

**OFFICE OF ENVIRONMENTAL QUALITY CONTROL
BUREAU OF AIR QUALITY
NSPS (40CFR60) AND NESHAP (40CFR63), AND SYNTHETIC MINOR
CONSTRUCTION PERMIT**

Johnson Controls Battery Group Inc. – Florence Recycling Plant
Paper Mill Road
Florence, SC 29501

Permission is hereby granted to construct a lead acid battery recycling facility. The facility will receive approximately 595 tons of automotive and marine batteries daily on a dry basis as well as non-hazardous lead-bearing materials from other JCBGI facilities and produce approximately 416 tons per day of lead ingots. The facility will utilize a super desulfurization process in ID 01. The facility will include the following equipment and processes:

Unit ID 01 – CX Plant

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
H100	Battery Preparation	FL-530	CS1
H-101	Vibrating Conveyor	FL-530	CS1
ML-101	Precrusher	FL-530	CS1
VS-102	Vibrating Screen Separator	FL-530	CS1
V-102	Paste Slurry Tank	FL-530	CS1
FL-101	Filter Press	FL-530	CS1
R-301a/b/c	Desulfurization Reactors	FL-530	CS1
FL-310a/b	Filter Press	FL-530	CS1
FL-311a/b	Polishing Filter	FL-530	CS1
R-311a/b/c	Neutralization Reactors	FL-530	CS1
H-202	Belt Conveyor	FL-530	CS1
H-203	Magnetic Separator	FL-530	CS1
ML-201	Hammer Mill	FL-530	CS1
VS-201	Vibrating Screen Separator	FL-530	CS1
R-302	Lead Paste Collection	FL-530	CS1
V-280a/b	Paste Slurry Settling Basin	FL-530	CS1
H-280a/b	Scraping Chain	FL-530	CS1
VS-220	Dewatering Screen	FL-530	CS1

PERMIT NUMBER: 1040-0129-CA
DATE OF ISSUE: February 5, 2010
FACILITY SIC/NAICS CODES: 3341/331492

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Control Device ID	Control Device Description	Pollutant(s) Controlled
FL-530	Plate Scrubber	PM/PM ₁₀ , Lead, H ₂ SO ₄

Unit ID 02 – CX Plant Ventilation

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
CX	Negative Pressure Building for CX Plant Fugitives	N/A	BB1-10

Unit ID 03 – PP Storage and Extrusion

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
S-221	Separator	N/A	RV1
S-221a	Extruder	N/A	RV1
S-221b/c	Two Silos with integral bin vent filters	N/A	RV1

Unit ID 04 – Boiler

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
PK-520	6.17 million BTU/hr Boiler, Fired on Natural Gas	N/A	B1

Unit ID 05 – Flash Tube Dryer and Silo

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
PK-420a/b	2.05 million BTU/hr Dryer, Fired on Natural Gas	N/A	FT1
SI-421a/b	(2) Sodium Sulfate Storage Silos with Integral Bin Vent Filters	N/A	FT1

Unit ID 06 – Melter and Charge Prep

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
KL-603	Rotary Lead Melting Furnace Rated at 3.85 Million BTU/hr using Natural Gas, enclosed in the negative pressure building for Melter and Charge Prep	PK-730	CB1
PK-710a/b	Charge Preparation, enclosed in the negative pressure building for Melter and Charge Prep	PK-730	CB1

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-730	Closed-loop Baghouse system and HEPA Filter	PM/PM ₁₀ , Metal HAPs

Unit ID 07 – Smelting Furnace # 1

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
KL-710a	Rotary Smelting Furnace #1 25.64 Million BTU/hr Fired on Natural Gas, equipped with Low NOx oxy-fuel combustion	PK-722a PK-720a PK-719a	F1

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-722a	Smelter #1 Afterburner 8.55 Million BTU/hr Fired on Natural Gas	CO
PK-720a	Smelter #1 closed-loop Baghouse system /HEPA Filter	PM/PM ₁₀ Metal HAPs
PK-719a	Smelter #1 Wet Scrubber	SO ₂

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Unit ID 08 – Smelting Furnace # 2

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
KL-710b	Rotary Smelting Furnace #2 25.64 Million BTU/hr Fired on Natural Gas, equipped with Low NOx oxy-fuel combustion	PK-722b PK-720b PK-719b	F2

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-722b	Smelter #2 Afterburner 8.55 Million BTU/hr Fired on Natural Gas	CO
PK-720b	Smelter #2 closed-loop Baghouse system /HEPA Filter	PM/PM ₁₀ Metal HAPs
PK-719b	Smelter #2 Wet Scrubber	SO ₂

Unit ID 09 – Smelting Furnace # 3

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
KL-710c	Rotary Smelting Furnace #3 25.64 Million BTU/hr, equipped with Low NOx oxy-fuel combustion	PK-722c PK-720c PK-719c	F3

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-722c	Smelter #3 Afterburner 8.55 Million BTU/hr Fired on Natural Gas	CO
PK-720c	Smelter #3 closed-loop Baghouse system /HEPA Filter	PM/PM ₁₀ Metal HAPs
PK-719c	Smelter #3 Wet Scrubber	SO ₂

Unit ID 10 – Foundry Ventilation

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
FV	Negative Pressure Building for Smelting and Slag Cooling Fugitives	PK-721	FB1

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-721	Closed-loop Baghouse system /HEPA Filter	PM/PM ₁₀ Metal HAPs

Unit ID 11 – Refining Kettles and Casting

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
KT-810a-i	(9) Refining Kettles 8.55 Million BTU/hour each, equipped with Low NOx burners	PK-820	RB1
PK-850	Ingot Casting	PK-820	RB1

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-820	Closed-loop Baghouse system /HEPA Filter	PM/PM ₁₀ Metal HAPs

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Unit ID 12 – Refining Ventilation

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
RV	Negative Pressure Building for Refining and Casting Fugitives	PK-821a-e	RE1-5

Control Device ID	Control Device Description	Pollutant(s) Controlled
PK-821a-e	HEPA Filter	PM/PM ₁₀ Metal HAPs

Unit ID 13 – Emergency Generators

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
EG1	No. 1 Emergency Natural Gas Generator 150 kW	N/A	EG1
EG2	No. 2 Emergency Natural Gas Generator 150 kW	N/A	EG2

Unit ID 14 – Slag Warehouse

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
SW1	Negative Pressure Building for Slag Warehouse	SWC1	SW1

Control Device ID	Control Device Description	Pollutant(s) Controlled
SWC1	Closed-loop Baghouse system and HEPA Filter	PM/PM ₁₀ Metal HAPs

NOTWITHSTANDING ANY OF THE CONDITIONS LISTED BELOW, NO APPLICABLE LAW, REGULATION, OR STANDARD WILL BE CONTRAVENED.

CONDITIONS

1. All official correspondence, plans, permit application forms, and written statements are an integral part of this permit.
2. The owner/operator shall submit written notification to the Director of the Engineering Services Division of the date construction is commenced, postmarked no later than 30 days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within 15 days after such date.
3. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time frame. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.
4. The owner or operator shall comply with all terms, conditions, and limitations of this permit.

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This is pursuant to the provisions of Section 48-1-110, 1976 *Code of Laws of South Carolina*, as amended, and the *South Carolina Air Quality Control Regulation 61-62.1*, Section II and the *Code of Federal Regulations*, Title 40, Parts 60 (Subpart A) and 63 (Subpart A).

