063			2.5

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### B.11 EQUIPMENT FOR EMISSION UNIT 06 – Cast House

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
71022	Dross Cooling Operations 302 DC-3 (4,500 tons/yr)	1980	50045	47
73011	Cold Side - Homogenizing Furnace #1 (18 million BTU/hr, 32,500 tons/yr, reheat cast aluminum to produce uniform grain structure)	1980	None	52-1
73012	Cold Side - Homogenizing Furnace #2 (18 million BTU/hr, 32,500 tons/yr, reheat cast aluminum to produce uniform grain structure)	1980	None	52-2
73021	Dross Processing - Dross Pad (2,200 tons/yr, store dross and truck loading)	1980	50038	50
73023	Cold Side - Homogenizing Furnace #3 (36 million BTU/hr, 40,000 tons/yr, reheat cast aluminum to produce uniform grain structure)	1990	None	52-3
73103/ 71010	Hot Side - Horizontal Direct Cast (HDC) Furnace 103 and HDC In-Line Metal Treatment Unit (65,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 2001	None	51-103/ 51-103 MTU
73104	Hot Side - Horizontal Direct Cast (HDC) Furnace 104 (65,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980	None	51-104
73105	Hot Side - Vertical Direct Cast (VDC) Furnace 105 (110,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 1992	None	51-105
73106/ 71001	Hot Side - Vertical Direct Cast (VDC) Furnace 106 and Pit #1 In-Line Metal Treatment Unit (110,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 1991, 2001	None	51-106/ 51-106 MTU
73107/ 71002	Hot Side - Vertical Direct Cast (VDC) Furnace 107 and Pit #2 In-Line Metal Treatment Unit (110,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 1988, 2001	None	51-107/ 51-107 MTU
73109	Hot Side - Vertical Direct Cast (VDC) Furnace 109 (110,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 1989	None	51-109
73110/ 71003	Hot Side - Vertical Direct Cast (VDC) Furnace 110 and Pit #3 In-Line Metal Treatment Unit (110,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 1993, 2001	None	51-110/ 51-110 MTU
73111	Hot Side - Vertical Direct Cast (VDC) Furnace 111	1980/ 1988	None	51-111

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#### B.11 EQUIPMENT FOR EMISSION UNIT 06 – Cast House

Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point/ Source ID
	(110,000 lbs/batch; alloy, treat, and cast molten aluminum)			
73112/ 71004	Hot Side - Vertical Direct Cast (VDC) Furnace 112 and Pit #4 In-Line Metal Treatment Unit (110,000 lbs/batch; alloy, treat, and cast molten aluminum)	1980/ 1986	None	51-112/ 51-112 MTU
73115	Preheat Furnace (3.0 million BTU/hr)	2000	None	122

#### B.12 CONTROL DEVICE(S) FOR EMISSION UNIT 06 – Cast House

Control Device ID	Control Device Description	Installation/ Modification Date	Pollutant(s) Controlled
50038	Dust Collector for Dross Processing Operations 302 DC-4 (30,360 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>
50045	Dust Collector for Dross Cooling Operations 302 DC-3 (18,722 cfm, 0.005 grain/scf)	1980	Filterable PM, PM <sub>10</sub> , PM <sub>2.5</sub>

### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	Emission Unit ID: All
	Equipment ID: All
	Control Device ID: All
C.1	Equipment capacities provided under the Equipment Description column of the Equipment Tables above are not intended to be permit limits unless otherwise specified within the Table of Conditions for the particular equipment. However, this condition does not exempt the facility from the construction permitting process, from PSD review, nor from any other applicable requirements that must be addressed prior to increasing production rates.
	Emission Unit ID: All
	Equipment ID: All
C.2	Control Device ID: All
	(S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions		
	operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.		
	Emission Unit ID: All Equipment ID: All Control Device ID: All		
C.3	The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.		
	(S.C. Regulation 61-62.1, Section II.J.1.d) Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.		
C.4	Emission Unit ID: All Equipment ID: All Control Device ID: All All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall be submitted to indicate such. Any alternative method for monitoring control device performance must be preapproved by the		
C.5	Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.70.7. <b>Emission Unit ID:</b> 01		

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions		
	Control Device ID: 50054		
	Emission Unit ID: 02 Control Device ID: 53001		
	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005		
	Emission Unit ID: 06 Equipment ID: 73103/ 71010, 73104, 73105, 73106/ 71001, 73107/ 71002, 73109, 73110/ 71003, 73111, 73112/ 71004		
	For any source test required under an applicable standard or permit condition, the owner, operator, or representative shall comply with S.C. Regulation 61-62.1, Section IV - Source Tests.		
	Unless approved otherwise by the Department, the owner, operator, or representative shall ensure that source tests are conducted while the source is operating at the maximum expected production rate or other production rate or operating parameter which would result in the highest emissions for the pollutants being tested. Some sources may have to spike fuels or raw materials to avoid being subjected to a more restrictive feed or process rate. Any source test performed at a production rate less than the rated capacity may result in permit limits on emission rates, including limits on production if necessary.		
	<ul> <li>When conducting source tests subject to this section, the owner, operator, or representative shall provide the following:</li> <li>Department access to the facility to observe source tests;</li> <li>Sampling ports adequate for test methods;</li> <li>Safe sampling site(s);</li> <li>Safe access to sampling site(s);</li> <li>Utilities for sampling and testing equipment; and</li> <li>Equipment and supplies necessary for safe testing of a source.</li> </ul>		
	The owner or operator shall comply with any limits that result from conducting a source test at less than rated capacity. A copy of the most recent Department issued source test summary letter, whether it imposes a limit or not, shall be maintained with the operating permit, for each source that is required to conduct a source test.		
	Site-specific test plans and amendments, notifications, and source test reports shall be submitted to the Manager of the Source Evaluation Section, Bureau of Air Quality.		

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions	
C 6	Emission Unit ID: 01 Equipment ID: 73501, 73502	
C.0	(S.C. Regulation 61-62.5, Standard No. 1, Section II) The maximum allowable discharge of particulate matter resulting from these sources is 0.6 pounds per million BTU input.	
	<b>Emission Unit ID:</b> 01 <b>Control Device ID:</b> 50056, 50057, 50020, 50058, 50014, 50005, 50013, 50015, 50006, 50016, 50012, 50051	
	Emission Unit ID: 02 Control Device ID: 50023, 50024, 50025, 89054	
	Emission Unit ID: 03 Control Device ID: 50007, 50008, 50010, 50050, 50059, 50064, 89055	
	<b>Emission Unit ID:</b> 04 <b>Control Device ID:</b> 50026, 50027, 50028, 50029, 50030, 50031, 50033, 50034, 50035, 50036, 50039, 50040, 50041, 50042, 50043, 50044, 50052, 50053	
	Equipment ID: 06 Control Device ID: 50038, 50045	
C.7	(S.C. Regulation 61-62.5, Standard No. 7) In accordance with BACT, filterable PM, PM10, PM2.5 emissions shall be limited to 0.005 grain/dscf, each pollutant, each source using baghouse controls. The owner/operator shall use best management practices as BACT for fugitive PM emissions and comply with specified practices.	
	The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module of each baghouse. Pressure drop readings for each baghouse shall be recorded monthly during source operation. Operation and maintenance checks shall be made on at least a monthly basis for baghouse cleaning systems, dust collection hoppers, and conveying systems for proper operation. Each baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.	
	<ul> <li>The following operation and maintenance checks will be made on at least a monthly basis for all baghouses:</li> <li>(a) The baghouse cleaning systems will be checked for proper operation.</li> <li>(b) Check dust collection hoppers and conveying systems for proper operation.</li> </ul>	
	The owner/operator shall assure the quality of filter bags in accordance with the facility's Filter Bag	

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions		
	Quality Assurance (QA) Program and/or by vendor certification of each shipment of bags. The BAQ shall be notified of any changes. Records shall be kept on site.		
	Emission Unit ID: 01 Control Device ID: 50054		
	(S.C. Regulation 61-62.5, Standard No. 7) Filterable PM emissions shall be limited to 0.75 lb/hr. The owner/operator shall use best management practices as BACT for fugitive PM emissions and comply with specified practices.		
C.8	The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module of the baghouse. Pressure drop readings shall be recorded monthly during source operation. Operation and maintenance checks shall be made on at least a monthly basis for baghouse cleaning systems, dust collection hoppers, and conveying systems for proper operation. The baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.		
	The owner/operator shall assure the quality of filter bags in accordance with the facility's Filter Bag Quality Assurance (QA) Program and/or by vendor certification of each shipment of bags. The BAQ shall be notified of any changes. Records shall be kept on site.		
	<b>Control Device ID:</b> 50005, 50006, 50012, 50013, 50014, 50015, 50016, 50020, 50051, 50054, 50056, 50057, 50058		
C.9	Emission Unit ID: 02 Control Device ID: 50023, 50024, 50025, 53001, 89054		
	Emission Unit ID: 03 Control Device ID: 50007, 50008, 50010, 50050, 50059, 50064, 89055, 50032		
	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005		
	<b>Emission Unit ID:</b> 04 <b>Control Device ID:</b> 50026, 50027, 50028, 50029, 50030, 50031, 50032, 50033, 50034, 50035, 50036, 50039, 50040, 50041, 50042, 50043, 50044, 50052, 50053		
	Emission Unit ID: 06 Equipment ID: 73103/71010, 73104, 73105, 73106/71001, 73107/71002, 73109, 73110/71003, 73111, 73112/71004		

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions				
	Control Device ID: 50038, 50045				
	(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:				
	For process weight rates less than or equal to 30 tons per hour $E = (F) 4.10P^{0.67}$ and For process weight rates greater than 30 tons per hour $E = (F) 55.0P^{0.11} - 40$ Where E = the allowable emission rate in pounds per hour P = process weight rate in tons per hour F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4				
	For the purposes of compliance with this condition, the process boundaries are defined as fol			s follows:	
	Unit ID	/ Process ID	Max Process Weight Rate (ton/hr)		
	01/ Greer	n Carbon Plant	13.85, total		
	02/ Baked	d Carbon Plant	18.66, total		
	03/ And	ode Rodding	67.38, total		
	04/ Potline Sc Root	rubber/Baghouse/ <sup>f</sup> Vent Set	18.28		
	04/ Du:	st Collectors	425		
	06/ C	ast House	36.53	J	
	Compliance demonstrated by engineering calculations. The controlled emission rate is at the emission limit.			t or below	
	Equipment ID: 73501, 735	502		a af av if w	
C.10	dioxide (SO <sub>2</sub> ) resulting from these sources is 2.3 pounds per million BTU input.				
	These sources are permitted to burn only natural gas or propane as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Department.				
	Emission Unit ID: 01				
C.11	(S.C. Regulation 61-62.5, St	andard No. 7 PSD avo	idance) SO <sub>2</sub> emissions shall not exceed 1	.27 lb/hr.	
	The owner/operator shall	maintain all records r	necessary to determine facility-wide SO <sub>2</sub> e	missions.	

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# C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions	
	SO <sub>2</sub> emissions shall be calculated on a monthly average basis. Reports of the calculated values shall be submitted semiannually.	
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.	
	Emission Unit ID: 01 Equipment ID: 73501, 73502	
C.12	(S.C. Regulation 61-62.5, Standard No. 1, Section I) The fuel burning source(s) shall not discharge into the ambient air smoke which exceeds opacity of 20%. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.	
	Emission Unit ID: 01 Control Device ID: 50054, Coke Canister1, BV	
	Emission Unit ID: 02 Control Device ID: 89054	
	Emission Unit ID: 03 Control Device ID: 89055	
	Emission Unit ID: 05 Control Device ID: 50061, 50062, 50063	
C.13	Emission Unit ID: 06 Equipment ID: 73103, 73104, 73105, 73106, 73107, 73109, 73110, 73111, 73112	
	Emission Unit ID: 06 Equipment ID: 71001, 71002, 71003, 71004, 71010, 71022, 73021, 73115	
	(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 20%, each.	
	The owner/operator shall perform a visual inspection on a daily basis during source operation. No periodic monitoring for opacity will be required during periods of burning natural gas or propane only. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the	

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions		
	required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If only natural gas or propane was combusted or if the unit did not operate during the semiannual period, the report shall state so.		
	Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.		
	Emission Unit ID: 01 Equipment ID: 71077 Control Device ID: 50005, 50006, 50012, 50013, 50014, 50015, 50016, 50020, 50051, 50056, 50057, 50058		
	Emission Unit ID: 02 Control Device ID: 50023, 50024, 50025		
	Emission Unit ID: 03 Control Device ID: 50007, 50008, 50010, 50050, 50059, 50064, 50032		
C.14	<b>Emission Unit ID:</b> 04 <b>Equipment ID:</b> 40101, 40102, 40103, 40104 <b>Control Device ID:</b> 50026, 50027, 50028, 50029, 50030, 50031, 50032, 50033, 50034, 50035, 50036, 50039, 50040, 50041, 50042, 50043, 50044, 50052, 50053, 53002, 53003, 53004, 53005		
	Emission Unit ID: 06 Equipment ID: 73011, 73012, 73023, 73103, 73104, 73105, 73106, 73107, 73109, 73110, 73111, 73112 Control Device ID: 50038, 50045		
	(S.C. Regulation 61-62.5, Standard No. 7) The visible emissions shall not exceed 10% opacity for each source.		
	The owner/operator shall perform a visual inspection on a daily basis during source operation. No periodic monitoring for opacity will be required during periods of burning natural gas or propane only. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective		
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## C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	actions taken. If only natural gas or propane was combusted or if the unit did not operate during the semiannual period, the report shall state so.					
	Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.					
	Emission Unit ID: 01					
	Control Device ID: 50054					
C.15	S.C. Regulation 61-62.5, Standard No. 7 PSD (avoidance) The sulfur content of the blended coke used in forming the anodes shall not exceed 3.0% by weight, based upon a monthly average, and shall be used to calculate applicable $SO_2$ emissions. The monthly average sulfur content of the blended coke used in forming anodes will be determined using an ASTM standard, an alternative method approved by the Department, or by vendor Certificates of Analysis along with the following mass-balance algorithm:					
	Monthly avg Coke S, % = [(Coke A, mt x Coke A %S) + (Coke B, mt x Coke B %S] + (Coke C, mt x Coke C %S +] \ Sum of Coke A, B, C, etc., mt					
	S.C. Regulation 61-52.5, Standard No. 7 PSD (avoidance) The sulfur content of the pitch used in forming the anodes shall not exceed 0.85% by weight, based upon a monthly average, and shall be used to calculate applicable SO <sub>2</sub> emissions. The monthly average sulfur content of the pitch used in forming the anodes will be determined using an ASTM standard, an alternative method approved by the Department or by vendor Certificates of Analysis, along with the following mass-balance algorithm:					
	Monthly avg Pitch S, % = [(Pitch A, mt x Pitch A %S] + (Pitch B, mt x Pitch B %S) + (Pitch C, mt x Pitch C %S +] \ Sum of Pitch A, B, C, etc., mt					
	Reports of the sulfur content of the coke and sulfur content of the pitch used to form the anodes, including all recorded parameters and calculated monthly values, shall be submitted quarterly.					
	Emission Unit ID: 02 Control Device ID: 53001					
C.16	(S.C. Regulation 61-62.5, Standard No. 7) Filterable PM emissions shall be limited to 4.91 lb/hr. Filterable PM10 and PM2.5 emissions shall be limited to 4.58 lb/hr, each.					
	The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module					

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	of the scrubber/baghouse. Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks shall be made on at least a monthly basis for baghouse cleaning systems, dust collection hoppers, and conveying systems for proper operation. The scrubber/baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of scrubber/baghouse malfunction or mechanical failure.					
	The owner/operator shall assure the quality of filter bags in accordance with Century's Filter Bag Quality Assurance (QA) Program and/or by vendor certification of each shipment of bags. The BAQ shall be notified of any changes. Records shall be kept on site.					
	Emission Unit ID: 02 Control Device ID: 53001					
	(S.C. Regulation 61-62.5, Standard No. 7 PSD avoidance) $SO_2$ emissions shall not exceed 82.92 lb/hr.					
C.17	The owner/operator shall maintain all records necessary to determine facility-wide $SO_2$ emissions. $SO_2$ emissions shall be calculated on a monthly average basis. Reports of the calculated values shall be submitted semiannually.					
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.					
Emission Unit ID: 02						
	<b>Control Device ID:</b> 53001 (S.C. Regulation 61-62.5, Standard No. 7) As established by a BACT analysis, this source is limited to 18.16 lb/hr of NO <sub>X</sub> emissions.					
C.18	An initial source test for $NO_x$ emissions from the dry scrubber/baghouse outlet shall be conducted within 180 days of the issue date of this permit and every 2 years thereafter. The source test will be used to show compliance with the emission limit. The owner or operator may request less frequent testing for $NO_x$ if at least two consecutive stack tests show that the emissions are at or below 75% of the emission limitation, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. If less frequent testing is approved, the next source test must be completed no more than 4 years after the previous source test. Results of greater than 75% of the emissions limitation will result in reinstating the 2-year cycle.					
	The dry scrubber/baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of dry scrubber/baghouse malfunction or mechanical failure.					
C.19	Emission Unit ID: 02					

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	Control Device ID: 53001					
	(S.C. Regulation 61-62.5, Standard No. 7) The owner/operator shall comply with the following good operating practices as BACT for the control of $NO_x$ emissions:					
	<ul> <li>(a) Bake Furnace Sealing Practices <ul> <li>(1) Refractory sealing on furnace top</li> <li>(2) Pit corner sealing</li> <li>(3) Plastic sheet sealing on top of furnace pits</li> <li>(4) Furnace crossover sealing</li> <li>(5) Furnace equipment sealing</li> <li>(6) Packing coke sealing</li> <li>(7) Furnace refractory maintenance</li> </ul> </li> <li>(b) Bake Furnace Firing Practices <ul> <li>(1) Flue draft control</li> <li>(2) Flue temperature monitoring control</li> <li>(3) Maximum refractory temperature monitoring and control</li> <li>(4) Pit temperature monitoring and isotherm surveys</li> <li>(5) Coal tar pitch volatile burn monitoring (at inlet of control device)</li> </ul> </li> </ul>					
	Records shall be kept on-site to verify that proper operation is being met. These records shall b					
	Emission Unit ID: 02					
	Control Device ID: 53001					
C.20	(S.C. Regulation 61-62.5, Standard No. 7) CO emissions shall be limited to 97.7 lb/hr as determined by BACT. The owner/operator shall use good operating practices as BACT and comply with specified practices.					
	The amount of natural gas and propane combusted by this source will be tracked using natural gas billing records and records of propane deliveries. Fuel usage will be summarized annually.					
	Emission Unit ID: 02 Control Device ID: 53001					
C.21	(S.C. Regulation 61-62.5, Standard No. 7) Total fluoride (TF) emissions shall be limited to 0.04 lb/ton aluminum equivalent based on a 12-month rolling average. The owner/operator shall use dry alumina injection as BACT.					
	Alternative testing requirements are established for this facility. Source testing for total fluorides in					

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions				
	accordance with EPA Test Method 13A, 13B, or BAQ-approved alternative shall be performed once a year. The source test results shall be recorded and used to show compliance with the emission limit. The source test results shall be submitted annually.				
	Emission Unit ID: 03 Control Device ID: 50032				
C.22	Emission Unit ID: 04 Control Device ID: 50032				
	Emission Unit ID: 05 Control Device ID: 50061, 50062, 50063				
	(S.C. Regulation 61-62.5, Standard No. 7) In accordance with BACT, filterable PM emissions shall be limited to 0.0035 grain/dscf, each source, using baghouse controls. The owner/operator shall use best management practices as BACT for fugitive PM emissions and comply with specified practices.				
	The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module of each baghouse. Pressure drop readings for each baghouse shall be recorded monthly during source operation. Operation and maintenance checks shall be made on at least a monthly basis for baghouse cleaning systems, dust collection hoppers and conveying systems for proper operation. Each baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.				
	<ul> <li>The following operation and maintenance checks will be made on at least a monthly basis for all baghouses:</li> <li>(a) The baghouse cleaning systems will be checked for proper operation.</li> <li>(b) Check dust collection hoppers and conveying systems for proper operation.</li> </ul>				
	The owner/operator shall assure the quality of filter bags in accordance with Century's Filter Bag Quality Assurance (QA) Program and/or by vendor certification of each shipment of bags. The BAQ shall be notified of any changes. Records shall be kept on site.				
	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005				
C.23	(S.C. Regulation 61-62.5, Standard No. 7) Filterable PM emissions shall be limited to 28.73 lb/hr for each pot room group. The owner/operator shall use best management practices as BACT for fugitive PM emissions and comply with specified practices.				