I. STANDARD CONDITIONS

A. This permit expressly incorporates all the provisions of *South Carolina Department of Health and Environmental Control Regulation 61-62.1*, Section II, Paragraph J.

II. SPECIAL CONDITIONS

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

ID	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
01	Opacity	20%	9	SC Reg. 61-62.5, Standard No. 4, Section IX	No
01	PM	8.81 lb/hr	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
02	Lead	0.00087 grains of lead per dry standard cubic foot	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.545	No
03: Silo 1 Silo 2 Extruder	Opacity	20% (each)	9	SC Reg. 61-62.5, Standard No. 4, Section IX	No
03: Silo 1 Silo 2 Extruder	PM	11.1 lb/hr (each)	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
04	Opacity	20%	9	SC Regulation 61-62.5, Standard No. 1, Section I	No
04	PM	0.6 pounds per million BTU input	*	SC Regulation 61-62.5, Standard No. 1, Section II	No
04	SO ₂	3.5 pounds per million BTU input	*	SC Regulation 61-62.5, Standard No. 1, Section III	No
05	Opacity	20%	9	SC Reg. 61-62.5, Standard No. 4, Section IX	No
05	PM	12.12 lb/hr	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
06	Opacity	20%	9	SC Reg. 61-62.5, Standard No. 4, Section IX	No
06	PM	17.8 lb/hr	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
06	Lead	0.00087 grains of lead per dry standard cubic foot	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.544 and 63.545	No

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ID	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
07, 08, 09	Waste Heat Input	≤3.26 X 10 ⁶ BTU's of Waste/Hour (each)	*	SC Reg. 61-62.5, Standard 3, Section III(L)(5)	Yes
07, 08, 09 (after- burners)	Opacity	20% (each)	9	SC Re. 61-62.5, Standard 3, Section III(I)(1)	Yes
07, 08, 09 (after- burners)	PM	0.5 lbs/10 ⁶ BTU total heat input	*	SC Re. 61-62.5, Standard 3, Section III(I)(2)	Yes
07, 08, 09	Opacity	20% (each)	9	SC Reg. 61-62.5, Standard No. 4, Section IX	No
07, 08, 09	PM	14.59 lb/hr (each)	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
07, 08, 09	NOx	30% Reduction from Uncontrolled (each)	*	SC Reg. 61-62.5, Standard 5.2, Section III	No
07, 08, 09	Opacity	20% (each)	9	SC Reg. 61-62.60, Subpart L 40 CFR 60.122(a)(2)	No
07, 08, 09	PM	0.022 gr/dscf (each)	5	SC Reg. 61-62.60, Subpart L 40 CFR 60.122(a)(1)	No
11	Opacity	10%	9	SC Reg. 61-62.60, Subpart L 40 CFR 60.122(b)	No
07, 08, 09	Lead	0.00087 grains of lead per dry standard cubic foot (each)	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.543	No
10	Lead	0.00087 grains of lead per dry standard cubic foot	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.545	No
11	Opacity	20%	9	SC Regulation 61-62.5, Standard No. 1, Section I	No
11	PM	0.6 pounds per million BTU input	*	SC Regulation 61-62.5, Standard No. 1, Section II	No
11	SO ₂	3.5 pounds per million BTU input	*	SC Regulation 61-62.5, Standard No. 1, Section III	No
11	Opacity	20%	9	SC Reg. 61-62.5, Standard No. 4, Section VII	No
11	PM	29.58 lb/hr	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
11	Lead	0.00087 grains of lead per dry standard cubic foot	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.544	No
12	Lead	0.00087 grains of lead per dry standard cubic foot	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.545	No
13	NOx, CO	Maximum 250 hours per year operation (Combined)	*	SC Regulation 61-62.1, Section II(E)	No
14	Opacity	20%	9	SC Reg. 61-62.5, Standard No. 4, Section IX	No

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ID	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
14	PM	5.66 lb/hr	*	SC Reg. 61-62.5, Standard No. 4, Section VIII	No
14	Lead	0.00087 grains of lead per dry standard cubic foot	12	SC Reg. 61-62.63, Subpart X 40 CFR 63.545	No
Facility Wide	PM	<100 TPY	*	SC Regulation 61-62.1, Section II(E) (PSD Avoidance)	No
Facility Wide	PM ₁₀	<100 TPY	*	SC Regulation 61-62.1, Section II(E) (PSD Avoidance)	No
Facility Wide	SO ₂	<100 TPY	*	SC Regulation 61-62.1, Section II(E) (PSD Avoidance)	No
Facility Wide	NO _x	<100 TPY	*	SC Regulation 61-62.1, Section II(E) (PSD Avoidance)	No
Facility Wide	CO	<100 TPY	*	SC Regulation 61-62.1, Section II(E) (PSD Avoidance)	No
Facility Wide	HAPs	<10 TPY (Each) <25 TPY (Total)	*	SC Regulation 61-62.1, Section II(E) (MACT Avoidance))	No
Facility Wide	Mercury	<12 lb/year	*	SC Regulation 61-62.1, Section II(J)(2)	Yes

N/A = Not Applicable

* As Approved By BAQ

The emission limitations listed for each emission unit are based on operation at permitted capacity. Operation at less than permitted capacity must meet emission limits specified in the applicable regulations based on that operating rate. All test methods must be the most recent revisions that are published in the *Code of Federal Regulations*, in accordance with the requirements of SC Regulation 61-62.1, Section IV, Source Test.

B. CONTINUOUS MONITORING REQUIREMENTS

ID	Pollutant	Averaging Time
06, 07, 08, 09, 11	NO _x	30 day rolling average and 12- month rolling sum
06, 07, 08, 09	CO	30 day rolling average and 12- month rolling sum

N/A = Not Applicable

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C. SOURCE TEST SCHEDULE

ID	Pollutant	Frequency	Method
01	H2SO4 mist	Initial and every two years	*
06, 07, 08, 09, 11	Lead	Initial and then every 12 Months. If ≤ 0.00044 grains of lead per dry standard cubic foot, then every 24 Months	12
07, 08, 09, 11	Opacity	Initial	9
06, 07, 08, 09, 11	SO ₂	Initial and every two years	*
06, 07, 08, 09, 11	NO _x	Initial	*
06, 07, 08, 09,	CO	Initial	*
11	CO	Initial and every two years	*
01, 06, 07, 08, 09, 10, 11, 12, 14	PM	Initial and every two years	*, **
06, 07, 08, 09, 11	Mercury	Initial and every two years	*
06, 07, 08, 09, 11, 12	Antimony, Arsenic, Beryllium, Cadmium, Chromium, Nickel, Selenium, Manganese	Initial	*, **
03, 07, 08, 09	Acetaldehyde, Acrolein, Benzene, Ethyl Benzene, Formaldehyde, Propionaldehyde, HCl, Chloroform, 1,3 Butadiene, Vinyl Chloride, Xylene, Styrene, Toluene	Initial	*, **

N/A = Not Applicable

* As Approved By BAQ

** Industrial hygiene methods acceptable for ID 12, ID 03

D. ADDITIONAL CONDITIONS

Condition Number	Conditions
1.	The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.

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2.	<p>In accordance with SC Regulation 61-62.1 Section II(J), for all sources not required to have continuous emissions monitors, in the event of 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 hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. If a control device fails, the facility shall shut down the process operations controlled by that air pollution control system as soon as possible in a manner consistent with safe operating practices. If a control device malfunctions such that it is not expected to meet the applicable emission limitations, the facility shall shut down process operations controlled by that air pollution control system in a manner consistent with safe operating practices. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.</p>
3.	<p>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 the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment A, not to exceed the pollutant limitations of this construction permit. Should the facility wish to increase the emission rates listed in Attachment A, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified in this permit condition. This is a State Only enforceable requirement.</p>
4.	<p>These conditions shall not supersede any State or Federal requirements such as National Emission Standards for Hazardous Air Pollutants, unless these conditions would impose a more restrictive limit.</p>
5.	<p>This construction permit was reviewed and issued based on the permit application submitted by the owner/operator. The owner/operator shall obtain any Bureau authorization required under South Carolina Regulation 61-62.1, Section II(A) prior to making modifications not covered under this construction permit.</p>
6.	<p>For sources not yet covered by an effective Title V operating permit, the owner or operator shall submit a written request to the Director of the Engineering Services Division for a new operating permit to cover any new, or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source. In accordance with SC Regulation 61-62.70.5(a), the owner or operator shall submit a timely and complete Part 70 permit application within 12 months of start up.</p>

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7.	The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department. If construction is certified as provided above, the permittee may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department. If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Director of the Engineering Services Division a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.
8.	Unless elsewhere specified within this permit, all records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request.
9.	(Unit IDs 04, 05, 06, 07(Afterburner only), 08(Afterburner only), 09(Afterburner only), 11, 13) These sources are permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.
10.	(Unit IDs 04, 11) In accordance with SC Regulation 61-62.5, Standard No. 1, Emissions from Fuel Burning Operations, the boiler and refining kettles shall not discharge into the ambient air smoke which exceeds an opacity of 20%. The opacity standards set forth above apply at all times. 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.
11.	(Unit IDs 04, 11) In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section II - Particulate Matter Emissions, the allowable discharge of particulate matter resulting from the fuel burning operations is 0.6 pounds per million BTU input.
12.	(Unit IDs 04, 11) In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section III - Sulfur Dioxide Emissions, the maximum allowable discharge of sulfur dioxide (SO ₂) resulting from the fuel burning operations is 3.5 pounds per million BTU input.
13.	(Unit IDs 07, 08, 09) The smelting furnaces are permitted to burn only natural gas, anthracite coal, and on-site generated non-chlorinated waste plastic as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.
14.	(Unit IDs 07, 08, 09) The anthracite coal shall have a sulfur content of less than or equal to 0.65% by weight. Compliance with the fuel sulfur limit shall be determined from the fuel supplier as specified. Records of these certifications shall be kept on site.
15.	<p>(Unit IDs 07, 08, 09) In accordance with SC Regulation 61-62.5, Standard 3, Section III(L)(5), sources burning small quantities of waste that is generated by the owner/operator and is burned at a rate of 10% or less of the total heat input capacity of each furnace, are exempt from the requirements of this Standard except as follows:</p> <ul style="list-style-type: none"> a. There must be a valid permit for the furnace which specifies the exact waste to be burned. b. Analysis may be required to prove that the material to be burned is one of the substances authorized by the permit. c. Records of the material being burned (i.e. gallons per month or tons per month) and its firing rate must be kept and made available to the Department upon request. <p>The facility is limited to utilizing non-chlorinated plastic only.</p>
16.	(Unit IDs 07, 08, 09) In accordance with SC Regulation 61-62.5, Standard 3, Section III(I)(1), the opacity from the afterburners (PK-722a, PK-722b, PK-722c) shall not exceed 20%
17.	(Unit IDs 07, 08, 09) In accordance with SC Regulation 61-62.5, Standard 3, Section III(I)(2), the particulate matter emissions from the afterburners (PK-722a, PK-722b, PK-722c) shall not exceed 0.5 lbs/10 ⁶ BTU total heat input. The total heat input value from waste and virgin fuel used for production shall not exceed the BTU used to affect the combustion of the waste.

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18.	<p>(Unit IDs 07, 08, 09) In accordance with SC Regulation 61-62.5, Standard 3, Section VIII(D)(1), an initial source test for particulate matter (PM) emissions shall be conducted within 180 days after startup.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>																																	
19.	<p>(Unit IDs 07, 08, 09) As specified in SC Regulation 61-62.5, Standard No. 3, Section IX (D), this facility has been granted an exemption from all of the Operator Training Requirements in SC Regulations 61-62.5, Standard No. 3, Section IX (C) for the afterburners (PK-722a, PK-722b, PK-722c).</p>																																	
20.	<p>(Unit IDs 01, 03(Silo 1), 03(Silo 2), 03(Extruder), 05, 06, 07, 08, 09, 11, 14) In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p>																																	
21.	<p>(Unit ID 11) In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VII – Metal Refining, the maximum allowable opacity from any furnace building and/or operations building (including but not limited to pollution control systems, louvers, doors, openings, etc.) shall be 20%.</p>																																	
22.	<p>(Unit IDs 01, 03(Silo 1), 03(Silo 2), 03(Extruder), 05, 06, 07, 08, 09, 11, 14) In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, 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 ($E = 4.10P^{0.67}$) and for process weight rates greater than 30 tons per hour ($E = 55.0P^{0.11} - 40$) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th align="center">Process</th> <th align="center">Emission Limit (lbs/hr)</th> <th align="center">Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td align="center">01 – CX Plant</td> <td align="center">8.81</td> <td align="center">24.8</td> </tr> <tr> <td align="center">03 – Each Silo</td> <td align="center">6.12</td> <td align="center">1.82</td> </tr> <tr> <td align="center">03 - Extruder</td> <td align="center">6.12</td> <td align="center">1.82</td> </tr> <tr> <td align="center">05 - Flash Tube Dryer and Silo</td> <td align="center">12.12</td> <td align="center">5.04</td> </tr> <tr> <td align="center">06 - Melter and Charge Prep</td> <td align="center">17.8</td> <td align="center">8.93</td> </tr> <tr> <td align="center">07 - Smelting Furnace # 1</td> <td align="center">14.6</td> <td align="center">6.65</td> </tr> <tr> <td align="center">08 - Smelting Furnace # 2</td> <td align="center">14.6</td> <td align="center">6.65</td> </tr> <tr> <td align="center">09- Smelting Furnace # 3</td> <td align="center">14.6</td> <td align="center">6.65</td> </tr> <tr> <td align="center">11- Refining Kettles and Casting</td> <td align="center">27.7</td> <td align="center">17.34</td> </tr> <tr> <td align="center">14- Slag Warehouse</td> <td align="center">5.66</td> <td align="center">1.62</td> </tr> </tbody> </table>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	01 – CX Plant	8.81	24.8	03 – Each Silo	6.12	1.82	03 - Extruder	6.12	1.82	05 - Flash Tube Dryer and Silo	12.12	5.04	06 - Melter and Charge Prep	17.8	8.93	07 - Smelting Furnace # 1	14.6	6.65	08 - Smelting Furnace # 2	14.6	6.65	09- Smelting Furnace # 3	14.6	6.65	11- Refining Kettles and Casting	27.7	17.34	14- Slag Warehouse	5.66	1.62
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)																																
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23.	(Unit IDs 07, 08, 09) In accordance with SC Regulation 61-62.5, Standard No. 5.2 – Control of Oxides of Nitrogen, Section III, these sources must achieve a minimum of 30% reduction from uncontrolled levels in the discharge of NO _x resulting from fuel burning.
24.	(Unit IDs 07, 08, 09) In accordance with SC Regulation 61-62.5, Standard No. 5.2 – Control of Oxides of Nitrogen, Section IV, stationary source that emits or has the potential to emit NO _x generated from fuel combustion constructed after 06/25/2004 must perform tune-ups every two years, a tune-up plan must be developed and kept on file, and records of tune-ups must be kept on site for a minimum of 5 years.
25.	<p>In accordance with 40 CFR §60.122 (Standard For Particulate Matter):</p> <p>(Unit IDs 07, 08, 09) 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 discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which:</p> <p>(a)(1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).</p> <p>(a)(2) Exhibit 20 percent opacity or greater.</p> <p>(Unit ID 11) 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 discharge or cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.</p> <p>In accordance with 40 CFR 60.8, within 60 calendar days after achieving the maximum production rate at which this facility will be operated, but no later than 180 calendar days after its initial startup and at such other times as may be required by the Department under section 114 of the Clean Air Act, the owner or operator of this facility shall conduct performance tests. Performance tests shall be conducted on IDs 07, 08, 09 and 11 to show compliance with the opacity standards. Compliance with the opacity standards shall be determined by conducting performance tests in accordance with 40 CFR 60 Appendix A Reference Method 9. Performance tests shall be conducted on IDs 07, 08 and 09 to show compliance with the PM standards. Compliance with the PM standards shall be determined by conducting performance tests in accordance with 40 CFR 60 Appendix A Reference Method 5.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality’s Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing.</p>
26.	<p>(Unit IDs 07, 08, 09) In accordance with 40 CFR §63.543 Standards For Process Sources:</p> <p>(a) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any new rotary smelting furnace any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard).</p> <p>(h) Except as provided in paragraph (i) of this section, following the initial test to demonstrate compliance with paragraph (a) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).</p> <p>(i) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.</p>