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## C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	The owner/operator shall maintain all records necessary to determine PM emissions. PM emissions shall be calculated on a monthly average basis. Reports of the calculated values shall be submitted semiannually.					
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors.					
	The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module of the dry scrubber/baghouse(s). Pressure drop readings shall be recorded daily during source operation. The dry scrubber/baghouse(s) shall be in place and operational whenever processes controlled by the dry scrubber/baghouse(s) are running, except during periods of dry scrubber/baghouse malfunction or mechanical failure.					
	The following operation and maintenance checks will be made on at least a monthly basis for each dry scrubber/baghouse: (a) The dry scrubber/baghouse cleaning systems will be checked for proper operation. (b) Check dust collection hoppers and conveying systems for proper operation.					
	Emission Unit ID: 04					
	Control Device ID: 53002, 53003, 53004, 53005					
	(S.C. Regulation 61-62.5, Standard No. 7) $SO_2$ emissions shall be limited to 212.24 lb/hr for each source and 848.96 lb/hr total, 3718.44 TPY total.					
C.24	The owner/operator shall maintain all records necessary to determine facility-wide $SO_2$ emissions. $SO_2$ emissions shall be calculated on a monthly average basis. Reports of the calculated values shall be submitted semiannually.					
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary, unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors.					
	Emission Unit ID: 04					
6.05	<b>Control Device ID:</b> 53002, 53003, 53004, 53005					
C.25	(S.C. Degulation 61.62 E. Standard No. 7) NO. oppications shall be limited to 5.04 lb/bs for each assure					
	The owner/operator shall comply with good operating practices as BACT for the control of process					

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## C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions						
	NO <sub>x</sub> emissions and comply with specified practices.						
	Process $NO_x$ emissions shall be derived using an emission factor from a source test and calculated on a monthly average basis. Reports of the calculated values shall be submitted semiannually.						
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.						
	Emission Unit ID: 04 Control Device ID: 53002, 53003, 53004, 53005						
	(S.C. Regulation 61-62.5, Standard No. 7) CO emissions shall be limited to 3,178.3 lb/hr for each source and 12,713.2 lb/hr total, 55,684 TPY total. The owner/operator shall comply with good operating practices as BACT for the control of process CO emissions and comply with specified practices.						
C.26	Process CO emissions shall be derived using Beck's Equation and calculated on a monthly average basis. Reports of the calculated values shall be submitted semiannually.						
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.						
	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005						
C.27	(S.C. Regulation 61-62.5, Standard No. 7) Total fluoride emissions shall be limited to a plant-average limit of 1.02 lb/ton of aluminum produced based on a 12-month rolling average and a plant-average limit of 1.34 lb/ton of aluminum produced based on a single month average. The facility shall comply with dry alumina injection for the potline scrubbers as determined by BACT. The facility shall comply with good operating practices for the potline roof monitors as determined by BACT.						
	Annual source testing of total fluoride emissions from the potline control devices shall be performed in accordance with the EPA Test Method 13A, 13B, or BAQ-approved alternative. Semiannual testing of total fluoride emissions from representative potline roof vents/monitors shall be performed in accordance with the EPA Test Method 14 and 13A or 13B. The owner or operator shall give the Bureau at least 15 days advance notice of each test. Source test methodology must be approved by this Bureau.						

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	shall be submitted in accordance with approved test plans.					
	Emission Unit ID: 02					
	Control Device ID: 53001					
	Emission Unit ID: 04					
	Equipment ID: 40101, 40102, 40103, 40104					
C.28	Control Device ID. 33002, 33003, 33004, 33003					
	These sources are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart A, General Provisions and Subpart S, Standards of Performance For Primary Aluminum Reduction Plants and S.C. Regulation 61-62.60 Subpart A, General Provisions and Subpart S, Standards of Performance For Primary Aluminum Reduction Plants, as applicable. These sources shall comply with all applicable requirements of Subparts A and S.					
	Emission Unit ID: 02					
	Control Device ID: 53001					
	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005					
	40 CFR §60.190 Applicability And Designation Of Affected Facility					
C.29	(a) The affected facilities in primary aluminum reduction plants to which this subpart applies are potroom groups and anode bake plants.					
	(b) Except as provided in paragraph (c) of this section, any affected facility under paragraph (a) of this section that commences construction or modification after October 23, 1974, is subject to the requirements of this subpart.					
	(c) An owner or operator of an affected facility under paragraph (a) of this section may elect to comply with the requirements of this subpart or the requirements of 40 CFR 63 Subpart LL.					
	Emission Unit ID: 04					
	Equipment ID: 40101, 40102, 40103, 40104					
	<b>Control Device ID:</b> 53002, 53003, 53004, 53005					
C.30	40 CFR §60.192 Standards For Fluorides					
	(a) On and after the date on which the initial performance test required to be conducted by §60.8 is					
	completed, no owner or operator subject to the provisions of this subpart shall cause to be					
	discharged into the atmosphere from any affected facility any gases containing total fluorides, as					

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## C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	measured according to §60.195, in excess of:					
	(a)(1)					
	(a)(2) 0.95 kg/Mg (1.9 lb/ton) of aluminum produced for each potroom group					
	Annual source testing of total fluoride emissions from the potline control devices shall be performed in accordance with the EPA Test Method 13A, 13B, or BAQ-approved alternative. Semiannual testing of total fluoride emissions from representative potline roof vents/monitors shall be performed in accordance with the EPA Test Method 14 and 13A or 13B, or a BAQ-approved alternative. The owner or operator shall give the Bureau at least 15 days advance notice of each test. Source test methodology must be approved by this Bureau.					
	Source test results shall be recorded and used to show compliance with the emission limit. Reports shall be submitted annually.					
	Emission Unit ID: 02 Control Device ID: 53001					
	40 CFR §60.192 Standards For Fluorides					
C.31	(a) On and after the date on which the initial performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases containing total fluorides, as measured according to §60.195, in excess of: (a)(1)					
	(a)(3) 0.05 kg/Mg (0.1 lb/ton) of aluminum equivalent for anode bake plants.					
	(b)					
	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005					
C.32	40 CFR §60.193 Standard For Visible Emissions					
	(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:					
	(a)(1) From any potroom group any gases which exhibit 10 percent opacity or greater, or					

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	(a)(2)					
	Emission Unit ID: 02 Equipment ID: 73050-N, 73051-S Control Device ID: 53001					
C.33	40 CFR §60.193 Standard For Visible Emissions					
	(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:					
	(a)(1)					
	<ul> <li>(a)(2) From any anode bake plant any gases which exhibit 20 percent opacity or greater.</li> <li>Emission Unit ID: Facility Wide</li> <li>Equipment ID: Facility Wide</li> <li>Control Device ID: Facility Wide</li> </ul>					
	40 CFR §60.194 Monitoring Of Operations					
C.34	(a)					
	(b) The owner/operator shall maintain a record of daily production rates of aluminum and anodes, raw material feed rates, and cell or potline voltages.					
	(C)					
	Emission Unit ID: 02 Control Device ID: 53001					
	40 CFR §60.194 Monitoring Of Operations					
C.35	As per §60.194(c) and (d)(2), alternative testing requirements are established for this facility. Source testing for total fluorides in accordance with EPA Test Method 13A, 13B, or BAQ-approved alternative shall be performed once a year.					
	The source test results shall be recorded and used to show compliance with the emission limit. Reports shall be submitted annually.					
C.36 Emission Unit ID: 04 C.36 Control Device ID: 50032						

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	Emission Unit ID: 05 Control Device ID: 50061, 50062, 50063					
	Emission Unit ID: 06 Control Device ID: 50038, 50045					
	40 CFR 64 (Compliance Assurance Monitoring) To meet the requirements, the indicator for $PM_{10}$ will be baghouse pressure drop and baghouse condition. The owner/operator shall continue to operate and maintain daily measurement of pressure drop, as well as verify proper operation of the collection system by monthly inspections and maintenance and annual internal inspection as the measurement approach. The baghouse pressure drop and inspections shall be used to provide assurance of compliance with each applicable requirement.					
	The operational ranges for the baghouse pressure drop shall be a pressure drop value between 1.0 inch to 9.9 inches of water. These operational ranges for the monitored parameters were derived from data which demonstrate a reasonable assurance of compliance. Pressure drop readings shall be recorded manually on a daily basis.					
	QA/QC practices, etc. shall consist of reading the pressure drop gauge daily. Installed gauges shall be replaced with new gauges or calibrated as per the manufacturer's recommendations annually. Calibration accuracy shall be +/- 0.5 inch of water. Calibration records shall be maintained on site for a period not less than 5 years.					
	An excursion is defined as any operating condition where the indicator is outside of the approved range. Upon detecting an excursion, the owner/operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing any startup, shutdown, or malfunction period and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup and shutdown conditions).					
	<ul> <li>A semiannual report for monitoring shall include, at a minimum, the information required under §70.6(a)(3)(iii) and the following information as applicable:</li> <li>(a) Summary information of the number, duration, and cause (including unknown cause, if applicable) of excursions, as applicable, and the corrective actions taken;</li> <li>(b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero</li> </ul>					
	<ul><li>span or other daily calibration checks, if applicable);</li><li>(c) If applicable, a description of the actions taken to implement a Quality Improvement Plan</li></ul>					

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### C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions					
	(QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner/operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring.					
	The owner/operator shall maintain records of monitoring data, monitor performance data, inspections, maintenance activities, corrective action, and, if applicable, quality improvement plans.					
	Emission Unit ID: Facility Wide Equipment ID: Facility Wide Control Device ID: Facility Wide					
C.37	(S.C. Regulation 61-62.5, Section II(E)) Facility-wide emissions of $SO_2$ shall not exceed 4,015.6 TPY based on a 12-month rolling sum.					
	The owner/operator shall maintain all records necessary to determine facility wide $SO_2$ emissions. $SO_2$ emissions shall be calculated on a monthly basis, and a 12-month rolling sum shall be calculated for total $SO_2$ emissions. Reports of the calculated values and the 12-month rolling sum shall be submitted semiannually.					
	An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary, unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors.					
	Emission Unit ID: 02 Equipment ID: 73050-N, 73051-S, 53001					
C.38	Emission Unit ID: 04 Equipment ID: 40101, 40102, 40103, 40104 Control Device ID: 53002, 53003, 53004, 53005					
	Emission Unit ID: 05 Control Device ID: 50061, 50062, 50063					
	Emission Unit ID: 06 Control Device ID: 50038, 50045					
	(S.C. Regulation 61-62.5, Standard No. 7) In accordance with BACT, process Pb emissions shall be controlled using baghouse controls and fugitive Pb emissions shall be controlled using best management practices. The facility shall comply with specified practices.					

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#### D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	LL	Semiannually	January 1 through June 30, July 1 through December 31	January 30, July 30
63	RRR	Semiannually	January 1 through June 30, July 1 through December 31	Within 60 days after the end of each 6- month period
63	ZZZZ (Emergency Engines; see notes 3 and 4)	None	None	None
63	DDDDD	Semiannually	January 1 through June 30, July 1 through December 31	Postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.

2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with 40 CFR 63.10(a)(5). This request may be made 1 year after the compliance date for the associated MACT standard.

- 3. Facilities with emergency engines are not required to submit reports. Only facilities with non-certified, nonemergency engines are required to submit semiannual reports.
- 4. Facilities with emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).

#### E. NESHAP – CONDITIONS

Condition Number	Conditions	
E.1	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South	
	Carolina Department of Health and Environmental Control - Bureau of Air Quality.	
E.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States	
	Environmental Protection Agency (US EPA) at the following address or electronically as required by	
	the specific subpart:	

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#### E. NESHAP – CONDITIONS

Condition Number	Conditions	
	US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street SW Atlanta, GA 30303	
	Emergency engines less than or equal to 150 kilowatt (kW) rated capacity, emergency engines greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, and diesel engine driven emergency fire pumps that are operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1.	
E.3	If present, these sources shall still comply with the requirements of all applicable regulations, including but not limited to the following:	
	New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions); NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines); NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines); National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines).	
E.4	This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A (General Provisions) and LL (National Emission Standards For Hazardous Air Pollutants For Primary Aluminum Reduction Plants). The owner or operator shall comply with all applicable requirements of these Subparts; which are incorporated by reference as if fully repeated herein. Existing affected sources shall be in compliance with the requirements of these Subparts by the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.	
E.5	This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A (General Provisions) and RRR (National Emission Standards For Hazardous Air Pollutants For Secondary Aluminum Production). The owner or operator shall comply with all applicable requirements of these Subparts; which are incorporated by reference as if fully repeated herein. Existing affected sources shall be in compliance with the requirements of these Subparts by the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.	
E.6	This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A (General Provisions) and DDDDD (National Emission Standards For Hazardous Air Pollutants For Industrial, Commercial, and Institutional Boilers and Process Heaters). The owner or operator shall comply with all applicable	

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#### E. NESHAP – CONDITIONS

Condition Number	Conditions
	requirements of these Subparts; which are incorporated by reference as if fully repeated herein.
	Existing affected sources shall be in compliance with the requirements of these Subparts by the
	compliance date, unless otherwise noted. Any new affected sources shall comply with the
	requirements of these Subparts upon initial start-up unless otherwise noted.

#### F. COMPLIANCE SCHEDULE - RESERVED

#### G. PERMIT SHIELD

Condition Number	Condition Conditions		
G.1	(S.C. Regulation 61-62.70.6(f)) A copy of the "applicability determination" submitted with the Part 70 permit application is included as Attachment – Applicable and Non-Applicable Federal and State Regulations. With the exception of those listed below, compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements specified in Attachment – Applicable and Non-Applicable Federal and State Regulations as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in the permit. The owner or operator shall also be shielded from the non-applicable requirements specified in Attachment – Attachment – Applicable and Non-Applicable Federal and State Regulations. Exceptions to this are stated below in the Permit Shield Exceptions Table. This permit shield does not extend to applicable requirements which are promulgated after permit issuance, unless the permit has been appropriately modified to reflect such new requirements.		
	Nothing in the permit shield or in any Part 70 permit shall alter or affect the provisions of Section 303 of the Act, Emergency Orders, of the Clean Air Act; the liability of the owner or operator for any violation of applicable requirements prior to or at the time of permit issuance; the applicable requirements of the Acid Rain Program, consistent with Section 408.a of the Clean Air Act; or the ability of US EPA to obtain information from a source pursuant to Section 114 of the Clean Air Act. In addition, the permit shield shall not apply to emission units in noncompliance at the time of permit issuance, minor permit modifications (S.C. Regulation 61-62.70.7(e)(2)), group processing of minor permit modifications (S.C. Regulation 61-62.70.7(e)(5)(ii)), except as specified in S.C. Regulation 61-62.70.7(e)(5)(iii).		
Permit Shield Exceptions			
	SC Regulation 61-62.1, Definitions and General Requirements		
	SC Regulation 61-62.2, Prohibition of Open Burning		
	SC Regulation 61-62.3, Air Pollution Episodes		
	SC Regulation 61-62.5 Standard No. 2 Ambient Air Ouality Standards		
	Se Regulation of 02.3, Standard No. 2, Amblent All Quality Standards		

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Permit Shield Exceptions
SC Regulation 61-62.5, Standard No. 5.2 Control of Oxides of Nitrogen
SC Regulation 61-62.5, Standard No. 7, Prevention of Significant Deterioration
SC Regulation 61-62.5, Standard No. 7.1, Nonattainment New Source Review
SC Regulation 61-62.5, Standard No. 8 Toxic Air Pollutants
SC Regulation 61-62.6, Control of Fugitive Particulate Matter
SC Regulation 61-62.61 Subpart M, National Emission Standard for Asbestos
SC Regulation 61-62.60 (All Subparts)
SC Regulation 61-62.61 (All Subparts)
SC Regulation 61-62.63 (All Subparts)
SC Regulation 61-62.7, Good Engineering Practice Stack Height
SC Regulation 61-62.72 Acid Rain
40 CFR 60 (All Subparts)
40 CFR 61, Subpart M National Emission Standard for Asbestos
40 CFR 63 (All Subparts)
40 CFR 63 Case-by-Case MACT 112(g)
40 CFR 64 Compliance Assurance Monitoring
40 CFR 68 Risk Management Programs Under Section 112(r)
40 CFR 98 Mandatory Greenhouse Gas Reporting Rule

#### H. PERMIT FLEXIBILITY

Condition Number	Conditions	
H.1	The facility may install, remove, and modify insignificant activities as defined in S.C. Regulation 61- 62.70.5.c and exempt sources as listed in S.C. Regulation 61-62.1, Section II.B, without revising or reopening the Title V Operating Permit. A list of insignificant activities/exempt sources must be maintained on site, along with any necessary documentation to support the determination that the activity is insignificant and/or exempt, and shall be made available to a Department representative upon request. The list shall be submitted with the next renewal application.	
Н.2	Aluminum potline reduction is limited to 256,150 tons/year. However, additional production is allowed as long as emission limits and conditions are met and no physical changes or changes in method of operation that result in a significant net emissions increase of a regulated pollutant are involved, or other modification that would require further permitting.	

#### I. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
l.1	Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to

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#### I. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions	
determine continuing compliance with these standards. These potential changes include decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack temperature, increase in building height or building additions, increase in emission rates, dec in distance between stack and property line, changes in vertical stack orientation, and installat a rain cap that impedes vertical flow. Parameters that are not required in the determination w invalidate the demonstration if they are modified. The emission rates used in the determination listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standa this permit provided a demonstration using these higher emission rates shows the attainmer maintenance of any state or federal ambient air quality standard or with any other appl requirement. Variations from the input parameters in the demonstration shall not constit violation unless the maximum allowable ambient concentrations identified in the standar exceeded.		
	The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.	

#### J. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
	January-March	April 30
Quartarhy	April-June	July 30
Quarterly	July-September	October 30
	October-December	January 30
	January-June	July 30
Somiannual	April-September	October 30
Semiannuar	July-December	January 30
	October-March	April 30
Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified		

in the federal standard unless the Department or EPA approves a change.

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#### K. TITLE V COMPLIANCE CERTIFICATION REPORTING SCHEDULE

Title V Compliance Certification Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
	January-December	February 14
Appual	April-March	May 15
Annuar	July-June	August 14
	October-September	November 14

#### L. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Conditions	
L.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Title V Periodic Reporting Schedule and the Title V Compliance Certification Reporting Schedule of this permit. All required reports must be certified by a responsible official consistent with S.C. Regulation 61-62.70.5.d.	
L.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: 2600 Bull Street Columbia, SC 29201 The contact information for the local Environmental Affairs Regional office can be found at:	
L.3	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.	
L.4	All Title V Annual Compliance Certifications shall be sent to the US EPA, Region 4, Air Enforcement Branch and to the Manager of the Technical Management Section, Bureau of Air Quality. US EPA, Region 4 Air Enforcement Branch 61 Forsyth Street SW Atlanta, GA 30303	
L.5	<ul> <li>(S.C. Regulation 61-62.70.6.a.3.ii) The owner or operator shall comply, where applicable, with the following monitoring/support information collection and retention record keeping requirements:</li> <li>1. Records of required monitoring information shall include the following: <ul> <li>a. The date, place as defined in the permit, and time of sampling or measurements;</li> <li>b. The date(s) analyses were performed;</li> <li>c. The company or entity that performed the analyses;</li> <li>d. The analytical techniques or methods used;</li> <li>e. The results of such analyses; and</li> <li>f. The operating conditions as existing at the time of sampling or measurement;</li> </ul> </li> <li>2. Records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all</li> </ul>	

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### L. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Conditions		
	original strip-chart recordings for continuous monitoring instrumentation, and copies of all		
	reports required by the permit.		
	(S.C. Regulation 61-62.1, Section II.J.1.c) For sources not required to have continuous emission monitors, any malfunction of air pollution control equipment or system, process upset, or other equipment failure which results in discharges of air contaminants lasting for one (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:		
	<ol> <li>The identity of the stack and/or emission point where the excess emissions occurred;</li> <li>The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;</li> <li>The time and duration of excess emissions;</li> <li>The identity of the equipment causing the excess emissions;</li> </ol>		
L.0	5. The nature and cause of such excess emissions;		
	<ol><li>The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;</li></ol>		
	7. The steps taken to limit the excess emissions; and,		
	8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.		
	The initial twenty-four (24) hour notification should be made to the Department's local Environmental Affairs Regional office.		
	The written report should be sent to the Manager of the Technical Management Section, Bureau of Air Quality and the local Environmental Affairs Regional office.		
	(S.C. Regulation 61-62.70.6.c.5.iii) The responsible official shall certify, annually, compliance with the conditions of this permit as required under S.C. Regulation 61-62.70.6.c. The compliance certification shall include the following:		
	1. The identification of each term or condition of the permit that is the basis of the certification.		
	2. The identification of the method(s) or means used by the owner or operator for determining		
17	the compliance status with each term and condition of the permit during the certification period		
	3. The status of compliance with the terms and conditions of the permit for the period covered		
	by the certification, including whether compliance during the period was continuous or		
	intermittent. The certification shall be based on the method or means designated in SC		
	Regulation 61-62.70.6.c.5.iii.B. The certification shall identify each deviation and take it into		
	account in the compliance certification.		
	4. Such other facts as the Department may require to determine the compliance status of the		

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#### L. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Conditions
	source.
L.8	(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Director of Air Permitting a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner or operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.

Condition Number	Conditions
M.1	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
M.2	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."
M.3	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."
M.4	The owner or operator shall comply with S.C. Regulation 61-62.6 "Control of Fugitive Particulate Matter", Section III "Control of Fugitive Particulate Matter Statewide."
	The owner or operator shall comply with the standards of performance for asbestos abatement
M.5	operations pursuant to 40 CFR Part 61.145, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
	The owner or operator shall comply with the standards of performance for asbestos abatement
M.6	operations pursuant to S.C. Regulation 61-86.1, including, but not limited to, requirements governing
	training, licensing, notification, work practice, cleanup, and disposal.
	The owner or operator shall comply with the standards for recycling and emissions reduction
	pursuant to 40 CFR Part 82, Subpart F, Protection of Stratospheric Ozone, Recycling and Emissions
M.7	Reduction, except as provided for motor venicle air conditioners (MVACs) in Subpart B. If the owner
	of operator performs a service on motor (neet) venicles that involves ozone-depieting substance
	22 Subpart B Servicing of MVACs
	$(S \cap \text{Regulation } 61-62, 70, 6, a, 5)$ The provisions of this permit are severable, and if any provision of
	this permit or application of any provision of this permit to any circumstance is held invalid the
M.8	application of such provision to other circumstances and the remainder of this permit shall not be
	affected thereby.
	(S.C. Regulation 61-62.70.6.a.6.i) The owner or operator must comply with all of the conditions of this
MO	permit. Any permit noncompliance constitutes a violation of the S.C. Pollution Control Act and/or the
101.9	Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and
	reissuance, or modification; or for denial of permit renewal application.

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Condition	Conditions							
Number	(S.C. Regulation 61-62.70.6 a 6 ii) It shall not be a defense for an owner or operator in an enforcement							
M 10	action that it would have been necessary to halt or reduce the permitted activity in order to maintain							
M.10 M.11 M.12	compliance with the conditions of this permit.							
	(S.C. Regulation 61-62.70.6.a.6.iii) The permit may be modified, revoked, reopened and reissued, or							
	terminated for cause by the Department. The filing of a request by the owner or operator for a permit							
M.11	modification, revocation and reissuance, or termination, or of a notification of planned changes or							
	anticipated noncompliance does not stay any permit condition.							
N4 12	(S.C. Regulation 61-62.70.6.a.6.iv) The permit does not convey any property rights of any sort, or any							
IVI.12	exclusive privilege.							
	(S.C. Regulation 61-62.70.6.a.6.v) The owner or operator shall furnish to the Department, within a							
	reasonable time, any information that the Department may request in writing to determine whether							
	cause exists for modifying, revoking and reissuing, or terminating the permit or to determine							
M.13	compliance with the permit. Upon request, the owner or operator shall also furnish to the							
	Department copies of records required to be kept by the permit or, for information claimed to be							
	confidential, the owner or operator may furnish such records directly to the Administrator along with							
	a claim of confidentiality. The Department may also request that the owner or operator furnish such							
	records directly to the Administrator along with a claim of confidentiality.							
NA 1 A	(S.C. Regulation 61-62.70.6.a.8) No permit revision shall be required, under any approved economic							
101.14	incentives, marketable permits, emissions trading and other similar programs or processes for							
	$(S \cap \text{Regulation } 61-62, 70.6, c.2)$ Upon presentation of credentials and other documents as may be							
	required by law the owner or operator shall allow the Department or an authorized representative							
	to perform the following:							
	1. Enter upon the owner or operator's premises where a Part 70 source is located or emissions-							
	related activity is conducted, or where records must be kept under the conditions of the							
	permit.							
M.15	2. Have access to and copy, at reasonable times, any records that must be kept under the							
	conditions of the permit.							
	3. Inspect any facilities, equipment (including monitoring and air pollution control equipment),							
	practices, or operations regulated or required under this permit.							
	4. As authorized by the Act and/or the S.C. Pollution Control Act, sample or monitor at							
	reasonable times substances or parameters for the purpose of assuring compliance with the							
	permit of applicable requirements.							
	(3.C. Regulation of oz. 70.6.g) in the case of an energency, as defined in S.C. Regulation of -							
	properly signed contemporaneous operating logs or other relevant evidence that:							
	1. An emergency occurred and that the owner or operator can identify the cause(s) of the							
M.16	emergency;							
	2. The permitted facility was at the time being properly operated; and							
	3. During the period of the emergency the owner or operator took all reasonable steps to							
	minimize levels of emissions that exceeded the emission standards, or other requirements							

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Condition Number	Conditions
	in the permit; and
	<ul> <li>4. The owner or operator shall submit verbal notification of the emergency to the Department within twenty-four (24) hours of the time when emission limitations were exceeded, followed by written notifications within thirty (30) days. This notice fulfills the requirement of S.C. Regulation 61-62.70.6.a.3.iii.B. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.</li> <li>This provision is in addition to any emergency or upset provision contained in any applicable requirement. In any enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.</li> </ul>
M.17	(S.C. Regulation 61-62.70.6.a.1.ii) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
M.18	(S.C. Regulation 61-62.70.6.a.4) According to S.C. Regulation 61-62.70.6.a.4, the owner or operator is prohibited from emissions exceeding any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by a source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowances shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
M.19	(S.C. Regulation 61-62.70.7.c.1.ii) Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with S.C. Regulation 61-62.70.5.a.1.iii, 62.70.5.a.2.iv, and 62.70.7.b. In this case, the permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the permit including any permit shield that may be granted pursuant to S.C. Regulation 61-62.70.6.f shall remain in effect until the renewal permit has been issued or denied.
M.20	Requests for permit modification and amendments shall be submitted on the appropriate Department approved Title V Modification Form(s).
M.21	(S.C. Regulation 61-62.70.6.a.7) The owners or operators of Part 70 sources shall pay fees to the Department consistent with the fee schedule approved pursuant to S.C. Regulation 61-62.70.9. Failure to pay applicable fee can be considered grounds for permit revocation.
M.22	<ul> <li>(S.C. Regulation 61-62.1, Section III) The owners or operators of Part 70 sources shall complete and submit a new updated emissions inventory consistent with the schedule approved pursuant to S.C. Regulation 61-62.1, Section III. These Emissions Inventory Reports shall be submitted to the Manager of the Emissions Inventory Section, Bureau of Air Quality.</li> <li>This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.</li> </ul>
M.23	This permit expressly incorporates insignificant activities. Emissions from these activities shall be included in the emissions inventory submittals as required by S.C. Regulation 61-62.1, Section

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Condition Number	Conditions
	III.B.2.g.
M.24	(S.C. Regulation 61-62.1, Section II.J.1.a) No applicable law, regulation, or standard will be contravened.
M.25	(S.C. Regulation 61-62.1, Section II.J.1.e) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to S.C. Regulation 61-62.1 or with the terms of any approval to construct, or who commences construction after the effective date of S.C. Regulation 61-62.1 without applying for and receiving approval hereunder, shall be subject to enforcement action.

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The emission rates listed herein are not considered enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Ambient Air Standards Requirements).

AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2								
Emission Doint ID	Emission Rates (lbs/hr)							
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	СО	Lead		
01	4.580	4.580	82.92	18.16	97.70	0.0052		
01A	0.517	0.517						
02	2.82	2.82	212.24	5.04	3178.30	0.0112		
02A	16.80	16.80				0.0662		
03	2.82	2.82	212.24	5.04	3178.30	0.0112		
03A	16.80	16.80				0.0662		
04	2.82	2.82	212.24	5.04	3178.30	0.0112		
04A	16.80	16.80				0.0662		
05	2.82	2.82	212.24	5.04	3178.30	0.0112		
05A	16.80	16.80				0.0662		
06	0.176	0.176						
07	0.034	0.034						
08	0.223	0.223						
09	0.429	0.429						
10	0.459	0.459						
11	0.154	0.154						
12	0.094	0.094						
13	0.174	0.174						
14	0.137	0.137						
15	0.087	0.087						
16	0.249	0.249						
17	0.043	0.043						
18	0.174	0.174						
19	0.503	0.503						
20	0.026	0.026						
21A	2.250	2.250				8.0E-05		
22	0.942	0.942						
23-25	0.966	0.966						
25A	0.058	0.058				4.86E-06		
26	0.026	0.026						

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 2 of 12

AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2							
Emission Doint ID	Emission Rates (lbs/hr)						
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	СО	Lead	
27	0.300	0.300					
28	0.270	0.270					
29	0.669	0.669					
30	4.062	4.062					
31	0.130	0.130					
32	0.268	0.268					
33	0.176	0.176					
34	0.176	0.176					
35	0.069	0.069					
36	0.069	0.069					
37	0.069	0.069					
38	0.069	0.069					
39	0.266	0.266					
40	0.069	0.069					
41	0.103	0.103					
42	0.351	0.351					
43	0.103	0.103					
44	0.103	0.103					
45	0.351	0.351					
46	0.103	0.103					
47	0.802	0.802				4.48E-03	
50	1.301	1.301				7.28E-03	
51_103	0.630	0.630	0.009	2.27	1.318	1.0E-05	
51_104	0.480	0.480	0.009	2.27	1.318	1.0E-05	
51_105	0.480	0.480	0.009	2.27	1.318	1.0E-05	
51_106	0.980	0.980	0.009	2.27	1.318	1.0E-05	
51_107	0.980	0.980	0.009	2.27	1.318	1.0E-05	
51_109	0.480	0.480	0.009	2.27	1.318	1.0E-05	
51_110	0.980	0.980	0.009	2.27	1.318	1.0E-05	
51_111	0.480	0.480	0.009	2.27	1.318	1.0E-05	
51_112	0.980	0.980	0.009	2.27	1.318	1.0E-05	
52_1	0.138	0.138	0.011	2.56	1.482	1.0E-05	
52_2	0.138	0.138	0.011	2.56	1.482	1.0E-05	
52_3	0.275	0.275	0.021	5.12	2.965	2.0E-05	
64	0.215	0.215	0.013	3.13	1.812		

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AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2							
Emission Doint ID	Emission Rates (lbs/hr)						
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	CO	Lead	
66	0.323	0.323					
83	0.038	0.038	0.003	0.710	0.412	2.0E-06	
84	0.012	0.012	0.001	0.227	0.132	1.0E-06	
85	0.750	0.750	1.27				
86	0.298	0.298				2.42E-04	
87	2.032	2.032				3.19E-05	
100	0.046	0.046					
106	0.560	0.560	0.52	0.452	1.700		
107	0.017	0.017	0.0004	0.307	0.045		
108	0.017	0.017	0.0004	0.307	0.045		
122	0.023	0.023	0.002	0.426	0.247	1.0E-06	
125	0.046	0.046					
CB-1	0.259	0.259			1.56	1.45E-06	
CB-2	0.259	0.259			2.087	1.92E-06	
D&B	0.429						
FCH	0.017						

STANDARD NO. 7 - PSD CLASS II INCREMENT EMISSION RATES (LB/HR)								
	Minor Source Baseline Date(s)							
Emission Point ID	11/30/1977		9/16/2017			4/26/1990		
	DM		PM <sub>2.5</sub>		50	NO		
	<b>P</b> IVI <sub>10</sub>	Primary	SO <sub>2</sub>	NOx	302	NOx		
01	4.580				82.92	15.25		
01A	0.517							
02	2.82				212.24	4.01		
02A	16.80							
03	2.82				212.24	4.01		
03A	16.80							
04	2.82				212.24	4.01		
04A	16.80							
05	2.82				212.24	4.01		
05A	16.80							
06	0.176							
07	0.034							

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STANDARD NO. 7 - PSD CLASS II INCREMENT EMISSION RATES (LB/HR)								
		Mi	nor Source B	Baseline Dat	te(s)			
Emission Doint ID	11/30/1977		9/16/2017		11/30/1977	4/26/1990		
	DM		PM <sub>2.5</sub>			NO		
	PIVI <sub>10</sub>	Primary	SO <sub>2</sub>	NOx	<b>SU</b> <sub>2</sub>	NOx		
08	0.223							
09	0.429							
10	0.459							
11	0.154							
12	0.094							
13	0.174							
14	0.137							
15	0.087							
16	0.249							
17	0.043							
18	0.174							
19	0.503							
20	0.026							
21A	2.250							
22	0.942							
23-25	0.966							
25A	0.058							
26	0.026							
27	0.300							
28	0.270							
29	0.669							
30	4.062							
31	0.130							
32	0.268							
33	0.176							
34	0.176							
35	0.069							
36	0.069							
37	0.069							
38	0.069							
39	0.266							
40	0.069							
41	0.103							
42	0.351							

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 5 of 12

STANDARD NO. 7 - PSD CLASS II INCREMENT EMISSION RATES (LB/HR)							
		Mi	nor Source B	Baseline Da	te(s)		
Emission Doint ID	11/30/1977	/1977 9/16/2017			11/30/1977	4/26/1990	
	DM		PM <sub>2.5</sub>		03	NO	
	PIVI <sub>10</sub>	Primary	SO <sub>2</sub>	NOx	SO <sub>2</sub>	NOx	
43	0.103						
44	0.103						
45	0.351						
46	0.103						
47	0.802						
50	1.301						
51_103	0.630				0.009	1.82	
51_104	0.480				0.009	1.82	
51_105	0.480				0.009	1.82	
51_106	0.980				0.009	1.82	
51_107	0.980				0.009	1.82	
51_109	0.480				0.009	1.82	
51_110	0.980				0.009	1.82	
51_111	0.480				0.009	1.82	
51_112	0.980				0.009	1.82	
52_1	0.138				0.011	1.59	
52_2	0.138				0.011	1.59	
52_3	0.275				0.021	3.17	
64	0.215				0.013	2.79	
66	0.323						
83	0.038				0.003	0.32	
84	0.012				0.001	0.19	
85	0.750				1.27		
86	0.298						
87	2.032						
100	0.046						
106	0.560						
107	0.017						
108	0.017						
122	0.023				0.002		
125	0.046						

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TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 1)										
	Emission Rates (lbs/hr)									
Emission Point ID	Ammonium Chloride	Antimony	Arsenic	Biphenyl						
	12125-02-9		7440-38-2	92-52-4						
01		1.02E-04	8.72E-05	0.055						
02		0.00101	4.72E-04							
02A		0.0223	0.0826							
03		0.00101	4.72E-04							
03A		0.0223	0.0826							
04		0.00101	4.72E-04							
04A		0.0223	0.0826							
05		0.00101	4.72E-04							
05A		0.0223	0.0826							
21A			0.00112							
25A			4.64E-05							
47	0.0320									
50	0.0519									
51_103			0.00133							
51_104			0.00133							
51_105			0.00133							
51_106			0.00133							
51_107			0.00133							
51_109			0.00133							
51_110			0.00133							
51_111			0.00133							
51_112			0.00133							
85		2.76E-05	1.04E-05	0.0053						
86			0.00160							
87			5.84E-04							

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 2)				
	Emission Rates (lbs/hr)			
Emission Point ID	Cadmium	Carbon Disulfide	Carbonyl Sulfide	Chlorine
	7440-43-9	75-15-0	463-58-1	7782-50-5
01	2.46E-04			
02	7.7E-04	1.02	55.86	