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27.	<p>(IDs 06, 07, 08, 09, 11) In accordance with 40 CFR §63.544 Standards For Process Fugitive Sources:</p> <p>(a) Each owner or operator of a secondary lead smelter shall control the process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section in accordance with the equipment and operational standards presented in paragraphs (b) and (c) of this section.</p> <p>(a)(1) Smelting furnace and dryer charging hoppers, chutes, and skip hoists;</p> <p>(a)(2) Smelting furnace lead taps, and molds during tapping;</p> <p>(a)(3) Smelting furnace slag taps, and molds during tapping;</p> <p>(a)(4) Refining kettles;</p> <p>(a)(5) Dryer transition pieces; and</p> <p>(a)(6) Agglomerating furnace product taps.</p> <p>(b) Process fugitive emission sources shall be equipped with an enclosure hood meeting the requirements of paragraphs (b)(1), (b)(2), or (b)(3) of this section, or be located in a total enclosure subject to general ventilation that maintains the building at a lower than ambient pressure to ensure in-draft through any doorway opening.</p> <p>(b)(1) All process fugitive enclosure hoods except those specified for refining kettles and dryer transition pieces shall be ventilated to maintain a face velocity of at least 90 meters per minute (300 feet per minute) at all hood openings.</p> <p>(b)(2) Process fugitive enclosure hoods required for refining kettles in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 75 meters per minute (250 feet per minute).</p> <p>(b)(3) Process fugitive enclosure hoods required over dryer transition pieces in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 110 meters per minute (350 feet per minute).</p> <p>(c) Ventilation air from all enclosures hoods and total enclosures shall be conveyed to a control device. Gases discharged to the atmosphere from these control devices shall not contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).</p> <p>(d) All dryer emission vents and agglomerating furnace emission vents shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).</p> <p>(e) Except as provided in paragraph (f) of this section, following the date of the initial test to demonstrate compliance with paragraphs (c) and (d) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).</p> <p>(f) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.</p> <p>(g) As an alternative to paragraph (a)(5) of this section, an owner or operator may elect to control the process fugitive emissions from dryer transition pieces by installing and operating pressurized dryer breaching seals at each transition piece.</p>

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28.	<p>(Unit IDs 02, 06, 10, 12, 14) In accordance with 40 CFR 63.545:</p> <p>(a) Each owner or operator of a secondary lead smelter shall prepare and at all times operate according to a standard operating procedures manual that describes in detail the measures that will be put in place to control fugitive dust emission sources within the areas of the secondary lead smelter listed in (a)(1) through (a)(5).</p> <p style="padding-left: 40px;">(a)(1) Plant roadways;</p> <p style="padding-left: 40px;">(a)(2) Battery breaking area;</p> <p style="padding-left: 40px;">(a)(3) Furnace area;</p> <p style="padding-left: 40px;">(a)(4) Refining and casting area; and</p> <p style="padding-left: 40px;">(a)(5) Materials storage and handling area.</p> <p>(b) The standard operating procedures manual shall be submitted to the Administrator or delegated authority for review and approval.</p> <p>(c) The controls specified in the standard operating procedures manual shall at a minimum include the requirements of paragraphs (c)(1) through (c)(5) of this section, unless the owner or operator satisfies the requirements in paragraph (f) of this section.</p> <p style="padding-left: 40px;">(c)(1) Plant roadways-paving of all areas subject to vehicle traffic and pavement cleaning twice per day of those areas, except on days when natural precipitation makes cleaning unnecessary or when sand or a similar material has been spread on plant roadways to provide traction on ice or snow.</p> <p style="padding-left: 40px;">(c)(2) Battery breaking area-partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, and pavement cleaning twice per day; or total enclosure of the battery breaking area.</p> <p style="padding-left: 40px;">(c)(3) Furnace area-partial enclosure and pavement cleaning twice per day; or total enclosure and ventilation of the enclosure to a control device.</p> <p style="padding-left: 40px;">(c)(4) Refining and casting area-partial enclosure and pavement cleaning twice per day; or total enclosure and ventilation of the enclosure to a control device.</p> <p style="padding-left: 40px;">(c)(5) Materials storage and handling area-partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, vehicle wash at each exit from the area, and paving of the area; or total enclosure of the area and ventilation of the enclosure to a control device, and a vehicle wash at each exit.</p> <p>(d) The standard operating procedures manual shall require that daily records be maintained of all wet suppression, pavement cleaning, and vehicle washing activities performed to control fugitive dust emissions.</p> <p>(e) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any building or enclosure ventilation system any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).</p>

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29.	<p>(Unit IDs 06, 07, 08, 09, 11) In accordance with 40 CFR 63.543(h) and 40 CFR 63.544(e), an initial source test for lead emissions shall be conducted within 60 calendar days after achieving the maximum production rate at which this facility will be operated, but no later than 180 calendar days after its initial startup and every year (no later than 12 months) thereafter. In accordance with 40 CFR 63.543(I) and 40 CFR 63.544(f), if a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds. Performance tests shall be conducted on Units 06, 07, 08, 09, 11 to show compliance with the Lead standards. Compliance with the Lead standards shall be determined by conducting performance tests in accordance with 40 CFR 60 Appendix A Reference Method 12 and in accordance with 40 CFR 63.547.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 60 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 60 days after completion of on-site testing</p>