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 7 of 12

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 2)				
		Emission Rat	tes (lbs/hr)	
Emission Point ID	Cadmium	Carbon Disulfide	<b>Carbonyl Sulfide</b>	Chlorine
	7440-43-9	75-15-0	463-58-1	7782-50-5
02A	3.62E-03			
03	7.7E-04	1.02	55.86	
03A	3.62E-03			
04	7.7E-04	1.02	55.86	
04A	3.62E-03			
05	7.7E-04	1.02	55.86	
05A	3.62E-03			
25A	1.21E-06			
47	1.07E-03			
50	1.73E-03			
51_103	2.5E-04			0.60
51_104	2.5E-04			
51_105	2.5E-04			
51_106	2.5E-04			2.00
51_107	2.5E-04			2.00
51_109	2.5E-04			
51_110	2.5E-04			2.00
51_111	2.5E-04			
51_112	2.5E-04			2.00
64	8.46E-06			
66	6.96E-05			
85	7.78E-05			
86	2.36E-04			
87	1.35E-05			
CB-1	3.86E-06			
CB-2	5.08E-06			

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 3)				
	Emission Rates (lbs/hr)			
Emission Point ID	Chromium (+6) Compounds	Cobalt	Cyanide	Ethyl Benzene
			57-12-5	100-41-4
01	0.03	1.32E-04		
02	0.0044	4.72E-04		

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 8 of 12

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 3)				
		Emission Rat	tes (lbs/hr)	
Emission Point ID	Chromium (+6) Compounds	Cobalt	Cyanide	Ethyl Benzene
			57-12-5	100-41-4
02A	0.2588	3.18E-03		
03	0.0044	4.72E-04		
03A	0.2588	3.18E-03		
04	0.0044	4.72E-04		
04A	0.2588	3.18E-03		
05	0.0044	4.72E-04		
05A	0.2588	3.18E-03		
21A	2.80E-04		0.0051	
23-25	6.48E-03			
47	1.41E-02			
50	2.28E-02			
51_103	1.69E-03			
51_104	1.69E-03			
51_105	1.69E-03			
51_106	1.69E-03			
51_107	1.69E-03			
51_109	1.69E-03			
51_110	1.69E-03			
51_111	1.69E-03			
51_112	1.69E-03			
80				0.003
81				0.003
82				0.003
85	2.33E-04	4.04E-05		
86	1.17E-04			
CB-1	8.88E-05			
CB-2	1.18E-04			

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 9 of 12

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 4)					
	Emission Rates (lbs/hr)				
Emission Point ID	Formaldehyde	Hydrogen Fluoride	Hydrogen Sulfide	Manganese	
	50-00-0	7664-39-3	7783-06-4		
01		0.52		4.88E-03	
02		0.63	5.82	2.4E-03	
02A		3.36		8.64E-02	
03		0.63	5.82	2.4E-03	
03A		3.36		8.64E-02	
04		0.63	5.82	2.4E-03	
04A		3.36		8.64E-02	
05		0.63	5.82	2.4E-03	
05A		3.36		8.64E-02	
21A		4.0E-05			
23-25				1.08E-02	
25A		0.0001		2.43E-04	
30		0.0099			
47		0.0076		1.41E-02	
50		0.0247		2.28E-02	
51_103				4.08E-02	
51_104				4.08E-02	
51_105				4.08E-02	
51_106				4.08E-02	
51_107				4.08E-02	
51_109				4.08E-02	
51_110				4.08E-02	
51_111				4.08E-02	
51_112				4.08E-02	
64				2.88E-04	
66				2.70E-03	
78	0.0004				
85				3.03E-04	
86		0.0249			
87		0.00138		1.50E-04	
CB-1		0.059			
CB-2		0.059			

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 10 of 12

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 5)					
	Emission Rates (lbs/hr)				
Emission Point ID	Naphthalene	Nickel	Phenol	Phosphorus	
	91-20-3	7440-02-0	108-95-2	7723-14-0	
01	1.37	0.0338	0.398		
02		3.18E-03			
02A		0.1626			
03		3.18E-03			
03A		0.1626			
04		3.18E-03			
04A		0.1626			
05		3.18E-03			
05A		0.1626			
08		8E-05			
09		1.8E-04			
10		1.8E-04			
11		6E-05			
12		4E-05			
13		6E-05			
14		6E-05			
15		4E-05			
16		1E-04			
17		2E-05			
18		6E-05			
19		2E-04			
20		2E-05			
21A		2.4E-04			
22		3.8E-04			
23-25		5.54-03		3.7E-04	
25A		4.9E-04			
26		2E-05			
27		1.2E-04			
30				8E-05	
31				3.0E-06	
35				1.0E-06	
36				1.0E-06	
37				1.0E-06	
38				1.0E-06	

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 11 of 12

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 5)				
		Emission Ra	tes (lbs/hr)	
Emission Point ID	Naphthalene	Nickel	Phenol	Phosphorus
	91-20-3	7440-02-0	108-95-2	7723-14-0
47		5.02E-03		0.01398
50		8.13E-03		0.02267
51_103		6.94E-04		
51_104		6.94E-04		
51_105		6.94E-04		
51_106		6.94E-04		
51_107		6.94E-04		
51_109		6.94E-04		
51_110		6.94E-04		
51_111		6.94E-04		
51_112		6.94E-04		
64		1.65E-05		
66		7.42E-05		
80	0.008		0.003	
81	0.008		0.003	
82	0.008		0.003	
85	0.0082	0.01		
86		2.66E-03		
87		0.0094		
100		2E-05		
125		2E-05		
CB-1		5.08E-05		
CB-2		6.82E-05		

TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 6)				
Emission Point ID	Emission Rates (lbs/hr)			
	Polycyclic Organic Matter	Selenium	Sulfuric Acid	Toluene
			7664-93-9	108-88-3
01	3.00	0.005	7.16	
02	1.40			
02A	4.46			
03	1.40			
03A	4.46			

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TOXIC AIR POLLUTANTS – STANDARD NO. 8 (Table 6)					
	Emission Rates (lbs/hr)				
Emission Point ID	Polycyclic Organic Matter	Selenium	Sulfuric Acid	Toluene	
			7664-93-9	108-88-3	
04	1.40				
04A	4.46				
05	1.40				
05A	4.46				
80	0.224			0.001	
81	0.224			0.001	
82	0.224			0.001	
85	0.340				
CB-1	1.436E-04				
CB-2	1.91E-04				

### **ATTACHMENT – Applicable and Non-Applicable Federal and State Regulations**

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 1 of 14

The following contains the Federal and South Carolina air pollution regulations and their applicability, as specified in the Part 70 permit application.

APPLICABILITY DETERMINATION				
Citation	Regulation	Applicable		
SC Regulation 61-62.1	Definitions and General Requirements	Yes		
SC Regulation 61-62.2	Prohibition of Open Burning	Yes		
SC Regulation 61-62.3	Air Pollution Episodes	Yes		
SC Regulation 61-62.4	Hazardous Air Pollution Conditions	Yes		
SC Regulation 61-62.5, Standard No. 1	Emissions From Fuel Burning Operations	Yes		
SC Regulation 61-62.5, Standard No. 2	Ambient Air Quality Standards	Yes		
SC Regulation 61-62.5, Standard No. 3	Waste Combustion and Reduction	No		
SC Regulation 61-62.5, Standard No. 3.1	Hospital, Medical, Infectious Waste Incinerators	No		
SC Regulation 61-62.5, Standard No. 4	Emissions from Process Industries	Yes		
SC Regulation 61-62.5, Standard No. 5	Volatile Organic Compounds	No		
SC Regulation 61-62.5, Standard No. 5.1	BACT/LAER Applicable to Volatile Organic Compounds	Yes		
SC Regulation 61-62.5, Standard No. 5.2	Control of Oxides of Nitrogen	Yes		
SC Regulation 61-62.5, Standard No. 6	Alternative Emission Limitation Options	No		
SC Regulation 61-62.5, Standard No. 7	Prevention of Significant Deterioration	Yes		
SC Regulation 61-62.5, Standard No. 8	Toxic Air Pollutants	Yes		
SC Regulation 61-62.6	Control of Fugitive Particulate Matter	Yes		
SC Regulation 61-62.7	Good Engineering Practice Stack Height	Yes		
SC Regulation 61-62.60	SC Designated Facility Plan and NSPS (Subparts A – DDDD)	Yes		
SC Regulation 61-62.61	National Emission Standards for Hazardous Air Pollutants (Asbestos)	Yes		
SC Regulation 61-62.63	National Emission Standards for Hazardous Air Pollutants For Source Categories (Subparts A – FFFF, DDDDD, HHHHH)	Yes		
SC Regulation 61-62.68	Chemical Accident Prevention Provisions	No		
SC Regulation 61-62.70	Title V Operating Permit Program	Yes		
SC Regulation 61-62.72	Acid Rain	No		

## **ATTACHMENT – Applicable and Non-Applicable Federal and State Regulations**

## Century Aluminum of South Carolina, Inc. TV-0420-0015 v1.1 Page 2 of 14

APPLICABILITY DETERMINATION				
Citation	Regulation	Applicable (Yes / No)		
SC Regulation 61-62.96	NO <sub>x</sub> Budget Trading Program	No		
SC Regulation 61-62.99	$\ensuremath{NO_{x}}$ Budget Trading Program Requirements for Stationary Sources Not in the Trading Program	No		
40 CFR 60 Subpart A	General Provisions	Yes		
40 CFR 60 Subpart B	Adoption and Submittal of State Plans for Designated Facilities	No		
40 CFR 60 Subpart C	Emission Guidelines and Compliance Times	No		
40 CFR 60 Subpart Cb	Emission Guidelines And Compliance Times for Large Municipal Waste Combustors that are Constructed on or Before September 20, 1994	No		
40 CFR 60 Subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	No		
40 CFR 60 Subpart Cd	Emission Guidelines and Compliance Times for Sulfuric Acid Production Units	No		
40 CFR 60 Subpart Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	No		
40 CFR 60 Subpart D	Standards of Performance for Fossil-fuel Fired Steam Generators for which Construction is Commenced After August 17, 1971	No		
40 CFR 60 Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978	No		
40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	No		
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No		
40 CFR 60 Subpart E	Standards of Performance for Incinerators	No		
40 CFR 60 Subpart Ea	Standards of Performance for Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or before September 20, 1994	No		
40 CFR 60 Subpart Eb	Standards of Performance for Large Municipal Waste Combustors for which Construction is Commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996	No		
40 CFR 60 Subpart Ec	Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which Construction is Commenced after June 20, 1996	No		
40 CFR 60 Subpart F	Standards of Performance for Portland Cement Plants	No		
40 CFR 60 Subpart G	Standards of Performance for Nitric Acid Plants	No		
40 CFR 60 Subpart H	Standards of Performance for Sulfuric Acid Plants	No		
40 CFR 60 Subpart l	Standards of Performance for Asphalt Concrete Plants	No		
40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries	No		
40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	No		
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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced After May 18, 1978 and Prior to July 23, 1984	No
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction of Modification Commenced after July 23, 1984	No
40 CFR 60 Subpart L	Standards of Performance for Secondary Lead Smelters	No
40 CFR 60 Subpart M	Standards of Performance for Secondary Brass and Bronze Production Plants	No
40 CFR 60 Subpart N	Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces for which Construction is Commenced After June 11, 1973	No
40 CFR 60 Subpart Na	Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for which Construction is Commenced After January 20, 1983	No
40 CFR 60 Subpart O	Standards of Performance for Sewage Treatment Plants	No
40 CFR 60 Subpart P	Standards of Performance for Primary Copper Smelters	No
40 CFR 60 Subpart Q	Standards of Performance for Primary Zinc Smelters	No
40 CFR 60 Subpart R	Standards of Performance for Primary Lead Smelters	No
40 CFR 60 Subpart S	Standards of Performance for Primary Aluminum Reduction Plants	Yes
40 CFR 60 Subpart T	Standards of Performance for the Phosphate Fertilizer Industry: Wet- Process Phosphoric Acid Plants	No
40 CFR 60 Subpart U	Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants	No
40 CFR 60 Subpart V	Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants	No
40 CFR 60 Subpart W	Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphoric Plants	No
40 CFR 60 Subpart X	Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	No
40 CFR 60 Subpart Y	Standards of Performance for Coal Preparation and Processing Plants	No
40 CFR 60 Subpart Z	Standards of Performance for Ferroalloy Production Facilities	No
40 CFR 60 Subpart AA	Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and on or Before August 17, 1983	No
40 CFR 60 Subpart AAa	Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	No
40 CFR 60 Subpart BB	Standards of Performance for Kraft Pulp Mills	No
40 CFR 60 Subpart CC	Standards of Performance for Glass Manufacturing Plants	No
40 CFR 60 Subpart DD	Standards of Performance for Grain Elevators	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 60 Subpart EE	Standards of Performance for Surface Coating of Metal Furniture	No
40 CFR 60 Subpart GG	Standards of Performance for Stationary Gas Turbines	No
40 CFR 60 Subpart HH	Standards of Performance for Lime Manufacturing Plants	No
40 CFR 60 Subpart KK	Standards of Performance for Lead-Acid Battery Manufacturing Plants	No
40 CFR 60 Subpart LL	Standards of Performance for Metallic Mineral Processing Plants	No
40 CFR 60 Subpart MM	Standards of Performance for Automobile and Light-Duty Truck Surface Coating Operations	No
40 CFR 60 Subpart NN	Standards of Performance for Phosphate Rock Plants	No
40 CFR 60 Subpart PP	Standards of Performance for Ammonium Sulfate Manufacture	No
40 CFR 60 Subpart QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	No
40 CFR 60 Subpart RR	Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations	No
40 CFR 60 Subpart SS	Standards of Performance for Industrial Surface Coating: Large Appliances	No
40 CFR 60 Subpart TT	Standards of Performance for Metal Coil Surface Coating	No
40 CFR 60 Subpart UU	Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture	No
40 CFR 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006	No
40 CFR 60 Subpart VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006	No
40 CFR 60 Subpart WW	Standards of Performance for the Beverage Can Surface Coating Industry	No
40 CFR 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	No
40 CFR 60 Subpart AAA	Standards of Performance for New Residential Wood Heaters	No
40 CFR 60 Subpart BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	No
40 CFR 60 Subpart DDD	Standards of Performance for Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	No
40 CFR 60 Subpart FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	No
40 CFR 60 Subpart GGG	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006	No
40 CFR 60 Subpart GGGa	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After November 7, 2006	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 60 Subpart HHH	Standards of Performance for Synthetic Fiber Production Facilities	No
40 CFR 60 Subpart III	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	No
40 CFR 60 Subpart JJJ	Standards of Performance for Petroleum Dry Cleaners	No
40 CFR 60 Subpart KKK	Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	No
40 CFR 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing; SO <sub>2</sub> Emissions	No
40 CFR 60 Subpart NNN	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	No
40 CFR 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	No
40 CFR 60 Subpart PPP	Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants	No
40 CFR 60 Subpart QQQ	Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems	No
40 CFR 60 Subpart RRR	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	No
40 CFR 60 Subpart SSS	Standards of Performance for Magnetic Tape Coating Facilities	No
40 CFR 60 Subpart TTT	Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	No
40 CFR 60 Subpart UUU	Standards of Performance for Calciners and Dryers in Mineral Industries	No
40 CFR 60 Subpart VVV	Standards of Performance for Polymeric Coating of Supporting Substrates Facilities	No
40 CFR 60 Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills	No
40 CFR 60 Subpart AAAA	Standards of Performance for Small Municipal Waste Combustion Units for which Construction is Commenced After August 30, 1999 or for which Modification or Reconstruction is Commenced after June 6, 2001	No
40 CFR 60 Subpart BBBB	Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999	No
40 CFR 60 Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for which Construction is Commenced After November 30, 1999 or for which Modification or Reconstruction is Commenced on or After June 1, 2001	No
40 CFR 60 Subpart DDDD	Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 60 Subpart EEEE	Standards of Performance for Other Solid Waste Incineration Units for which Construction is Commenced After December 9, 2004, or for which Modification or Reconstruction is Commenced on or After June 16, 2006	No
40 CFR 60 Subpart FFFF	Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units that Commenced Construction On or Before December 9, 2004	No
40 CFR 60 Subpart HHHH	Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units	No
40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	No
40 CFR 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No
40 CFR 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	No
40 CFR 60 Subpart LLLL	Standards of Performance for New Sewage Sludge Incineration Units	No
40 CFR 60 Subpart MMMM	Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	No
40 CFR 61 Subpart A	General Provisions	No
40 CFR 61 Subpart B	National Emission Standards for Radon Emissions from Underground Uranium Mines	No
40 CFR 61 Subpart C	National Emission Standard for Beryllium	No
40 CFR 61 Subpart D	National Emission Standard for Beryllium Rocket Motor Firing	No
40 CFR 61 Subpart E	National Emission Standard for Mercury	No
40 CFR 61 Subpart F	National Emission Standard for Vinyl Chloride	No
40 CFR 61 Subpart H	National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities	No
40 CFR 61 Subpart l	National Emission Standards for Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees And Not Covered By Subpart H	No
40 CFR 61 Subpart J	National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene	No
40 CFR 61 Subpart K	National Emission Standards for Radionuclide Emissions from Elemental Phosphorus Plants	No
40 CFR 61 Subpart L	National Emission Standards for Benzene Emissions from Coke By- Product Recovery Plants	No
40 CFR 61 Subpart M	National Emission Standard for Asbestos	Yes
40 CFR 61 Subpart N	National Emission Standard for Inorganic Arsenic Emissions from Gas Manufacturing Plants	No
40 CFR 61 Subpart O	National Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 61 Subpart P	National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities	No
40 CFR 61 Subpart Q	National Emission Standards for Radon Emissions from Department of Energy Facilities	No
40 CFR 61 Subpart R	National Emission Standards for Radon Emissions from Phosphogypsum Stacks	No
40 CFR 61 Subpart T	National Emission Standards for Radon Emissions from the Disposal of Uranium Mill Tailings	No
40 CFR 61 Subpart V	National Emission Standard for Equipment Leaks (Fugitive Emission Sources)	No
40 CFR 61 Subpart W	National Emission Standards for Radon Emissions from Operating Mill Tailings	No
40 CFR 61 Subpart Y	National Emission Standard for Benzene Emissions from Benzene Storage Vessels	No
40 CFR 61 Subpart BB	National Emission Standard for Benzene Emissions from Benzene Transfer Operations	No
40 CFR 61 Subpart FF	National Emission Standard for Benzene Waste Operations	No
40 CFR 63 Subpart A	General Provisions	Yes
40 CFR 63 Subpart B	Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112 (g) and 112 (j)	No
40 CFR 63 Subpart C	List of Hazardous Pollutants, Petition Process, Lesser Quantity Designations, Source Category List	No
40 CFR 63 Subpart D	Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants	No
40 CFR 63 Subpart E	Approval of State Programs and Delegation of Federal Authorities	No
40 CFR 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry	No
40 CFR 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater	No
40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks	No
40 CFR 63 Subpart I	National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks	No
40 CFR 63 Subpart J	National Emission Standards For Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production	No
40 CFR 63 Subpart L	National Emission Standards for Coke Oven Batteries	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart M	National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities	No
40 CFR 63 Subpart N	National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	No
40 CFR 63 Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities	No
40 CFR 63 Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	No
40 CFR 63 Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	No
40 CFR 63 Subpart S	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	No
40 CFR 63 Subpart T	National Emission Standards of Halogenated Solvent Cleaning	No
40 CFR 63 Subpart U	National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins	No
40 CFR 63 Subpart W	National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production	No
40 CFR 63 Subpart X	National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting	No
40 CFR 63 Subpart Y	National Emission Standards for Marine Tank Vessel Loading Operations	No
40 CFR 63 Subpart AA	National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants	No
40 CFR 63 Subpart BB	National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants	No
40 CFR 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries	No
40 CFR 63 Subpart DD	National Emission Standards for Hazardous Air Pollutants from Off-site Waste and Recovery Operations	No
40 CFR 63 Subpart EE	National Emission Standards for Magnetic Tape Manufacturing Operations	No
40 CFR 63 Subpart FF	Reserved	No
40 CFR 63 Subpart GG	National Emission Standards for Aerospace Manufacturing and Rework Facilities	No
40 CFR 63 Subpart HH	National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	No
40 CFR 63 Subpart II	National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)	No
40 CFR 63 Subpart JJ	National Emission Standards for Wood Furniture Manufacturing Operations	No
40 CFR 63 Subpart KK	National Emission Standards for the Printing and Publishing Industry	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart LL	National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants	Yes
40 CFR 63 Subpart MM	National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills	No
40 CFR 63 Subpart OO	National Emission Standards for Tanks - Level 1	No
40 CFR 63 Subpart PP	National Emission Standards for Containers	No
40 CFR 63 Subpart QQ	National Emission Standards for Surface Impoundments	No
40 CFR 63 Subpart RR	National Emission Standards for Individual Drain Systems	No
40 CFR 63 Subpart SS	National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process	No
40 CFR 63 Subpart TT	National Emission Standards for Equipment Leaks-Control Level 1	No
40 CFR 63 Subpart UU	National Emission Standards for Equipment Leaks-Control Level 2 Standards	No
40 CFR 63 Subpart VV	National Emission Standards of Oil-Water Separators and Organic-Water Separators	No
40 CFR 63 Subpart WW	National Emission Standards for Storage Vessels (Tanks) - Control Level 2	No
40 CFR 63 Subpart XX	National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations	No
40 CFR 63 Subpart YY	National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards	No
40 CFR 63 Subpart CCC	National Emission Standards for Hazardous Air Pollutants for Steel PicklingHCl Process Facilities and Hydrochloric Acid Regeneration Plants	No
40 CFR 63 Subpart DDD	National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production	No
40 CFR 63 Subpart EEE	National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors	No
40 CFR 63 Subpart GGG	National Emission Standards for Pharmaceuticals Production	No
40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities	No
40 CFR 63 Subpart III	National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production	No
40 CFR 63 Subpart JJJ	National Emission Standards for Hazardous Air Pollutants Emissions: Group IV Polymers and Resins	No
40 CFR 63 Subpart LLL	National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry	No
40 CFR 63 Subpart MMM	National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart NNN	National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing	No
40 CFR 63 Subpart OOO	National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins	No
40 CFR 63 Subpart PPP	National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production	No
40 CFR 63 Subpart QQQ	National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting	No
40 CFR 63 Subpart RRR	National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production	Yes
40 CFR 63 Subpart TTT	National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting	No
40 CFR 63 Subpart UUU	National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units	No
40 CFR 63 Subpart VVV	National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works	No
40 CFR 63 Subpart XXX	National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese	No
40 CFR 63 Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	No
40 CFR 63 Subpart CCCC	National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast	No
40 CFR 63 Subpart DDDD	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	No
40 CFR 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	No
40 CFR 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	No
40 CFR 63 Subpart GGGG	National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production	No
40 CFR 63 Subpart HHHH	National Emission Standards for Hazardous Air Pollutants for Wet- Formed Fiberglass Mat Production	No
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	No
40 CFR 63 Subpart JJJJ	National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating	No
40 CFR 63 Subpart KKKK	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart MMMM	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	No
40 CFR 63 Subpart NNNN	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances	No
40 CFR 63 Subpart OOOO	National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles	No
40 CFR 63 Subpart PPPP	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products	No
40 CFR 63 Subpart QQQQ	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products	No
40 CFR 63 Subpart RRRR	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture	No
40 CFR 63 Subpart SSSS	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil	No
40 CFR 63 Subpart TTTT	National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations	No
40 CFR 63 Subpart UUUU	National Emission Standards for Hazardous Air Pollutants for Cellulose Product Manufacturing	No
40 CFR 63 Subpart VVVV	National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing	No
40 CFR 63 Subpart WWWW	National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production	No
40 CFR 63 Subpart XXXX	National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing	No
40 CFR 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	No
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Yes
40 CFR 63 Subpart AAAAA	National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants	No
40 CFR 63 Subpart BBBBB	National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing	No
40 CFR 63 Subpart CCCCC	National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks	No
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	Yes
40 CFR 63 Subpart EEEEE	National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart FFFFF	National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities	No
40 CFR 63 Subpart GGGGG	National Emission Standards for Hazardous Air Pollutants: Site Remediation	No
40 CFR 63 Subpart HHHHH	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing	No
40 CFR 63 Subpart IIIII	National Emission Standards for Hazardous Air Pollutants: Mercury Emissions from Mercury Cell Chlor-Alkali Plants	No
40 CFR 63 Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing	No
40 CFR 63 Subpart KKKKK	National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing	No
40 CFR 63 Subpart LLLLL	National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing	No
40 CFR 63 Subpart MMMMM	National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations	No
40 CFR 63 Subpart NNNNN	National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production	No
40 CFR 63 Subpart PPPPP	National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands	No
40 CFR 63 Subpart QQQQQ	National Emission Standards For Hazardous Air Pollutants For Friction Materials Manufacturing Facilities	No
40 CFR 63 Subpart RRRRR	National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing	No
40 CFR 63 Subpart SSSSS	National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing	No
40 CFR 63 Subpart TTTTT	National Emission Standards for Hazardous Air Pollutants for Primary Magnesium Refining	No
40 CFR 63 Subpart WWWWW	National Emission Standards For Hospital Ethylene Oxide Sterilizers	No
40 CFR 63 Subpart XXXXX	Reserved	No
40 CFR 63 Subpart YYYYY	National Emission Standards For Hazardous Air Pollutants For Area Sources: Electric Arc Furnace Steelmaking Facilities	No
40 CFR 63 Subpart ZZZZZ	National Emission Standards For Hazardous Air Pollutants For Iron And Steel Foundries Area Sources	No
40 CFR 63 Subpart AAAAAA	Reserved	No
40 CFR 63 Subpart BBBBBB	National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, And Pipeline Facilities	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart CCCCCC	National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Dispensing Facilities	No
40 CFR 63 Subpart DDDDDD	National Emission Standards For Hazardous Air Pollutants For Polyvinyl Chloride And Copolymers Production Area Sources	No
40 CFR 63 Subpart EEEEEE	National Emission Standards For Hazardous Air Pollutants For Primary Copper Smelting Area Sources	No
40 CFR 63 Subpart FFFFFF	National Emission Standards For Hazardous Air Pollutants For Secondary Copper Smelting Area Sources	No
40 CFR 63 Subpart GGGGGG	National Emission Standards For Hazardous Air Pollutants For Primary Nonferrous Metals Area SourcesZinc, Cadmium, And Beryllium	No
40 CFR 63 Subpart HHHHHH	National Emission Standards For Hazardous Air Pollutants: Paint Stripping And Miscellaneous Surface Coating Operations At Area Sources	No
40 CFR 63 Subpart LLLLLL	National Emission Standards For Hazardous Air Pollutants For Acrylic And Modacrylic Fibers Production Area Sources	No
40 CFR 63 Subpart MMMMMM	National Emission Standards For Hazardous Air Pollutants For Carbon Black Production Area Sources	No
40 CFR 63 Subpart NNNNN	National Emission Standards For Hazardous Air Pollutants For Chemical Manufacturing Area Sources: Chromium Compounds	No
40 CFR 63 Subpart OOOOOO	National Emission Standards For Hazardous Air Pollutants For Flexible Polyurethane Foam Production And Fabrication Area Sources	No
40 CFR 63 Subpart PPPPP	National Emission Standards For Hazardous Air Pollutants For Lead Acid Battery Manufacturing Area Sources	No
40 CFR 63 Subpart QQQQQ	National Emission Standards For Hazardous Air Pollutants For Wood Preserving Area Sources	No
40 CFR 63 Subpart RRRRR	National Emission Standards For Hazardous Air Pollutants For Clay Ceramics Manufacturing Area Sources	No
40 CFR 63 Subpart SSSSSS	National Emission Standards For Hazardous Air Pollutants For Glass Manufacturing Area Sources	No
40 CFR 63 Subpart TTTTTT	National Emission Standards For Hazardous Air Pollutants For Secondary Nonferrous Metals Processing Area Sources	No
40 CFR 63 Subpart VVVVV	National Emission Standards For Hazardous Air Pollutants For Chemical Manufacturing Area Sources	No
40 CFR 63 Subpart WWWWWW	National Emission Standards For Hazardous Air Pollutants: Area Source Standards For Plating And Polishing Operations	No
40 CFR 63 Subpart XXXXXX	National Emission Standards For Hazardous Air Pollutants Area Source Standards For Nine Metal Fabrication And Finishing Source Categories	No
40 CFR 63 Subpart YYYYYY	National Emission Standards For Hazardous Air Pollutants For Area Sources: Ferroalloys Production Facilities	No