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30.	<p>(Unit IDs 02, 06, 07, 08, 09, 10, 11, 12, 14) In accordance with 40 CFR §63.548 Monitoring Requirements:</p> <p>(a) Owners and operators of secondary lead smelters shall prepare, and at all times operate according to, a standard operating procedures manual that describes in detail procedures for inspection, maintenance, and corrective action plans for all baghouses (fabric filters) that are used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in <u>§§63.543, 63.544, and 63.545</u>, including those used to control emissions from building ventilation.</p> <p>(b) The standard operating procedures manual for baghouses required by paragraph (a) of this section shall be submitted to the BAQ – Air Toxics Section for review and approval.</p> <p>(c) The procedures specified in the standard operating procedures manual for inspections and routine maintenance shall, at a minimum, include the requirements of paragraphs (c)(1) through (c)(8) of this section.</p> <p style="padding-left: 40px;">(c)(1) Daily monitoring of pressure drop across each baghouse cell.</p> <p style="padding-left: 40px;">(c)(2) Weekly confirmation that dust is being removed from hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms.</p> <p style="padding-left: 40px;">(c)(3) Daily check of compressed air supply for pulse-jet baghouses.</p> <p style="padding-left: 40px;">(c)(4) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.</p> <p style="padding-left: 40px;">(c)(5) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.</p> <p style="padding-left: 40px;">(c)(6) Monthly check of bag tension on reverse air and shaker-type baghouses. Such checks are not required for shaker-type baghouses using self-tensioning (spring loaded) devices.</p> <p style="padding-left: 40px;">(c)(7) Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.</p> <p style="padding-left: 40px;">(c)(8) Quarterly inspection of fans for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means.</p> <p>(d) The procedures specified in the standard operating procedures manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.</p> <p>(g) Baghouses equipped with HEPA filters as a secondary filter used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in <u>§63.543, 63.544, or 63.545</u> are exempt from the requirement in §63.548(c)(9) of this section to be equipped with a bag leak detector. The owner or operator of an affected source that uses a HEPA filter shall monitor and record the pressure drop across the HEPA filter system daily. If the pressure drop is outside the limit(s) specified by the filter manufacturer, the owner or operator must take appropriate corrective measures, which may include but not be limited to those given in paragraphs (g)(1) through (g)(4) of this section.</p> <p style="padding-left: 40px;">(g)(1) Inspecting the filter and filter housing for air leaks and torn or broken filters.</p> <p style="padding-left: 40px;">(g)(2) Replacing defective filter media, or otherwise repairing the control device.</p> <p style="padding-left: 40px;">(g)(3) Sealing off a defective control device by routing air to other control devices.</p> <p style="padding-left: 40px;">(g)(4) Shutting down the process producing the particulate emissions.</p>

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30. Continued	(h) Baghouses that are used exclusively for the control of fugitive dust emissions from any source subject to the lead emissions standard in <u>§63.545</u> are exempt from the requirement in §63.548(c)(9) of this section to be equipped with a bag leak detector.
31.	(Unit IDs 02, 06, 07, 08, 09, 10, 11, 12, 14) In accordance with 40 CFR §63.549 (Notification Requirements): (a) The owner or operator of a secondary lead smelter shall comply with all of the notification requirements of <u>§63.9</u> of subpart A, General Provisions. (b) The owner or operator of a secondary lead smelter shall submit the fugitive dust control standard operating procedures manual required under <u>§63.545(a)</u> and the standard operating procedures manual for baghouses required under <u>§63.548(a)</u> to the Manager of the Air Toxics Section, Bureau of Air Quality along with a notification that the smelter is seeking review and approval of these plans and procedures. The owner or operator of a secondary lead smelter that commences construction or reconstruction after June 9, 1994, shall submit this notification no later than 180 days before startup of the constructed or reconstructed secondary lead smelter.

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32.	<p>(Unit IDs 02, 06, 07, 08, 09, 10, 11, 12, 14) In accordance with 40 CFR §63.9 (Notification Requirements):</p> <p>(e) <i>Notification of performance test.</i> The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.</p> <p>(h)(2)(i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list--</p> <p>(h)(2)(i)(A) The methods that were used to determine compliance;</p> <p>(h)(2)(i)(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;</p> <p>(h)(2)(i)(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;</p> <p>(h)(2)(i)(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;</p> <p>(h)(2)(i)(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);</p> <p>(h)(2)(i)(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and</p> <p>(h)(2)(i)(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.</p> <p>(h)(2)(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.</p>

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33.	<p>(Unit IDs 02, 06, 07, 08, 09, 10, 11, 12, 14) In accordance with 40 CFR §63.550 (Recordkeeping And Reporting Requirements):</p> <p>(a) The owner or operator of a secondary lead smelter shall comply with all of the recordkeeping requirements under <u>§63.10</u> of the General Provisions. In addition, each owner or operator of a secondary lead smelter shall maintain for a period of 5 years, records of the information listed in paragraphs (a)(1) through (a)(6) of this section.</p> <p>(a)(1) An identification of the date and time of all bag leak detection system alarms, their cause, and an explanation of the corrective actions taken.</p> <p>(a)(4) Any recordkeeping required as part of the practices described in the standard operating procedures manual required under <u>§63.545(a)</u> for the control of fugitive dust emissions.</p> <p>(a)(5) Any recordkeeping required as part of the practices described in the standard operating procedures manual for baghouses required under <u>§63.548(a)</u>.</p> <p>(b) The owner or operator of a secondary lead smelter shall comply with all of the reporting requirements under <u>§63.10</u> of the General Provisions. The submittal of reports shall be no less frequent than specified under <u>§63.10(e)(3)</u> of the General Provisions. Once a source reports a violation of the standard or excess emissions, the source shall follow the reporting format required under <u>§63.10(e)(3)</u> until a request to reduce reporting frequency is approved.</p> <p>(c) In addition to the information required under <u>§63.10</u> of the General Provisions, reports required under paragraph (b) of this section shall include the information specified in paragraphs (c)(4) and (c)(6) of this section.</p> <p>(c)(4) The reports shall contain a summary of the records maintained as part of the practices described in the standard operating procedures manual for baghouses required under <u>§63.548(a)</u>, including an explanation of the periods when the procedures were not followed and the corrective actions taken.</p> <p>(c)(6) The reports shall contain a summary of the fugitive dust control measures performed during the required reporting period, including an explanation of the periods when the procedures outlined in the standard operating procedures manual pursuant to <u>§63.545(a)</u> were not followed and the corrective actions taken. The reports shall not contain copies of the daily records required to demonstrate compliance with the requirements of the standard operating procedures manuals required under <u>§§63.545(a)</u> and <u>63.548(a)</u>.</p>
34.	<p>(Unit IDs 02, 06, 07, 08, 09, 10, 11, 12, 14) In accordance with 40 CFR §63.10(d) (General reporting requirements):</p> <p>(d)(2) Reporting results of performance tests. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under §63.7 to the Department. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the Department. The owner or operator of an affected source shall report the results of the performance test to the Department before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Department. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h).</p>
35.	<p>All Part 63 NESHAP notifications and reports shall be sent to the South Carolina Department of Health and Environmental Control - Bureau of Air Quality (SCDHEC - BAQ) at the following address:</p> <p align="center">SCDHEC - BAQ Air Toxics Section 2600 Bull Street Columbia, SC 29201</p>