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APPLICABILITY DETERMINATION		
Citation	Regulation	Applicable (Yes / No)
40 CFR 63 Subpart ZZZZZ	National Emission Standards For Hazardous Air Pollutants: Area Source Standards For Aluminum, Copper, And Other Nonferrous Foundries	No
40 CFR 63 Subpart AAAAAAA	National Emission Standards For Hazardous Air Pollutants For Area Sources: Asphalt Processing And Asphalt Roofing Manufacturing	No
40 CFR 63 Subpart BBBBBBB	National Emission Standards For Hazardous Air Pollutants For Area Sources: Chemical Preparations Industry	No
40 CFR 63 Subpart CCCCCCC	National Emission Standards For Hazardous Air Pollutants For Area Sources: Paints And Allied Products Manufacturing	No
40 CFR 63 Subpart DDDDDD	National Emission Standards For Hazardous Air Pollutants For Area Sources: Prepared Feeds Manufacturing	No
40 CFR 63 Subpart EEEEEE	National Emission Standards For Hazardous Air Pollutants: Gold Mine Ore Processing And Production Area Source Category	No
40 CFR 63	Case-by-Case MACT 112(g)	No
40 CFR 64	Compliance Assurance Monitoring	Yes
40 CFR 68	Risk Management Programs Under Section 112(r)	No
40 CFR 98	Mandatory Greenhouse Gas Reporting Rule	Yes

#### BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Petition No. IV-2023-09

In the Matter of

Century Aluminum of South Carolina, Inc.

Permit No. TV-0420-0015 v1.1

Issued by the South Carolina Department of Health and Environmental Control

### ORDER GRANTING IN PART AND DENYING IN PART A PETITION FOR OBJECTION TO A TITLE V OPERATING PERMIT

### I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated June 9, 2023 (the Petition) from Sierra Club and the Environmental Integrity Project (the Petitioners), pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2). The Petition requests that the EPA Administrator object to operating permit No. TV-0420-0015 v1.1 (the Permit) issued by the South Carolina Department of Health and Environmental Control (SCDHEC) to the Century Aluminum of South Carolina, Inc. primary aluminum reduction facility (Century Aluminum) in Berkeley County, South Carolina. The operating permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and S.C. Reg. 61-62.70. *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also known as a title V permit or part 70 permit.

Based on a review of the Petition and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and as explained in Section IV of this Order, the EPA grants in part and denies in part the Petition requesting that the EPA Administrator object to the Permit. Specifically, the EPA grants Claim 1 and grants in part and denies in part Claim 2.

#### II. STATUTORY AND REGULATORY FRAMEWORK

#### A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to the EPA an operating permit program to meet the requirements of title V of the CAA and the EPA's implementing regulations at 40 C.F.R. part 70. The state of South Carolina submitted a title V program governing the issuance of operating permits in 1993. The EPA granted full approval of South Carolina's

title V operating permit program in 1995. 60 Fed. Reg. 32913 (June 26, 1995). This program, which became effective on July 26, 1995, is codified in S.C. Reg. 61-62.70.

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan. 42 U.S.C. §§ 7661a(a), 7661b, 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements, but does require permits to contain adequate monitoring, recordkeeping, reporting, and other requirements to assure compliance with applicable requirements. 40 C.F.R. § 70.1(b); 42 U.S.C. § 7661c(c). One purpose of the title V program is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." 57 Fed. Reg. 32250, 32251 (July 21, 1992). Thus, the title V operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source's emission units and for providing adequate monitoring, recordkeeping, and reporting to assure compliance with such requirements.

### B. Review of Issues in a Petition

State and local permitting authorities issue title V permits pursuant to their EPA-approved title V programs. Under CAA § 505(a) and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to the EPA for review. 42 U.S.C. § 7661d(a). Upon receipt of a proposed permit, the EPA has 45 days to object to final issuance of the proposed permit if the EPA determines that the proposed permit is not in compliance with applicable requirements under the Act. 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c). If the EPA does not object to a permit on its own initiative, any person may, within 60 days of the expiration of the EPA's 45-day review period, petition the Administrator to object to the permit. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under part 70. 40 C.F.R. § 70.12(a)(2). Any arguments or claims the petitioner wishes the EPA to consider in support of each issue raised must generally be contained within the body of the petition.<sup>1</sup> *Id.* 

The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting authority (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see also* 40 C.F.R. § 70.12(a)(2)(v).

<sup>&</sup>lt;sup>1</sup> If reference is made to an attached document, the body of the petition must provide a specific citation to the referenced information, along with a description of how that information supports the claim. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. *Id*.

In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).<sup>2</sup> Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.<sup>3</sup> The petitioner's demonstration burden is a critical component of CAA § 505(b)(2). As courts have recognized, CAA § 505(b)(2) contains both a "discretionary component," under which the Administrator determines whether a petition demonstrates that a permit is not in compliance with the requirements of the Act, and a nondiscretionary duty on the Administrator's part to object where such a demonstration is made. Sierra Club v. Johnson, 541 F.3d at 1265–66 ("[I]t is undeniable [that CAA § 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements."); NYPIRG, 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA § 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the Act. Citizens Against Ruining the Environment, 535 F.3d at 677 (stating that § 505(b)(2) "clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object if such a demonstration is made" (emphasis added)).<sup>4</sup> When courts have reviewed the EPA's interpretation of the ambiguous term "demonstrates" and its determination as to whether the demonstration has been made, they have applied a deferential standard of review. See, e.g., MacClarence, 596 F.3d at 1130–31.<sup>5</sup> Certain aspects of the petitioner's demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to the EPA's proposed petitions rule. See 81 Fed. Reg. 57822, 57829–31 (Aug. 24, 2016); see also In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4–7 (June 19, 2013) (Nucor II Order).

The EPA considers a number of criteria in determining whether a petitioner has demonstrated noncompliance with the Act. *See generally Nucor II Order* at 7. For example, one such criterion is whether a petitioner has provided the relevant analyses and citations to support its claims. For each claim, the petitioner must identify (1) the specific grounds for an objection, citing to a specific permit term or condition where applicable; (2) the applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under part 70, that is not met; and (3) an explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under part 70. 40 C.F.R. § 70.12(a)(2)(i)–(iii). If a petitioner does not identify these elements, the EPA is left to work out the basis for the petitioner's objection, contrary to Congress's express allocation of the burden of demonstration to the petitioner in CAA § 505(b)(2). *See MacClarence*, 596 F.3d at 1131 ("[T]he Administrator's requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and

<sup>&</sup>lt;sup>2</sup> See also New York Public Interest Research Group, Inc. v. Whitman, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (NYPIRG).

<sup>&</sup>lt;sup>3</sup> WildEarth Guardians v. EPA, 728 F.3d 1075, 1081–82 (10th Cir. 2013); MacClarence v. EPA, 596 F.3d 1123, 1130–33 (9th Cir. 2010); Sierra Club v. EPA, 557 F.3d 401, 405–07 (6th Cir. 2009); Sierra Club v. Johnson, 541 F.3d 1257, 1266–67 (11th Cir. 2008); Citizens Against Ruining the Environment v. EPA, 535 F.3d 670, 677–78 (7th Cir. 2008); cf. NYPIRG, 321 F.3d at 333 n.11.

<sup>&</sup>lt;sup>4</sup> See also Sierra Club v. Johnson, 541 F.3d at 1265 ("Congress's use of the word 'shall' . . . plainly mandates an objection whenever a petitioner demonstrates noncompliance." (emphasis added)).

<sup>&</sup>lt;sup>5</sup> See also Sierra Club v. Johnson, 541 F.3d at 1265–66; Citizens Against Ruining the Environment, 535 F.3d at 678.

persuasive.").<sup>6</sup> Relatedly, the EPA has pointed out in numerous previous orders that general assertions or allegations did not meet the demonstration standard. *See, e.g., In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition Number VI-2011-05 at 9 (Jan. 15, 2013).<sup>7</sup> Also, the failure to address a key element of a particular issue presents further grounds for the EPA to determine that a petitioner has not demonstrated a flaw in the permit. *See, e.g., In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014).<sup>8</sup>

Another factor the EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning contained in the permit record. 81 Fed. Reg. at 57832; *see Voigt v. EPA*, 46 F.4th 895, 901–02 (8th Cir. 2022); *MacClarence*, 596 F.3d at 1132–33.<sup>9</sup> This includes a requirement that petitioners address the permitting authority's final decision and final reasoning (including the state's response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi). Specifically, the petition must identify where the permitting authority's response is inadequate to address (or does not address) the issue raised in the public comment. *Id*.

The information that the EPA considers in determining whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. 40 C.F.R. § 70.13. The administrative record for a particular proposed permit includes the draft and proposed permits; any permit applications that relate to the draft or proposed permits; the statement required by § 70.7(a)(5) (sometimes referred to as the 'statement of basis'); any comments the permitting authority received during the public participation process on the draft permit; the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; and all materials available to the permitting authority that are relevant to the permitting decision and that the permitting authority made available to the public according to § 70.7(h)(2). *Id.* If a final permit and a statement of basis for the final permit are available

<sup>&</sup>lt;sup>6</sup> See also In the Matter of Murphy Oil USA, Inc., Order on Petition No. VI-2011-02 at 12 (Sept. 21, 2011) (denying a title V petition claim where petitioners did not cite any specific applicable requirement that lacked required monitoring); In the Matter of Portland Generating Station, Order on Petition at 7 (June 20, 2007) (Portland Generating Station Order).

<sup>&</sup>lt;sup>7</sup> See also Portland Generating Station Order at 7 ("[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement]."); In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1, Order on Petition Number VII-2004-02 at 8 (Apr. 20, 2007); In the Matter of Georgia Power Company, Order on Petitions at 9–13 (Jan. 8, 2007) (Georgia Power Plants Order); In the Matter of Chevron Products Co., Richmond, Calif. Facility, Order on Petition No. IX-2004–10 at 12, 24 (Mar. 15, 2005).