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36.	<p>All Part 63 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:</p> <p align="center">US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street Atlanta, GA 30303</p>
37.	<p>(Unit IDs 07, 08, 09) In accordance with 40 CFR 60.122, within 60 calendar days after achieving the maximum production rate at which this facility will be operated, but no later than 180 calendar days after its initial startup and at such other times as may be required by the Department under section 114 of the Clean Air Act, the owner or operator of this facility shall conduct performance tests. Performance tests shall be conducted on units 07, 08, and 09 to show compliance with the opacity and particulate matter standards. A source test for particulate matter shall be conducted every two years thereafter unless the initial source test shows a particulate matter speciation of greater than or equal to 90% lead. Compliance with the opacity standard shall be determined by conducting performance tests in accordance with 40 CFR 60 Appendix A Reference Method 9. Compliance with the particulate matter standard shall be determined by conducting performance tests in accordance with 40 CFR 60 Appendix A Reference Method 5.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>
38.	<p>(IDs 06, 07, 08, 09, 11) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for NOx emissions shall be conducted within 180 days after startup.</p> <ul style="list-style-type: none"> • The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with the facility wide PSD avoidance limit of <100 tons per year of NOx <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>

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39.	<p>(IDs 06, 07, 08, 09, 11) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for CO emissions shall be conducted within 180 days after startup. Unit ID 11 shall be tested every 2 years thereafter.</p> <ul style="list-style-type: none"> • The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with the facility wide PSD avoidance limit of <100 tons per year of CO; <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality’s Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>
40.	<p>(IDs 06, 07, 08, 09, 11) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for SO₂ emissions shall be conducted within 180 days after startup and then every two years from the initial date of startup. The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with the facility wide PSD avoidance limit of <100 tons per year of SO₂. The operating ranges for the scrubber shall also be determined during this test.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality’s Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>
41.	<p>(Facility-Wide) In accordance with SC Regulation 61-62.1, Section II(E), the facility wide particulate matter (PM), PM₁₀, SO₂, CO and NO_x emissions are limited to less than 100 tons per year each, based on a 12 month rolling sum. These emission limits are to avoid the requirements of SC Regulation 61-62.5, Standard 7 (PSD Avoidance).</p> <p>The facility-wide emissions for PM, PM₁₀, SO₂, CO and NO_x emissions shall be calculated on a monthly basis, and a twelve-month rolling sum shall be calculated for total PM, PM₁₀, SO₂, CO and NO_x emissions. Malfunctions and upsets are required to be quantified and included in the calculations. Reports of the calculated values and the twelve-month rolling sum shall be submitted semiannually.</p> <p>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.</p>
42.	<p>(Unit ID 13) In accordance with SC Regulation 61-62.1, Section II(E), both emergency generators are limited to less than or equal to 250 hours per year of operation (total) based on a 12 month rolling sum. The owner or operator shall record the total number hours operated on a monthly basis, and a twelve-month rolling sum shall be calculated for total hours operated. The twelve-month rolling sum shall not exceed 250 hours (total) for each 12 month rolling sum. Reports of the twelve-month rolling sum shall be submitted semiannually.</p>

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Condition Number	Conditions
43.	<p>(Unit ID 07, 08, 09) The owner/operator shall install, operate, and maintain liquid flow meters, scrubber liquid exit pH meters and liquid to gas ratio meters. Each parameter shall be recorded each shift during source operation. The scrubber(s) shall be in place and operational whenever processes controlled by the scrubber(s) are running. During periods of scrubber malfunction that cause excess emissions or scrubber failure, the process shall be shutdown as quickly as possible considering safety. Once the scrubber is properly operational, the process can be re-started.</p> <p>Prior to the first source test, the facility shall use manufacturer's recommendations for operational ranges. Operational ranges after the source test for the monitored parameters shall be established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters shall be derived from stack test data, which demonstrate the proper operation of the equipment in compliance. These ranges, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of start up. The operating ranges may be updated using this procedure, following Bureau approval.</p>
44.	<p>(Unit IDs 07, 08, 09)The owner/operator shall install, operate and maintain combustion zone and/or afterburner temperature indicators on each incinerator. Temperature readings shall be recorded at least every fifteen (15) minutes and maintained on site. The temperature shall be maintained at or above the minimum temperature established during the initial source test. The afterburner shall be in place and operational whenever processes controlled by the afterburner are running. During periods of afterburner malfunction that cause excess emissions or afterburner failure, the process shall be shutdown as quickly as possible considering safety. Once the afterburner is properly operational, the process can be re-started.</p> <p>Prior to the first source test, the facility shall use manufacturer's recommendations for minimum afterburner temperature. Minimum afterburner temperature after the source test shall be established to provide a reasonable assurance of compliance. The minimum afterburner temperature shall be derived from stack test data, which demonstrates the proper operation of the equipment in compliance. The minimum temperature, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of start up. The minimum afterburner temperature may be updated using this procedure, following Bureau approval.</p>
45.	<p>(Unit ID 01) The owner/operator shall install, operate, and maintain pressure drop indicators and liquid flow meters, liquid pressure indicators, gas flow meters, ph meters on each scrubber module. Each parameter shall be recorded each shift during source operation. The scrubber(s) shall be in place and operational whenever processes controlled by the scrubber(s) are running. During periods of scrubber malfunction that cause excess emissions or scrubber failure, the process shall be shutdown as quickly as possible considering safety. Once the scrubber is properly operational, the process can be re-started.</p> <p>Prior to the first source test, the facility shall use manufacturer's recommendations for operational ranges. Operational ranges after the source test for the monitored parameters shall be established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters shall be derived from stack test data, which demonstrate the proper operation of the equipment in compliance. These ranges, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of start up. The operating ranges may be updated using this procedure, following Bureau approval.</p>
46.	<p>(Unit IDs 06, 07, 08, 09, 11, 14) The owner/operator shall install, operate and maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded each shift during source operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running. During periods of baghouse malfunction that cause excess emissions or control device failure, the process shall be shutdown as quickly as possible considering safety. Once the baghouse is properly operational, the process can be re-started.</p>

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Condition Number	Conditions
47.	(Unit IDs 06, 07, 08, 09, 10, 11) The owner/operator shall install, operate and maintain pressure drop gauge(s) on the HEPA Filter. Pressure drop readings shall be recorded each shift during source operation. The HEPA Filter shall be in place and operational whenever processes controlled by the HEPA filter are running. During periods of HEPA malfunction that cause excess emissions or HEPA system failure, the process shall be shutdown as quickly as possible considering safety. Once the HEPA is properly operational, the process can be re-started.
48.	(IDs 06, 07, 08, 09, 10, 11, 12, 14) Operational ranges for the monitored parameters for the PM control devices shall be established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters shall be derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment in compliance. These ranges, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of start up. The operating ranges may be updated using this procedure, following Bureau approval.
49.	(Facility Wide) In accordance with 40 CFR 58, Appendix D 4.5, there must be one source-oriented SLAMS site located to measure the maximum lead concentration in the ambient air resulting from emissions from this facility. The monitoring results for this site will be provided to the national ambient air database (AQS) and made available to the facility. Data review will include, but not be limited to, concentration measurements, comparison to the level of the NAAQS for lead, and review of impacts and actual emissions. The Department shall determine if continued operation of the monitor is required during the annual network monitoring plan review.
50.	<p>Unless elsewhere specified within this permit, all reports required under this permit including all recorded parameters and calculated values shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality, at the address listed below, postmarked no later than thirty (30) calendar days after the end of the reporting period.</p> <p align="center">SC DHEC - BAQ Technical Management Section 2600 Bull Street Columbia, SC 29201</p>
51.	(Unit IDs 06, 07, 08, 09) In accordance with SC Regulation 61-62.1, Section II(E), the owner or operator of the smelters shall install, calibrate, maintain, and operate a CEMS for measuring CO concentration discharged to the atmosphere from the smelters and record the output of the system. All continuous monitoring systems required shall be subject to the provisions of SC Regulation 61-62.60 Subpart A.
52.	(Unit IDs 06, 07, 08, 09, 11) In accordance with SC Regulation 61-62.1, Section II(E), the owner or operator of the smelters shall install, calibrate, maintain, and operate a CEMS for measuring NOx concentration discharged to the atmosphere from the smelters and record the output of the system. All continuous monitoring systems required shall be subject to the provisions of SC Regulation 61-62.60 Subpart A.
53.	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.