<sup>&</sup>lt;sup>8</sup> See also In the Matter of Hu Honua Bioenergy, Order on Petition No. IX-2011-1 at 19–20 (Feb. 7, 2014); Georgia Power Plants Order at 10.

<sup>&</sup>lt;sup>9</sup> See also, e.g., Finger Lakes Zero Waste Coalition v. EPA, 734 Fed. App'x \*11, \*15 (2d Cir. 2018) (summary order); In the Matter of Noranda Alumina, LLC, Order on Petition No. VI-2011-04 at 20–21 (Dec. 14, 2012) (denying a title V petition issue where petitioners did not respond to the state's explanation in response to comments or explain why the state erred or why the permit was deficient); In the Matter of Kentucky Syngas, LLC, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue where petitioners did not acknowledge or reply to the state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient); Georgia Power Plants Order at 9–13 (denying a title V petition issue where petitioners did not address a potential defense that the state had pointed out in the response to comments).

during the agency's review of a petition on a proposed permit, those documents may also be considered when determining whether to grant or deny the petition. *Id*.

If the EPA grants a title V petition, a permitting authority may address the EPA's objection by, among other things, providing the EPA with a revised permit. 42 U.S.C. § 7661d(b)(3), (c); 40 C.F.R. § 70.8(d); *see id.* § 70.7(g)(4); 70.8(c)(4); *see generally* 81 Fed. Reg. at 57842 (describing post-petition procedures); *Nucor II Order* at 14–15 (same). In some cases, the permitting authority's response to an EPA objection may not involve a revision to the permit terms and conditions themselves, but may instead involve revisions to the permit record. For example, when the EPA has issued a title V objection on the ground that the permit record does not adequately support the permitting decision, it may be acceptable for the permitting authority to respond only by providing an additional rationale to support its permitting decision.

When the permitting authority revises a permit or permit record in order to resolve an EPA objection, it must go through the appropriate procedures for that revision. The permitting authority should determine whether its response is a minor modification or a significant modification to the title V permit, as described in 40 C.F.R. § 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the modification is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 C.F.R. § 70.7(h) or the state's corresponding regulations.

In any case, whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, and regardless of the procedures used to make such revision, the permitting authority's response is generally treated as a new proposed permit for purposes of CAA § 505(b) and 40 C.F.R. § 70.8(c) and (d). *See Nucor II Order* at 14. As such, it would be subject to the EPA's 45-day review per CAA § 505(b)(1) and 40 C.F.R. § 70.8(c), and an opportunity for the public to petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) if the EPA does not object during its 45-day review period.

When a permitting authority responds to an EPA objection, it may choose to do so by modifying the permit terms or conditions or the permit record with respect to the specific deficiencies that the EPA identified; permitting authorities need not address elements of the permit or the permit record that are unrelated to the EPA's objection. As described in various title V petition orders, the scope of the EPA's review (and accordingly, the appropriate scope of a petition) on such a response would be limited to the specific permit terms or conditions or elements of the permit record modified in that permit action. *See In The Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 38–40 (Sept. 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (Dec. 19, 2007).

### C. New Source Review

The major New Source Review (NSR) program encompasses two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major

modifications of existing major stationary sources for pollutants for which an area is designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS) and for other pollutants regulated under the CAA. 42 U.S.C. §§ 7470–7479. Part D of title I of the Act establishes the major nonattainment NSR (NNSR) program, which applies to new major stationary sources and major modifications of existing major stationary sources for those NAAQS pollutants for which an area is designated as nonattainment. 42 U.S.C. §§ 7501–7515. The EPA has two largely identical sets of regulations implementing the PSD program. One set, found at 40 C.F.R. § 51.166, contains the requirements that state PSD programs must meet to be approved as part of a state implementation plan (SIP). The other set of regulations, found at 40 C.F.R. § 52.21, contains the EPA's federal PSD program, which applies in areas without a SIP-approved PSD program. The EPA's regulations specifying requirements for state NNSR programs are contained in 40 C.F.R. § 51.165.

While parts C and D of title I of the Act address the major NSR program for major sources, section 110(a)(2)(C) addresses the permitting program for new and modified minor sources and for minor modifications to major sources. The EPA commonly refers to the latter program as the "minor NSR" program. States must also develop minor NSR programs to, along with the major source programs, attain and maintain the NAAQS. The federal requirements for state minor NSR programs are outlined in 40 C.F.R. §§ 51.160 through 51.164. These federal requirements for minor NSR programs are less prescriptive than those for major sources, and, as a result, there is a larger variation of requirements in EPA-approved state minor NSR programs than in major source programs.

The EPA has approved South Carolina's PSD, NNSR, and minor NSR programs as part of its SIP. *See* 40 C.F.R. § 52.2120 (identifying EPA-approved regulations in the South Carolina SIP). As relevant here, South Carolina's PSD provisions, as incorporated into South Carolina's EPA-approved SIP, are contained in S.C. Reg. 61-62.5, Std. 7.

### III. BACKGROUND

### A. The Century Aluminum Facility

Century Aluminum of South Carolina, Inc. owns and operates a primary aluminum reduction facility near Mt. Holly and Goose Creek, north of Charleston, in Berkeley County, South Carolina. The Century Aluminum facility produces high grade aluminum from aluminum oxide (alumina) using the Hall-Heroult electrolytic process. The aluminum manufacturing process consists of three basic steps: (1) the manufacture of carbon anodes from coke and pitch, (2) the reduction of alumina to produce molten aluminum, and (3) the processing of molten aluminum for end users. The facility emits various pollutants from different emission units and is subject to various CAA requirements, including title V and preconstruction permitting requirements. Relevant to the Petition are the facility's emissions of sulfur dioxide (SO<sub>2</sub>) from the green carbon plant, which produces green anodes from coke and pitch, as well as emissions of particulate matter (PM) from ridge vents, scrubbers, and dust collectors associated with multiple sets of potlines. The EPA used EJScreen<sup>10</sup> to assess key demographic and environmental indicators within a fivekilometer radius of Century Aluminum. This analysis showed a total population of approximately 39,389 residents within a five-kilometer radius of the facility, of which approximately 41 percent are people of color and 29 percent are low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 13 environmental indicators. The following table identifies the Environmental Justice Indices for the five-kilometer radius surrounding the facility and their associated percentiles when compared to the rest of the State of South Carolina.

EJ Index	Percentile in State					
Particulate Matter 2.5	32					
Ozone	45					
Diesel Particulate Matter	69					
Air Toxics Cancer Risk	45					
Air Toxics Respiratory Hazard	72					
Toxic Releases to Air	84					
Traffic Proximity	67					
Lead Paint	24					
Superfund Proximity	53					
RMP Facility Proximity	47					
Hazardous Waste Proximity	65					
Underground Storage Tanks	60					
Wastewater Discharge	46					

### B. Permitting History

Century Aluminum first obtained a title V permit in 2001, which was last renewed in 2021 (the 2021 Title V Renewal Permit, included as Petition Ex. 6). On January 23, 2023, and January 27, 2023, Century Aluminum submitted two applications to revise its title V permit. The first application requested that the title V permit be administratively amended to incorporate the terms of a PSD permit issued on January 12, 2023, Permit No. 0420-0015-CY (the 2023 PSD Permit, included within Petition Ex. 10). The second application requested a minor modification to the title V permit related to conditions originally established in a 2002 preconstruction permit, Permit No. 0420-0015-CR (the 2002 Preconstruction Permit, included as Petition Ex. 5). SCDHEC processed both of these revisions at the same time, and prepared a Statement of Basis describing both sets of changes (the SOB, included as Petition Ex. 3). On February 23, 2023, SCDHEC submitted a Proposed Permit reflecting both proposed permit revisions to the EPA for its 45-day review. The EPA's 45-day review period ended on April 10, 2023, during which time the EPA did not object to the Proposed Permit. SCDHEC issued Century Aluminum a final title V permit, reflecting both revisions, on April 13, 2023 (the Permit, included as Petition Ex. 1).

<sup>&</sup>lt;sup>10</sup> EJScreen is an environmental justice mapping and screening tool that provides the EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. *See https://www.epa.gov/ejscreen/whatejscreen.* 

### C. Timeliness of Petition

Pursuant to the CAA, if the EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). The EPA's 45-day review period expired on April 10, 2023. Thus, any petition seeking the EPA's objection to the Proposed Permit was due on or before June 9, 2023. The Petition was dated and received June 9, 2023, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

### IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

### Claim 1: The Petitioners Claim That "The Changes to the Coke Sulfur Content Permit Conditions Cannot Be Processed as a Minor Permit Modification."

**Petitioners' Claim:** The Petitioners claim that revisions to a sulfur content limit did not qualify for processing via title V minor modification procedures. *See* Petition at 9–21.

This claim involves changes to a single permit term—Condition C.15—which, among other things, imposes limits on the sulfur content of coke and pitch used to form carbon anodes. *See id.* at 4. The Petitioners explain that the relevant limits are derived from the 2002 Preconstruction Permit, which limited sulfur content in coke to 2.22% and pitch to 0.85%. *Id.* at 10. According to the Petitioners, these same limits were then incorporated into prior versions of the facility's title V permit, issued in 2004 and 2021. *Id.* at 16 n.37. The current permit modification revises the limit on sulfur content in coke to 3.0%; the limit on pitch is unchanged. *Id.* at 4 (citing Permit at 23).<sup>11</sup>

The Petitioners present two primary reasons why the change to the coke sulfur content limit cannot be processed as a minor modification to the title V permit. First, the Petitioners state that minor modification procedures cannot be used for permit revisions that "change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject." *Id.* at 10 (quoting 40 C.F.R. § 70.7(e)(2)(i)(A)(4) and S.C. Reg. 61-62.70.7(e)(2)(i)(A)(4)).<sup>12</sup> The Petitioners assert that neither the South Carolina SIP nor any federal regulations imposed the sulfur content limit at issue, which instead originated from the 2002 Preconstruction Permit. *Id.* at 10. Moreover, the Petitioners specifically contend that the former 2.22% sulfur content limit was imposed in 2002 in order to allow the facility to avoid PSD permitting requirements for SO<sub>2</sub> that would have otherwise applied to the 2002 modification. *Id.* at 10.<sup>13</sup> The Petitioners conclude that minor modification procedures cannot be used to change this "permit term for which there is no corresponding underlying

<sup>&</sup>lt;sup>11</sup> Additionally, the revised Condition C.15 includes new language indicating that the sulfur and pitch content limits "shall be used to calculate SO<sub>2</sub> emissions" for purposes of demonstrating compliance with a facility-wide SO<sub>2</sub> emissions limit, along with a methodology for calculating blended coke sulfur content. Petition at 4 (citing Permit at 23).

<sup>&</sup>lt;sup>12</sup> The Petition attributes this language to 40 C.F.R. § 70.7I(2)(i)(A)(4) and S.C. Reg. 61-62.70.7I(2)(i)(A)(4), which do not exist. These citations appear to be typographical errors.

<sup>&</sup>lt;sup>13</sup> Specifically, the Petitioners indicate that a statement of basis accompanying the 2002 Preconstruction Permit indicated that the facility was "requesting to reduce the limit of their coke and pitch sulfur content from 2.95% and 1.2% to 2.22% and 0.85%, respectively, as a means to net out of PSD requirements for SO<sub>2</sub>." *Id.* at 10 (quoting Petition Ex. 12).

applicable requirement and that the source has assumed to avoid an applicable requirement." *Id.* at 11.

Second, the Petitioners state that a minor modification cannot be used for permit revisions that "violate any applicable requirement." *Id.* at 11 (quoting 40 C.F.R. § 70.7(e)(2)(i)(A)(1) and S.C. Reg. 61-62.70.7(e)(2)(i)(A)(1)). The Petitioners claim that the new 3.0% coke sulfur content limit violates "applicable requirements" related to two preconstruction permits and one SIP provision.

The Petitioners explain that "applicable requirements" include "any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the [CAA]." Id. (quoting 40 C.F.R. § 70.2 and S.C. Reg. 61-62.70.2(f)(2)). The Petitioners assert that the new coke sulfur content limit violates conditions from two preconstruction permits. Specifically, the Petitioners state that Condition II.D.9 of the 2002 Preconstruction Permit provides: "sulfur content of the coke used in forming the anodes shall not exceed 2.22% by weight based upon a monthly average." Id. Additionally, the Petitioners state that a 2016 preconstruction permit allowed coke sulfur content to increase from 2.22% to 3.0%, but only under limited operating scenarios, as reflected in additional enforceable permit terms (including a lower SO<sub>2</sub> emission limit and lower aluminum production limit). *Id.* at 12 (citing Petition Ex. 7 at 2, 4). The Petitioners assert that the new 3.0% coke sulfur content limit in the title V permit contains none of those same limitations. Id.14 In sum, the Petitioners assert that the new 3.0% coke sulfur content limit violates the terms of both the 2002 and 2016 preconstruction permits, and thus was ineligible for processing as a title V minor modification. Id. at 11–12. Relatedly, the Petitioners contend that SCDHEC cannot revise this preconstruction permit limit through the title V process at all, but instead must use the appropriate NSR permitting process to do so. Id. at 11 (citing In the Matter of Big River Steel, LLC, Order on Petition No. VI-2013-10 at 8–20 (Oct. 31, 2017) (Big River Steel Order)).

The Petitioners further allege that the new 3.0% coke sulfur content limit violates applicable requirements of the SIP. *Id.* at 12.<sup>15</sup> Specifically, the Petitioners reproduce the following provision from the South Carolina SIP:

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of paragraphs (J) through (R) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

*Id*. (quoting S.C. Reg. 61-62.5, Std. 7, § (R)(4); citing 40 C.F.R. § 51.2120(c), 52.21(r)(4)). The Petitioners assert that replacing the original 2.22% coke sulfur content limit with the new 3.0% limit was just such a relaxation. *See id*. at 13–14 (citing Petition Exs. 4, 13). The Petitioners conclude: "Because the relaxed

<sup>&</sup>lt;sup>14</sup> Moreover, the Petitioners state that, in general, the terms of this 2016 preconstruction permit are not included in the title V permit. *See id.* at 5 n.13.

<sup>&</sup>lt;sup>15</sup> The Petitioners state that "applicable requirements" include "any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act." *Id.* at 12 (quoting 40 C.F.R. § 70.2 and S.C. Regulation 61-62.70.2(f)(1)).

coke sulfur content limit likely violates applicable PSD permitting requirements of the South Carolina SIP . . . , DHEC was not authorized to process the increased sulfur content through minor permit modification procedures pursuant to the limitations of 40 C.F.R. § 70.7(e)(2)(i)(A)(1)." *Id.* at 14.

Underlying each of the Petitioners' arguments is a disagreement with SCDHEC's characterization of the 2002 limit on coke sulfur content and the extent to which the title V minor modification revises and/or conflicts with this limit. The Petitioners contest SCDHEC's assertion that the revised permit term was simply "part of the methodology for demonstrating compliance with the 4,015.6 tpy SO<sub>2</sub> emission limit." *Id.* at 15 (quoting SOB at 1).<sup>16</sup>

Instead, the Petitioners argue that the former 2.22% sulfur content limit was an independently enforceable limitation. *Id*. For support, the Petitioners cite multiple documents. First, the Petitioners invoke the terms of the 2002 Preconstruction Permit that established the limit, which states: "The sulfur content of the coke used in forming the anodes shall not exceed 2.22% by weight based upon a monthly average." *Id*. (quoting 2002 Preconstruction Permit at 6). The Petitioners claim that nothing in this 2002 Preconstruction Permit indicates that the limitation on coke sulfur content was solely part of the methodology for demonstrating compliance with a 4,015.6 tpy SO<sub>2</sub> emission limit. *Id*. at 16. In fact, the Petitioners state that no such emission limit was established until a subsequent title V permitting action. *Id*. (citing 2021 Title V Renewal Permit at 32–33). Second, the Petitioners reproduce various statements within a 2004 Consent Order between SCDHEC and the facility, which addressed violations of the 2.22% sulfur content limit and characterized this limit as a "Federally enforceable limit to avoid PSD permitting," among other things. *Id*. at 16–17 (quoting Petition Ex. 14).<sup>17</sup> Third, the Petitioners repeat statements from SCDHEC's statement of basis accompanying a 2016 preconstruction permit, which characterized the existing 2.22% limit as a "PSD avoidance limit[]." *Id*. at 18 (quoting Petition Ex. 7). Overall, the Petitioners claim:

[T]he sulfur content limits on coke and pitch from the 2002 permit[] were not simply "part of the methodology" for compliance with the ton per year SO<sub>2</sub> limits. Instead, the sulfur content limits on coke and pitch were the synthetic minor limits on SO<sub>2</sub> from the Mt. Holly plant. DHEC cannot now rewrite the basis for those synthetic minor limits—at least not without modifying the 2002 Construction Permit.

*Id*. at 19.

<sup>&</sup>lt;sup>16</sup> In a footnote, the Petitioners argue: "Even if EPA were to accept DHEC's justification that the sulfur content limit was "part of the methodology" for determining compliance with the plant-wide  $SO_2$  limit—which it should not—DHEC's permit change would then have violated the prohibition against using minor permit processes where a modification involves significant changes to existing monitoring requirements." Petition at 19 n.47 (citing 40 C.F.R. § 70.7(e)(2)(i)(A)(2); S.C. Regulation 61-62.70.7(e)(2)(i)(A)(2)).

<sup>&</sup>lt;sup>17</sup> The Petitioners reproduce relevant portions of this Consent Order, which provided, in part: "Construction Permit 0420-0015-CR requires Alumax to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average. Alumax accepted this Federally enforceable limit to avoid PSD permitting and emission control requirements for SO<sub>2</sub>... [T]he Department concludes that Alumax has violated ... S.C. Code Ann. §48-1-110(d), in that it failed to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average, as required by its permit." Petition at 17 (quoting Petition Ex. 14 at 2–3).

The Petitioners also contest SCDHEC's suggestion that the 2002 Preconstruction Permit "granted flexibility" to use coke with a higher sulfur content. *See id.* at 15, 19–21 (quoting SOB at 1). The Petitioners claim that the 2002 Preconstruction Permit and several regulations do not provide this flexibility. The Petitioners acknowledge that the 2002 Preconstruction Permit states that "additional production is allowed as long as emission limits and conditions are met and no physical changes or changes in the method of operation that result in a significant net emissions increase of a regulated pollutant are invoiced, or other modification that would require further permitting." *Id.* at 20 (quoting 2002 Preconstruction Permit at 1) (emphasis in petition). The Petitioners argue:

This statement explicitly allows for an increase in aluminum production capacity—it does **not** allow for an increase in coke sulfur content. Further, the fact that this statement requires both emissions limits and "conditions" to not be exceeded indicates that this statement was not intended to allow an increase in sulfur content of coke. Nothing in the 2002 Construction Permit or accompanying permit record suggests that the sulfur content limit is "flexible."

*Id*. The Petitioners further claim that various changes to emission and production limits made in the 2016 preconstruction permit contradict SCDHEC's claim that the 2002 Preconstruction Permit itself granted flexibility to use different coke sulfur levels; if the 2002 permit contained this flexibility, certain 2016 permit changes would not have been necessary. *See id.* at 21.<sup>18</sup>

In conclusion, the Petitioners claim:

[T]he permit change to the coke sulfur content at Mt. Holly did not meet the criteria for minor permit modification procedures because it violated applicable requirements, and it changed a permit condition for which there is no corresponding underlying requirement and which the Mt. Holly plant assumed to avoid applicable PSD requirements.

Id. at 21 (citing 40 C.F.R. § 70.7(e)(2)(i)(1) & (4); S.C. Reg. 61-62.70.7(e)(2)(i)(1) & (4)).

*EPA's Response:* For the following reasons, the EPA grants the Petitioners' request for an objection on this claim.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> Because the 2002 Preconstruction Permit did not provide flexibility to use coke with a higher sulfur content, the Petitioners contend that any increase in coke sulfur content would be considered a "physical change or change in the method of operation," requiring additional preconstruction permitting and analysis (which SCDHEC has not conducted). *Id*. at 20–21 (citing S.C. Reg. 61-62.5, Std. 7, § (b)(30)(iii)(e); 40 C.F.R. § 52.21(b)(2)(iii)(e)). (Note that S.C. Reg. 61-62.5, Std. 7, § (b)(30)(iii)(e) does not exist; the Petitioners may have intended to cite § (B)(30)(c)(v).) Moreover, the Petitioners again claim that SCDHEC "would also be required to determine whether the relaxation of the coke sulfur content limit would have resulted in the 2002 project being considered a major modification for SO<sub>2</sub> and, if so, the increase in coke sulfur content would be required to obtain a PSD permit as though construction had not yet commenced." *Id*. at 21 (citing S.C. Reg. 61-62.5, Std. 7, § (R)(4); 40 C.F.R. § 52.21(r)(4)).

<sup>&</sup>lt;sup>19</sup> Because SCDHEC processed the present permit action as a minor modification, there was no public comment period. It was therefore impracticable for the Petitioners to raise these concerns during the public comment period, and the Petitioners are excepted from the requirement that all petition claims be based on issues raised in public comments. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.8(d), 70.12(a)(2)(v).

The EPA can object to a title V permit that is not issued according to part 70 requirements, including procedural requirements related to title V permit issuance. *See* 40 C.F.R. §§ 70.8(c)(1), (c)(3), 70.12(a)(2), (a)(2)(iii), (a)(2)(iv). For example, the EPA can object if a petitioner demonstrates that a title V permit revision was inappropriately processed using minor modification procedures.

To determine whether the change at issue was eligible for processing via title V minor modification, it is first necessary to address the Petitioners' and SCDHEC's competing factual characterizations of the change. The Petitioners contend that the current permit action revises an enforceable limitation on coke sulfur content established in the 2002 Preconstruction Permit in order to avoid PSD review. SCDHEC suggests that the revised coke sulfur content provisions are simply part of a clarified methodology to demonstrate compliance with existing SO<sub>2</sub> emission limits.

The 2002 Preconstruction Permit, as well as the most recent 2021 Title V Renewal Permit, provide, in relevant part: "The sulfur content of the coke used in forming the anodes shall not exceed 2.22% by weight based upon a monthly average." 2002 Preconstruction Permit at 6 (Condition II.D.9); 2021 Title V Renewal Permit at 23 (Condition C.15).

The present title V permit modification establishes the following (with changes and additions underlined):

The sulfur content of the blended coke used in forming the anodes shall not exceed <u>3.0%</u> by weight, based upon a monthly average, <u>and shall be used to calculate applicable SO<sub>2</sub> emissions. The monthly average sulfur content of the blended coke used in forming anodes will be determined using an ASTM standard, an alternative method approved by the Department, or by vendor Certificates of Analysis along with the following mass-balance algorithm:</u>

Mor	nthly	avg Cok	ke S,	% = [(	Coke	e A, r	nt x	Coke A	%S) +	(Coke B	, mt x	Coke	e B %S	5] + (Co	ke C,
mt	х	Coke	С	%S	+	]		Sum	of	Coke	Α,	В,	С,	etc.,	mt

\* \* \*

Permit at 22 (Condition C.15).<sup>20</sup>

SCDHEC's SOB associated with the minor modification explains:

The facility is also requesting Minor Modification to Clarify Condition C.15 of the Title V permit regarding % by weight sulfur content of blended coke and pitch used to form anodes. The facility is requesting to add mass balance algorithms for % weight sulfur content to calculate monthly average SO<sub>2</sub> emissions to meet facility-wide 4,015.6 tpy.

<sup>&</sup>lt;sup>20</sup> Condition C.15 of the Permit includes similar new text related to the sulfur content of pitch used to form anodes. Specifically, although the pitch sulfur content limit is unchanged (at 0.85% by weight), the Permit now includes additional information about how monthly pitch sulfur content is calculated.

The PSD construction permit CR (issued November 19, 2002) granted flexibility of using different % sulfur content in Coke, depending on varied production levels, to comply with applicable emissions limits, which remain unchanged.

PSD construction permit CR - This PSD project was less than significant threshold of 40 tpy (~26 tpy PTE) for SO<sub>2</sub> and resulted in a reduction of permitted SO<sub>2</sub> emissions of >1,100 tpy (the facility was permitted to emit 5,132 tpy SO<sub>2</sub> pre-project and 4,015.6 tpy SO<sub>2</sub> post-project).

The average sulfur content of pitch and coke is part of the methodology for demonstrating compliance with the 4,015.6 tpy SO<sub>2</sub> emission limit (PSD construction permit CR). The 2002 construction permit sought an increase in the Al production limit from 234,274 tpy to the full production capacity of 256,150 tpy, *or greater as long as emissions limits and conditions are not exceeded*. The 2002 project was subjected to PSD review for [various other pollutants], but elected to limit the future potential SO<sub>2</sub> emissions increase below 40 tpy. To show compliance with the SO<sub>2</sub> limits established in the 2002 permit, an average coke sulfur content of 2.22% was used in the calculations described above.

The current minor modification request is to clarify that just as the permit allows Al production to exceed 256,150 tpy if average coke sulfur content is lower than 2.22%, conversely, if the average sulfur content is greater than 2.22%, [aluminum] production would necessarily be lower than 256,150 tpy to maintain compliance with the 4,015.6 tpy  $SO_2$  emission limit.

#### SOB at 1.

Although SCDHEC is correct that the current permit revision uses coke sulfur content values as part of a broader methodology for calculating SO<sub>2</sub> emissions, that is only half the story. The more important— and disputed—issue is whether the new 3.0% coke sulfur content limit revised an enforceable 2.22% coke sulfur content limit from the 2002 Preconstruction Permit.

From the record before the EPA,<sup>21</sup> the Petitioners' interpretation of the change at issue is more accurate. SCDHEC's suggestion that the 2002 Preconstruction Permit "granted flexibility of using different % sulfur content in Coke, depending on varied production levels, to comply with applicable emissions limits," SOB at 1, is inconsistent with the plain language of the 2002 Preconstruction Permit. Again, the 2002 Preconstruction Permit expressly provides: "The sulfur content of the coke used in forming the anodes *shall not exceed* 2.22% by weight based upon a monthly average." 2002 Preconstruction Permit at 6 (Condition II.D.9) (emphasis added). By its terms, this is clearly a binding,

<sup>&</sup>lt;sup>21</sup> Because SCDHEC processed this change as a minor modification, there was no public comment period. Consequently, the public did not have any prior opportunity to raise its concerns underlying this petition claim, and SCDHEC did not have an opportunity to directly respond on the record to those concerns.

enforceable limit.<sup>22</sup> Nothing in the 2002 Preconstruction Permit grants the flexibility SCDHEC suggests.<sup>23</sup> Tellingly, SCDHEC itself previously considered the 2002 Preconstruction Permit to establish a binding, enforceable limit on coke sulfur content, as it enforced violations of that same permit term. *See* Petition Ex. 14;<sup>24</sup> see also Petition at 16–19 (quoting various other SCDHEC statements characterizing the 2.22% coke sulfur content provision as an enforceable limit).

Overall, it is clear to the EPA that the current permit action changed the former 2.22% coke sulfur content limit to a 3.0% coke sulfur content limit (among other changes). The question, then, is whether SCDHEC was allowed to process this change via title V minor modification procedures.

In relevant part, the EPA's and SCDHEC's title V regulations provide:

(A) Minor permit modification procedures may be used only for those permit modifications that:

(1) Do not violate any applicable requirement;

[and]

\* \* \*

(4) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

(A) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I; . . .

40 C.F.R. § 70.7(e)(2)(i)(A); see S.C. Reg. 61-62.70.7(e)(2)(i)(A).

The change to the coke sulfur content limit ran afoul of both these requirements, and thus was not eligible for processing as a minor modification.

First, this change "violated an[] applicable requirement." *Id*. As the Petitioners correctly observe, the terms and conditions of preconstruction permits issued under title I constitute "applicable requirements" for title V purposes. 40 C.F.R. § 70.2 (definition of "applicable requirement," paragraph (2)). The 2.22% coke sulfur content limit in the 2002 Preconstruction Permit is an applicable requirement for title V purposes. The Permit no longer includes this limit, but instead includes a

<sup>&</sup>lt;sup>22</sup> Similarly, both the most recent 2021 Title V Renewal Permit and the current title V permit modification present the 2.22% and 3.0% coke sulfur content requirement as binding, enforceable limits that Century Aluminum "shall not exceed." 2021 Title V Renewal Permit at 23 (Condition C.15); Permit at 23 (Condition C.15).

<sup>&</sup>lt;sup>23</sup> For example, although the 2002 Preconstruction Permit provided that "additional *production* is allowed as long as emission limits and conditions are met" (among other criteria), it did not suggest that similar flexibilities existed with respect to the "emission limits and conditions" themselves, including the coke sulfur content limit. 2002 Preconstruction Permit at 1 (emphasis added).

<sup>&</sup>lt;sup>24</sup> As previously noted, a SCDHEC Consent Order stated, in part: "Construction Permit 0420-0015-CR requires Alumax to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average. Alumax accepted this Federally enforceable limit to avoid PSD permitting and emission control requirements for SO<sub>2</sub>.... [T]he Department concludes that Alumax has violated .... S.C. Code Ann. §48-1-110(d), in that it failed to limit the sulfur content of coke used in forming anodes in the Green Carbon Plant to 2.22% by weight based upon a monthly average, as required by its permit." Petition Ex. 14 at 2–3.

revised (and less stringent) 3.0% coke sulfur content limit. This revision violates the applicable requirement from the 2002 Preconstruction Permit to maintain coke sulfur content below 2.22%. This change was therefore not eligible for title V minor modification procedures. 40 C.F.R. § 70.7(e)(2)(i)(A)(1); S.C. Reg. 61-62.70.7(e)(2)(i)(A)(1). Thus, the EPA grants Claim 1 and objects to the Permit.

Relatedly, as the Petitioners correctly state, this change should not have been undertaken through a title V permit action at all. Unless and until title I permit terms are changed through the appropriate title I process, they remain "applicable requirements" for title V purposes. *See, e.g.*, 40 C.F.R. § 70.2; *Big River Steel Order* at 16, 19.<sup>25</sup> A title V permit that reduces the stringency of such an applicable requirement cannot be said to "assure compliance" with the applicable requirement. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1). This presents an additional basis for the EPA's objection.

Second, this change "establish[ed] or change[d] a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject," and more specifically "[a] federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I," *i.e.*, PSD. 40 C.F.R. § 70.7(e)(2)(i)(A)(4); *see* S.C. Reg. 61-62.70.7(e)(2)(i)(A)(4). No underlying applicable requirement establishes the 3.0% coke sulfur content limit; this new limit was established in the present title V permit action. The Permit and permit record indicate that the previous 2.22% coke sulfur content limit was originally imposed to ensure that a modification authorized by the 2002 Preconstruction Permit did not trigger PSD for SO<sub>2</sub> and that the new 3.0% limit is intended to serve a similar function. *See, e.g.,* 2021 Title V Renewal Permit at 23 (describing the 2.22% limit as one for "PSD (avoidance)"); Permit at 23 (same description for new 3.0% limit); *see also* Petition at 10, 17–19 (quoting various SCDHEC statements characterizing the limit in a similar manner). Such a PSD avoidance limit (sometimes called a "synthetic minor limit" or "PTE limit") cannot be established or changed using title V minor modification procedures. 40 C.F.R. § 70.7(e)(2)(i)(A)(4); *see* S.C. Reg. 61-62.70.7(e)(2)(i)(A)(4). This provides further grounds for the EPA's objection.

Because the EPA is granting this claim and objecting to the Permit for the aforementioned reasons, the EPA need not address alternative Petition arguments that would lead to the same result. Specifically,

<sup>&</sup>lt;sup>25</sup> The EPA is not aware of any provision in South Carolina's EPA-approved SIP or title V regulations that would cause or allow the applicable terms of title I preconstruction permits to cease existing as "applicable requirements" for title V purposes, absent further action through a title I permitting vehicle. The EPA has long explained that title V permits do not supersede title I permits—which must remain in effect to authorize construction and/or operations—even after the terms of a title I permit are incorporated into a title V permit. *See, e.g.,* 69 Fed. Reg. 10167, 10170 (Mar. 4, 2004); 66 Fed. Reg. 64039, 64040 (Dec. 11, 2001); Letter from John S. Seitz, EPA, to Robert Hodanbosi & Charles Lagges, STAPPA/ALAPCO, Encl. A at 4 (May 20, 1999). If a state wishes to revise the terms of an underlying preconstruction permit—particularly to make them less stringent or more flexible—it must use the appropriate title I permitting avenues to do so. Once revised, the updated NSR permit terms will establish new applicable requirements that can be incorporated into the title V permit, generally without further review (other than to ensure the title V permit contains sufficient compliance assurance provisions). *See, e.g., Big River Steel Order* at 14–20.

the EPA need not address whether the permit changes constituted a significant change to monitoring,<sup>26</sup> whether they violated the terms of a 2016 preconstruction permit (which is not incorporated into the current title V permit), or whether they violated the SIP. It would be especially premature for the EPA to address whether the change at issue violated substantive requirements of the SIP governing PSD, such as the requirements in paragraph (r)(4). These issues may be further addressed by SCDHEC and the public in subsequent permitting actions that SCDHEC will have to undertake in response to the EPA's objection.

**Direction to SCDHEC:** SCDHEC must follow the appropriate part 70 procedures in order to process any changes to the title V permit relevant to coke sulfur content or other permit terms originally established in the 2002 Preconstruction Permit. If SCDHEC wishes to reconfigure the limits established in the 2002 Preconstruction Permit in order to provide more flexibility while ensuring that the changes associated with that 2002 permit do not trigger PSD, it should first do so using the title I permitting process, not the title V permitting process. SCDHEC could then use the appropriate title V permitting mechanisms to incorporate the terms of such a revised title I permit into the title V permit.<sup>27</sup>

### Claim 2: The Petitioners Claim That "PSD Construction Permit No. 0420-0015-CY Cannot Be Incorporated into Mt. Holly's Title V Permit via an Administrative Permit Amendment Because DHEC Failed to Meet Applicable Public Notice Requirements."

**Petitioners' Claim:** Claim 2 addresses a different change to the title V permit than Claim 1—specifically, the title V permit's incorporation of the 2023 PSD Permit. Petition at 22. This claim features two discrete arguments or subclaims ("Argument 1" and "Argument 2").

In "Argument 1," the Petitioners claim that the public notice associated with the 2023 PSD Permit did not contain information required by the South Carolina SIP. *Id.* at 22. Specifically, the Petitioners note that the SIP (and the federal regulation upon which the SIP is based) requires that public notice for a PSD permit include "the degree of increment consumption that is expected from the source or modification." *Id.* at 23 (quoting S.C. Reg. 61-62.5, Std. 7, § (Q)(2)(c); citing 42 U.S.C. § 7475; 40 C.F.R. §§ 51.166(q)(2)(iii), 52.2120(c)); *see id.* at 24.<sup>28</sup>

The Petitioners allege that the public notice associated with the 2023 PSD Permit failed to meet this SIP requirement because it did not identify the degree of increment consumed from the source or modification. *Id.* at 23. According to the Petitioners, the public notice was "incorrect" or "inaccurate at

<sup>&</sup>lt;sup>26</sup> For example, the Petitioners include a footnote arguing that "[e]ven if EPA were to accept DHEC's justification" that the changes to coke sulfur content provisions were simply part of the methodology for demonstration compliance with emission limits, these changes would constitute significant changes to existing monitoring requirements, which are not eligible for minor modifications. Petition at 19 n.47 (citing 40 C.F.R. § 70.7(e)(2)(i)(A)(2); S.C. Reg. 61-62.70.7(e)(2)(i)(A)(2)). The EPA does not accept SCDHEC's characterization of the changes, so the EPA need not reach the Petitioners' alternative argument.

<sup>&</sup>lt;sup>27</sup> The EPA understands that for reasons unrelated to this Order (related to Regional Haze requirements under its SIP), SCDHEC is working on a draft title I permit that would include similar changes to the coke sulfur content limit, among other things. Once that process concludes and SCDHEC issues a final title I permit, it could be incorporated into the title V permit in order to resolve the EPA's objection in the present Order.

<sup>&</sup>lt;sup>28</sup> The Petitioners also observe that the EPA Environmental Appeals Board (EAB) has found a PSD permit to be deficient for failing to provide a complete description of proposed increment consumption in the public notice for a draft PSD permit. Petition at 23–24 (citing *In re Hadson Power 14--Buena Vista,* 4 E.A.D. 258, 271–72 (EAB 1992)).

best" to state that there would be *no* degree of increment consumed. *Id.* at 23, 24. The Petitioners assert that other documents in the permit record indicated that the facility would consume 75.5% of the 24-hour PM<sub>10</sub> increment and 24.6% of the annual PM<sub>10</sub> increment. *Id.* at 23–24.

The Petitioners contend that "EPA must object where a petitioner demonstrates that a permit process is not in compliance with applicable requirements." *Id.* at 23 (citing 40 C.F.R. §§ 70.8(c)(1), 70.12(a)(2)). The Petitioners characterize the SIP provision regarding the content of PSD notices as an "applicable requirement" for title V purposes, as applicable requirements include "any standard *or other requirement* provided for in the applicable" SIP. *Id.* at 23 (quoting 40 C.F.R. § 70.2) (emphasis in Petition); *see id.* at 22. Accordingly, "because the PSD permit process failed to comply with the applicable requirements of the South Carolina SIP," the "Petitioners request that EPA object to the incorporation of PSD Construction Permit CY into Mt. Holly's Title V Permit . . . via an administrative permit amendment." *Id.* at 24 (citing S.C. Reg. 61-62.5, Std. 7, § (Q)(2)(c); 40 C.F.R. § 52.2120(c)).

In "Argument 2," the Petitioners claim that SCDHEC's incorporation of the 2023 PSD permit via administrative amendment ran afoul of title V (part 70) procedural requirements. The Petitioners explain that states can only use the title V administrative amendment process to incorporate requirements from preconstruction permits if the preconstruction permit is issued under "a program [that] meets procedural requirements substantially equivalent to the requirements of [40 C.F.R.] §§ 70.7 and 70.8 that would be applicable to the change if it were subject to review as a permit modification . . . ." *Id.* at 25 (quoting 40 C.F.R. § 70.7(d)(1)(v); citing S.C. Reg. 61-62.70.7(d)(1)(v)).

The Petitioners claim that the public notice associated with the 2023 PSD Permit did not satisfy requirements "substantially equivalent" to part 70 requirements concerning public notice. *Id.* Specifically, the Petitioners address the part 70 requirement that the "notice shall identify . . . the activity or activities involved in the permit action; [and] the emissions change involved in any permit modification." *Id.* (quoting 40 C.F.R. § 70.7(h)(2); S.C. Reg. 61-62.70.7(h)(2)). The Petitioners address both parts of the quoted requirement.

First, the Petitioners assert that the notice did not properly identify the "emissions change involved" in the permit action because it did not identify the magnitude of the emissions changes being allowed. *Id*. The Petitioners state that the EPA has previously objected to a title V permit where the public notice did not specifically describe the magnitude of the emissions change. *Id*. at 26 (citing *In the Matter of Bio Energy, LLC*, Order on Petition No. I-2003-01, at 9–10 (Oct. 27, 2006) (*Bio Energy Order*)).

The Petitioners reproduce the relevant discussion from the public notice, which stated:

The facility has submitted a permit application to revise the existing filterable particulate matter (PM) [Best Available Control Technology, or BACT] emission limits for the Unit ID 04 Potline potroom groups to a new, single emission limit. Emissions generated by this facility as a result of the proposed project will include:

- Particulate Matter (PM);
- Particulate Matter less than 10 micrometers in diameter (PM<sub>10</sub>);
- Particulate Matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>);

Air dispersion modeling has indicated that the release of emissions from this facility will not cause or contribute to an exceedance of the [NAAQS]. No degree of increment consumption is expected.

There will be no Class I Areas impacted and no degree of increment consumption resulting from this proposed project.

Id. at 25 (quoting Petition Ex. 9 at 1).

According to the Petitioners: "Taken as a whole, and in the absence of information on the magnitude of emissions changes that were being allowed, the public notice gave the impression that *no* PM emission increase would occur." *Id.* at 26. Specifically, the notice "twice states that there will be 'no degree of increment consumption,'" and the notice suggests that "the sole purpose of this proposed modification was to adopt a new single BACT limit that reflected the sum total of the existing PM BACT limits for the potline potroom groups, in place of the existing individual limits." *Id*.

However, the Petitioners assert that the 2023 PSD permit "*does* allow for significant increases in [PM], PM<sub>10</sub>, and PM<sub>2.5</sub> emissions." *Id*. The Petitioners assert the change involved more than a 100 ton per year increase in allowable emissions. *Id*. at 31.

Second, and relatedly, the Petitioners contend that the notice did not properly describe "the activity or activities involved in the permit action." *Id.* at 26 (quoting 40 C.F.R. § 70.7(h)(2)). The Petitioners argue that the notice was "highly misleading" to describe the permit action as revising the four potline groups' emission limits into a single limit. *Id.* The Petitioners assert that the notice did not accurately describe the manner in which the limits were combined. *See id.* Moreover, the Petitioners assert that the limits were not only combined, but also *increased* (from 19.65 lb/hr for each potline group to 28.73 lb/hr for each potline group—a nearly 50% increase). *Id.* at 26, 31.<sup>29</sup>

The Petitioners conclude that the lack of this information within the public notice itself presents grounds for the EPA's objection. *Id.* at 27.<sup>30</sup> Specifically:

In sum, because the public notice for [the 2023 PSD Permit] did not identify any emissions change involved [in] the permit modification or the activities involved in the change, the Permit did not follow procedural requirements for public notice in 40 C.F.R. § 70.7(h)(2)

<sup>&</sup>lt;sup>29</sup> The Petitioners suggest that the limits were increased in order to make it less likely that the facility would exceed or violate the limits (which the Petitioners allege occurred repeatedly in the past). *See* Petition at 27, 27 n.60, 28. The Petitioners briefly contend that the state should not relax (*i.e.*, increase) BACT limits more than 20 years after they were established. *Id.* at 28.

<sup>&</sup>lt;sup>30</sup> Although the Petitioner's request for the EPA's objection focuses on the content of the public notice itself, the Petitioners also allege that information about the emissions change and activities at issue was not readily ascertainable from other documents in the permit record that accompanied the public notice. *Id.* at 27; *see id.* at 29–30, 31 (citing *In the Matter of Phillips 66 San Francisco Refinery*, Order on Petition No. IX-2018-4 at 7 (Aug. 8, 2018)). The Petitioners present this discussion to explain why the Petitioners did not provide comments on the draft 2023 PSD Permit, and also to support the Petitioners' overarching concerns that the public was deprived of meaningful participation opportunities. *See id.* at 28–29, 31.

and S.C. Regulation 61-62.70.7(h)(2) and is not eligible for administrative incorporation into the Title V permit for the Mt. Holly plant.

Id. at 28 (citing 40 C.F.R. § 70.7(d)(1)(v); S.C. Reg. 61-62.70.7(d)(1)(v)).

**EPA's Response:** For the following reasons, the EPA grants in part and denies in part the Petitioners' request for an objection on this claim.

The EPA can object to a title V permit that does not comply with "applicable requirements" of the CAA (as that term is defined in EPA regulations) or requirements of part 70. *See* 42 U.S.C. § 7661d(b); 40 C.F.R. §§ 70.8(c)(1), 70.12(a)(2), (a)(2)(ii). As noted with respect to Claim 1, this can include procedural defects related to the issuance of a particular title V permit. *See* 40 C.F.R. §§ 70.8(c)(1), (c)(3), 70.12(a)(2), (a)(2)(iv).

The Petitioners' first argument in Claim 2 ("Argument 1") does not allege any defect that could form a basis for the EPA's objection to the present title V permit. As an initial matter, the EPA's authority to object under CAA § 505(b) only extends to the particular proposed title V permit before the agency for review.<sup>31</sup> This part of Claim 2 does not allege that *the title V permit*, or the issuance of the title V permit, failed to satisfy any applicable CAA or part 70 requirements. Instead, the Petitioners allege that issuance of *the 2023 PSD Permit* did not comply with procedural requirements of the SIP relevant to the issuance of that PSD Permit. *See* Petition at 23–24. An alleged procedural defect in a separate permit action that does not result in substantive or procedural defects in the current title V permit action cannot present a basis for the EPA's objection to the current title V permit.

The Petitioners' argument that the procedural requirements of the SIP are also "applicable requirements" *for purposes of the present title V permit* are unpersuasive. *Id.* at 23. Notably, the Petitioners fail to acknowledge a key provision within the definition of this term, which indicates that "applicable requirements" only include requirements of the SIP "as they apply to emissions units in a part 70 source." 40 C.F.R. § 70.2. The SIP requirements do not directly apply to emission units in a part 70 source. Thus, they are not "applicable requirements" with which the title V permit must assure compliance. Again, the alleged violation of procedures associated exclusively with that prior NSR permit action do not provide an independent basis for the EPA's objection to the current title V permit.

The Petitioners do not allege that this violation of procedural SIP requirements resulted in a violation of any part 70 requirements. For example, the Petitioners offer no connection between these procedural SIP requirements and the part 70 requirements governing title V administrative amendments (which *are* implicated by the Petitioners' second argument, discussed in the following paragraphs).

<sup>&</sup>lt;sup>31</sup> The references within CAA § 505(b) to "any permit," "the proposed permit," "a permit," "the permit," etc. apply to the title V permit that a permitting authority proposes to issue and transmits to the EPA under CAA § 505(a)(1). 42 U.S.C. § 7661d(a), (b)(1), (b)(2). *See also* 40 C.F.R. §§ 70.8(c)(1), (d), (similar language and cross-references as the statute), 70.12(a)(1) (requirement that petitioners identify the specific title V permit action on which the petition is based), 70.12(a)(2) (petition claims must be based on alleged deficiencies in "the permit process" associated with the title V permit being petitioned).

In summary, the Petitioners' arguments concerning the alleged violation of procedural requirements of the SIP that exclusively concern issuance of the 2023 PSD Permit do not present an independent basis for the EPA's objection to the current title V permit. Thus, the EPA denies the first part of Claim 2.

In the second part of Claim 2 ("Argument 2"), the Petitioners present a clearer connection between issuance of the 2023 PSD Permit and part 70 requirements governing the current title V permit action. As the Petitioners explain, the EPA's regulations currently allow states to use the title V administrative amendment procedures to incorporate the terms of NSR permits issued under an EPA-approved program that "*meets procedural requirements substantially equivalent to the requirements of Sections 70.7* and 70.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in Section 70.6." 40 C.F.R. § 70.7(d)(1)(v) (emphasis added); *see* S.C. Regulation 61-62.70.7(d)(1)(v). The Petitioners claim that the 2023 PSD Permit cannot be incorporated into the title V permit via administrative amendment because the 2023 PSD Permit's public notice did not satisfy requirements substantially equivalent to part 70 requirements governing public notice in 40 C.F.R. § 70.7(h)(2). This issue is properly within the scope of the EPA's review of the current title V permit action.<sup>32</sup>

The notice associated with the 2023 PSD Permit states, in relevant part:

Century has applied to the SC DHEC, BAQ, for a [PSD] air construction permit to revise the existing PM (filterable) BACT emission limit at its existing facility.

\* \* \*

The facility has submitted a permit application to revise the existing filterable particulate matter (PM) BACT emission limits for the Unit ID 04 Potline potroom groups to a new, single emission limit. Emissions generated by this facility as a result of the proposed project will include:

• Particulate Matter (PM);

<sup>&</sup>lt;sup>32</sup> The public does not ordinarily have the opportunity to petition the EPA to object to title V administrative amendments because permitting authorities are not required to submit a "proposed permit" to the EPA for review before finalizing administrative amendments. (By contrast, permitting authorities must transmit a proposed permit to the EPA for all other types of title V permit actions, including initial permits, renewal permits, minor modifications, significant modifications, and permit reopenings.) However, here, SCDHEC did not finalize the changes ostensibly qualifying as an administrative amendment without the EPA's review. Instead, the state effectively processed these changes using minor modification procedures. Specifically, as the Petitioners point out, the Proposed Permit that SCDHEC transmitted to the EPA on February 23, 2023, included both the proposed minor modification change at issue in Claim 1 as well as the proposed "administrative amendment" change at issue in Claim 2. Neither of these changes were finalized until April 13, 2023, after the EPA's review of the Proposed Permit. Because the Proposed Permit reflects both sets of changes, both sets of changes are consequently within the scope of the EPA's (and the public's) review of the Proposed Permit in the present proceeding. See Petition at 23 n.54. Additionally, note that PSD permits cannot be incorporated into a title V permit via minor modification. See 40 C.F.R. 40 C.F.R. § 70.7(e)(2)(i)(A)(5). Thus, if the 2023 PSD Permit was ineligible for incorporation via administrative amendment, SCDHEC would have been required to process this change via significant permit modification. Therefore, questions about whether the 2023 PSD Permit qualified for incorporation via administrative amendment remain relevant to whether the EPA must object to the current permit action, regardless of the fact that SCDHEC included this change within the Proposed Permit submitted to the EPA.

- Particulate Matter less than 10 micrometers in diameter (PM<sub>10</sub>);
- Particulate Matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>);

Air dispersion modeling has indicated that the release of emissions from this facility will not cause or contribute to an exceedance of the [NAAQS]. No degree of increment consumption is expected.

There will be no Class I Areas impacted and no degree of increment consumption resulting from this proposed project.

#### Petition Ex. 9 at 1.

The Petitioners have demonstrated that this public notice associated with the 2023 PSD Permit did not "identify . . . the activity or activities involved in the permit action [and] the emissions change involved in any permit modification." 40 C.F.R. § 70.7(h)(2); see Bio Energy Order at 9–10 (objecting to the issuance of a permit where a "notice did not specifically describe the change in emissions associated with this proposed permit modification, as required by 40 C.F.R. § 70.7(h)(2) . . . .").

Here, the notice provides no information about the emission change involved in this permit action. The notice does not indicate the magnitude, significance, relevance, or even direction of such changes (*i.e.*, increase or decrease). The notice does not even expressly acknowledge that the action would involve *any* change in emissions. The closest the notice comes is the following statement: "Emissions generated by this facility as a result of the proposed project will include: [PM, PM<sub>10</sub>, and PM<sub>2.5</sub>]." Petition Ex. 9 at 1. But again, that statement does nothing to suggest whether the permit action would involve any emission *changes*. Not only does the notice fail to include any explicit information about emissions changes, but it also implies that there would be no increases in emissions. Specifically, the notice communicates two points: (i) the permit action involves a consolidation of existing PM BACT limits into a new, single emission limit; and (ii) this permit change will not result in any degree of increment consumption. However, the permit action resulted in a nearly 50% increase in permitted emissions from each set of affected emission units: from 19.65 lb/hr to 28.73 lb/hr.<sup>33</sup>

Overall, the EPA finds that because of these omissions and potentially misleading statements, the notice associated with the 2023 PSD Permit did not "identify . . . the activity or activities involved in the permit action [and] the emissions change involved in any permit modification," as required by 40 C.F.R. § 70.7(h)(2). As a result, the public was deprived from the opportunity to meaningfully participate on that PSD permit action. More to the point, because issuance of the 2023 PSD Permit did not satisfy procedures substantially equivalent to those in § 70.7 (governing public notice), that PSD Permit was not eligible for incorporation into the title V permit via administrative amendment. 40 C.F.R. § 70.7(d)(1)(v); see S.C. Regulation 61-62.70.7(d)(1)(v). the EPA therefore grants this part of Claim 2 and objects to the Permit.

<sup>&</sup>lt;sup>33</sup> As SCDHEC subsequently explained: "The newly combined PM BACT limit will increase from 18.15 lb/hr (each ridge vent or roof monitor) and 1.5 lb/hr (each scrubber/dust collector) to a single emission limit of 28.73 lb/hr for each Potline scrubber/dust collector and ridge vent set." SOB at 1. Note that this description comes from the SOB associated with the present title V permit action, and not the notice associated with the 2023 PSD Permit action.

**Direction to SCDHEC**: SCDHEC must follow the appropriate procedures in order to revise the title V permit to incorporate the terms of the 2023 PSD Permit. The state may be able to accomplish this in various ways, some of which could involve separate PSD permit actions with more meaningful opportunities for public participation.

#### V. CONCLUSION

For the reasons set forth in this Order and pursuant to CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), | hereby grant in part and deny in part the Petition as described in this Order.

NOV 2 - 2023

& Regan

Michael S. Regan Administrator

#### **PUBLIC NOTICE**

State of South Carolina (SC) Department of Health and Environmental Control (DHEC) Bureau of Air Quality (BAQ) 2600 Bull Street Columbia, SC 29201 (803) 898-4123

#### Notice of a Draft Air Prevention of Significant Deterioration (PSD) Construction Permit **PUBLIC NOTICE #22-091-PSD**

**COMMENT PERIOD**: Public Notice will begin on **December 7**, **2022** and will end at close of business, which is 5:00 p.m. on **January 5**, **2023**.

#### Century Aluminum of South Carolina, Inc (Century) 3575 Highway 52 Goose Creek, South Carolina 29445 (Berkeley County) AIR PERMIT #0420-0015-CY

Century has applied to the SC DHEC, BAQ, for a Prevention of Significant Deterioration (PSD) air construction permit to revise the existing PM (filterable) BACT emission limit at its existing facility. A Preliminary Determination, draft construction permit, and statement of basis have been written by the BAQ outlining this proposed project and applicable regulations. In addition to other state and federal air quality regulations, the draft permit is subject to review under SC DHEC Regulation 61-62.5, Standard No. 7 - Prevention of Significant Deterioration (PSD). This regulation is equivalent to Title 40 of the Code of Federal Regulations, Part 52.21 - Prevention of Significant Deterioration (PSD). This deteriorate the air quality in its region prior to constructing or modifying sources of air pollutants. The draft permit has not yet been approved and is open to comment from the public, the United States Environmental Protection Agency (EPA), the Federal Land Managers, the chief executives of Berkeley County, the City of Goose Creek, and the Berkeley-Charleston-Dorchester Council of Government.

Century is a primary aluminum reduction facility in Goose Creek, SC that produces high grade aluminum from the raw material, aluminum oxide (alumina) using the Hall-Heroult electrolytic process. The facility has submitted a permit application to revise the existing filterable particulate matter (PM) BACT emission limits for the Unit ID 04 Potline potroom groups to a new, single emission limit. Emissions generated by this facility as a result of the proposed project will include:

- Particulate Matter (PM);
- Particulate Matter less than 10 micrometers in diameter (PM<sub>10</sub>);
- Particulate Matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>);

Air dispersion modeling has indicated that the release of emissions from this facility will not cause or contribute to an exceedance of the National Ambient Air Quality Standards (NAAQS). No degree of increment consumption is expected.

There will be no Class I Areas impacted and no degree of increment consumption resulting from this proposed project.

This construction permit will be incorporated into the existing Title V permit with no additional public comment period, provided all public participation and EPA requirements were fulfilled with notice of the construction permit action.

Interested parties may review the materials drafted and maintained by SC DHEC for this facility and submit written

comments on the draft permit by the end of the public notice period listed above. Written comments can be submitted to the BAQ Public Notice Coordinator at the above SC DHEC address or by e-mail at <u>AirPNComments@dhec.sc.gov</u>. Comments should specify, in as much details as possible, the air quality related issues and identify the portion(s) of the state and/or federal air quality regulations that are of concern and have not been adequately addressed in the draft permit. All comments received by the end of the notice period (Should the comment period end on a weekend or state holiday, comments will be accepted up until close of business the next working day), will be considered when making a decision to approve, disapprove, or modify the draft permit. Where there is a significant amount of public interest, SC DHEC may hold a public hearing/meeting to receive additional comments. Public hearing/meeting requests should be made in writing to the BAQ Public Notice Coordinator at the above SC DHEC address or by e-mail. Any requests for a public hearing/meeting must be made within the 30-day public comment period. If a public hearing/meeting is requested and scheduled, notice of said public hearing/meeting will be given thirty (30) days in advance. BAQ may conduct public hearings/meetings in-person or in "virtual" format. If you have questions concerning the draft permit, please contact Wanda Parnell at the phone number listed above. A final review request may be filed after the permit decision has been made. Information regarding final review procedures is available from SC DHEC's legal office at the above address or by calling (803) 898-3350. Information relative to the draft permit will be made available for review through the end of the notice period listed above, at the SC DHEC Columbia Office listed above and at the local regional office (https://scdhec.gov/ea-regional-offices).

Information on permit decisions and hearing/meeting procedures is available by contacting SC DHEC at either address listed above. Copies of a draft permit or other related documents may be requested in writing to the Freedom of Information Office; fees may apply. Please bring this notice to the attention of persons you know will be interested in this matter.

This public notice, along with the Preliminary Determination which includes the draft permit and draft statement of basis, may be viewed through the end of the notice period on SC DHEC's website at: <u>http://www.scdhec.gov/PublicNotices/</u>.