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Condition Number	Conditions
54.	<p>(Facility Wide) In accordance with SC Regulation 61-62.1, Section II(E), the facility wide hazardous air pollutant (HAP) emissions are limited to less than 10 tons per year individual HAP and less than 25 tons per year total HAPs, based on a 12 month rolling sum.</p> <p>The owner/operator shall maintain records of all HAP. These records shall include the total amount of each material used, the HAP content in percent by weight of each material, and any other records necessary to determine facility wide HAP emissions. HAP emissions shall be calculated on a monthly basis, and a twelve-month rolling sum shall be calculated for total HAP emissions. The twelve-month rolling sum shall be less than 10 tons annually for each single HAP and less than 25 tons annually for total HAPs. Reports of the calculated values and the twelve-month rolling sum shall be submitted semiannually.</p> <p>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.</p>
55.	<p>(IDs 01, 06, 07, 08, 09, 10, 11, 12,14) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for PM emissions shall be conducted within 180 days after startup and every two years thereafter. The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with any applicable emission limits.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>
56.	<p>(IDs 06, 07, 08, 09, 11) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for antimony, arsenic, beryllium, chromium, cadmium, manganese, selenium, and nickel emissions shall be conducted within 180 days after startup. The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with any applicable emission limits.</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>
57.	<p>In accordance with 40 CFR 98 Mandatory Greenhouse Gas Reporting, § 98.2, reporting requirements and related monitoring, recordkeeping, and reporting requirements apply to any lead production facility in any calendar year starting in 2010 that emits 25,000 metric tons CO₂e or more per year. The facility shall comply with all applicable parts of this rule.</p>

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58.	<p>(IDs 03, 07, 08, 09) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for Acetaldehyde, Acrolein, Benzene, Ethyl Benzene, Formaldehyde, Propionaldehyde, HCl, Chloroform, 1,3 Butadiene, Vinyl Chloride, Xylenes, Styrene, and Toluene emissions shall be conducted within 180 days after startup. The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with any applicable emission limits</p> <p>All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality’s Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.</p>
59.	<p>(Facility Wide) The facility shall maintain daily records of the mass of batteries received and production records of mass of lead ingots produced. This information shall be maintained on site and reports shall be submitted semiannually.</p>
60.	<p>(ID 11) The following materials may be used as additives to the refining process:</p> <ul style="list-style-type: none"> • Caustic Soda • Sulfur (500 pounds per day) • Sodium Nitrate (1,102 pounds per day) • Calcium • Magnesium • Zinc • Saw Dust <p>Daily records of sodium nitrate usage and sulfur usage shall be maintained on site and reports submitted semiannually. The facility must receive written Bureau approval prior to using any new additive that may increase emissions.</p>
61.	<p>(ID 13) The emergency generators shall comply with the requirements of all applicable regulations including but not limited to:</p> <ol style="list-style-type: none"> (1) New Source Performance Standards (NSPS) 40 CFR 60 Subparts A (General Provisions) and IIII (Stationary Compression Ignition Internal Combustion Engines) (2) National Emission Standards For Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A (General Provisions) and ZZZZ (Stationary Reciprocating Internal Combustion Engines) <p>The generators have been defined as emergency generators, in accordance with 40 CFR 63 Subpart ZZZZ. Therefore, they do not have to meet the requirements of the subpart or of Subpart A of 40 CFR 63 except for the initial notification requirements of 40 CFR 63.6645(d).</p>
62.	<p>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 indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.70.7.</p>

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63.	(Unit IDs 12, 14) The owner/operator shall install, operate and maintain pressure drop gauge(s) on the HEPA Filter. Pressure drop readings shall be recorded each shift during source operation. The HEPA Filter shall be in place and operational whenever processes controlled by the HEPA filter are running.
64.	(IDs 06, 07, 08, 09, 11) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for mercury emissions shall be conducted within 180 days after startup and every two years thereafter. The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with any applicable emission limits. All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.
65.	(IDs 01) In accordance with SC Regulation 61-62.1, Section IV(A), an initial source test for sulfuric acid (H ₂ SO ₄) emissions shall be conducted within 180 days after startup and every two years thereafter. The results of these source tests shall be used to verify and establish emission factors, verify emissions used in air dispersion modeling, and demonstrate compliance with any applicable emission limits. All test plans, notifications and final reports shall be submitted to the Bureau of Air Quality's Source Evaluation Section according to SC Regulation 61-62.1 Section IV. A protocol shall be submitted to the Source Test Evaluation Section of this Bureau for approval indicating the proposed initial source test date and test procedure at least 45 days prior to the proposed test date. The Bureau must be notified at least two weeks prior to a source test so that a Bureau Representative may be present, and the final test report must be submitted no later than 30 days after completion of on-site testing. An alternative date for the final test report may be requested in the site specific test plan. The alternative date must be approved by the Bureau.
66.	Prior to start of operation the facility shall submit manufacturer's certification that the HEPA filters meet the HEPA filter definition in 40 CFR 63, Subpart X.
67.	(Facility-Wide) In accordance with SC Regulation 61-62.1, Section II(J), the facility wide mercury emissions are limited to less than 12 pounds per year, based on a 12 month rolling sum. The facility-wide emissions for mercury shall be calculated on a monthly basis, and a twelve-month rolling sum shall be calculated. Malfunctions and upsets are required to be quantified and included in the calculations. Reports of the calculated values and the twelve-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.



Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

ATTACHMENT A

Modeled Emission Rates

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AMBIENT AIR QUALITY STANDARDS - STANDARD 2					
STACK	Modeled Emission Rates (lbs/hr)				
	TSP	PM ₁₀	SO ₂	NO _x	CO
CS1-CX Plant Scrubber	0.28	0.28	--	--	--
BB1-CX Plant Vent 1	0.003	0.003	--	--	--
BB2-CX Plant Vent 2	0.003	0.003	--	--	--
BB3-CX Plant Vent 3	0.003	0.003	--	--	--
BB4-CX Plant Vent 4	0.003	0.003	--	--	--
BB5-CX Plant Vent 5	0.003	0.003	--	--	--
BB6-CX Plant Vent 6	0.003	0.003	--	--	--
BB7-CX Plant Vent 7	0.003	0.003	--	--	--
BB8-CX Plant Vent 8	0.003	0.003	--	--	--
BB9-CX Plant Vent 9	0.003	0.003	--	--	--
BB10-CX Plant Vent 10	0.003	0.003	--	--	--
B1-Boiler	0.05	0.05	0.004	0.62	0.52
FT1-Flash Tube	0.06	0.06	0.001	0.2	0.17
CB1-Melter/Charge Prep	0.04	0.04	1.98	5.51	5.73
F1-Smelting Furnace 1	0.18	0.18	2.33	4.19	4.79
F2-Smelting Furnace 2	0.18	0.18	2.33	4.19	4.79
F3-Smelting Furnace 3	0.18	0.18	2.33	4.19	4.79
FB1-Foundry Ventilation	0.26	0.26	--	--	--
RB1-Refining Kettles	0.49	0.49	4.52	3.3	1.1
RE1-Refining Area 1	0.01	0.01	--	--	--
RE2-Refining Area 2	0.01	0.01	--	--	--
RE3-Refining Area 3	0.01	0.01	--	--	--
RE4-Refining Area 4	0.01	0.01	--	--	--
RE5-Refining Area 5	0.01	0.01	--	--	--
SW1-Slag Warehouse	3.00E-04	3.00E-04	--	--	--
RV-Ridge Vent	2.39	2.39	--	--	--
FACILITY TOTAL	4.19	4.19	13.49	22.2	21.89
Listed emission rates for the Ridge Vent are for the entire vent, not each individual portion of the volume source.					

AMBIENT AIR QUALITY STANDARDS - STANDARD 2	
STACK	Modeled Emission Rates (lbs/hr)
	Lead
CS1-CX Plant Scrubber	0.0275
BB1-CX Plant Vent 1	3.37E-04
BB2-CX Plant Vent 2	3.37E-04
BB3-CX Plant Vent 3	3.37E-04
BB4-CX Plant Vent 4	3.37E-04
BB5-CX Plant Vent 5	3.37E-04
BB6-CX Plant Vent 6	3.37E-04
BB7-CX Plant Vent 7	3.37E-04
BB8-CX Plant Vent 8	3.37E-04
BB9-CX Plant Vent 9	3.37E-04
BB10-CX Plant Vent 10	3.37E-04
FT1-Flash Tube	3.02E-07
CB1-Melter/Charge Prep	0.04

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AMBIENT AIR QUALITY STANDARDS - STANDARD 2	
STACK	Modeled Emission Rates (lbs/hr)
	Lead
F1-Smelting Furnace 1	0.18
F2-Smelting Furnace 2	0.18
F3-Smelting Furnace 3	0.18
FB1-Foundry Ventilation	0.26
RB1-Refining Kettles	0.49
RE1-Refining Area 1	0.01
RE2-Refining Area 2	0.01
RE3-Refining Area 3	0.01
RE4-Refining Area 4	0.01
RE5-Refining Area 5	0.01
SW1-Slag Warehouse	3.00E-04
RV-Ridge Vent	2.43E-05
FACILITY TOTAL	1.41
Listed emission rates for the Ridge Vent are for the entire vent, not each individual portion of the volume source.	

CLASS II PREVENTION OF SIGNIFICANT DETERIORATION - STANDARD 7			
STACK	Modeled Emission Rates (lbs/hr)		
	PM₁₀	SO₂	NO_x
CS1-CX Plant Scrubber	0.28	--	--
BB1-CX Plant Vent 1	0.003	--	--
BB2-CX Plant Vent 2	0.003	--	--
BB3-CX Plant Vent 3	0.003	--	--
BB4-CX Plant Vent 4	0.003	--	--
BB5-CX Plant Vent 5	0.003	--	--
BB6-CX Plant Vent 6	0.003	--	--
BB7-CX Plant Vent 7	0.003	--	--
BB8-CX Plant Vent 8	0.003	--	--
BB9-CX Plant Vent 9	0.003	--	--
BB10-CX Plant Vent 10	0.003	--	--
B1-Boiler	0.05	0.004	0.62
FT1-Flash Tube	0.06	0.001	0.2
CB1-Melter/Charge Prep	0.04	1.98	5.51
F1-Smelting Furnace 1	0.18	2.33	4.19
F2-Smelting Furnace 2	0.18	2.33	4.19
F3-Smelting Furnace 3	0.18	2.33	4.19
FB1-Foundry Ventilation	0.26	--	--
RB1-Refining Kettles	0.49	4.52	3.3
RE1-Refining Area 1	0.01	--	--
RE2-Refining Area 2	0.01	--	--
RE3-Refining Area 3	0.01	--	--
RE4-Refining Area 4	0.01	--	--
RE5-Refining Area 5	0.01	--	--
SW1-Slag Warehouse	3.00E-04	--	--
RV-Ridge Vent	2.39	--	--
FACILITY TOTAL	4.19	13.49	22.2

ATTACHMENT A

Modeled Emission Rates

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STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES TABLE 1 (LBS/HR)				
STACK ID	Acrolein	Antimony	Arsenic	Cadmium
	107-02-8	N/A	7440-38-2	7440-43-9
CB1-Melter/Charge Prep	--	0.00441	0.0022	0.0022
F1-Smelting Furnace 1	--	0.0176	0.00881	0.00881
F2-Smelting Furnace 2	--	0.0176	0.00881	0.00881
F3-Smelting Furnace 3	--	0.0176	0.00881	0.00881
FB1-Foundry Ventilation	--	0.0264	0.0132	0.0132
FT1-Flash Tube	--	4.79E-06	4.79E-06	4.79E-06
RB1-Refining Kettles	--	0.00275	0.00064	0.00084
RE1-Refining Area 1	--	0.00112	0.000561	0.000561
RE2-Refining Area 2	--	0.00112	0.000561	0.000561
RE3-Refining Area 3	--	0.00112	0.000561	0.000561
RE4-Refining Area 4	--	0.00112	0.000561	0.000561
RE5-Refining Area 5	--	0.00112	0.000561	0.000561
RV-Ridge Vent	2.95E-03	2.60E-08	1.04E-08	1.04E-08
SW1-Slag Warehouse	--	3.36E-05	1.68E-05	1.68E-05
FACILITY TOTAL	2.95E-03	0.092	0.045	0.045

Listed emission rates for the Ridge Vent are for the entire vent, not each individual portion of the volume source.

STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES TABLE 2 (LBS/HR)				
STACK ID	Chlorine	Chromium (+6) Compounds	Formaldehyde	HCl
	7782-50-5	N/A	50-00-0	7647-01-0
CB1-Melter/Charge Prep	--	4.41E-04	--	--
F1-Smelting Furnace 1	0.0364	0.00176	--	0.337
F2-Smelting Furnace 2	0.0364	0.00176	--	0.337
F3-Smelting Furnace 3	0.0364	0.00176	--	0.337
FB1-Foundry Ventilation	--	0.00264	--	--
FT1-Flash Tube	--	4.79E-06	--	--
RB1-Refining Kettles	--	4.91E-04	--	--
RE1-Refining Area 1	--	1.12E-04	--	--
RE2-Refining Area 2	--	1.12E-04	--	--
RE3-Refining Area 3	--	1.12E-04	--	--
RE4-Refining Area 4	--	1.12E-04	--	--

ATTACHMENT A

Modeled Emission Rates

Johnson Controls Inc. – Florence Recycling Plant

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STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES TABLE 2 (LBS/HR)				
STACK ID	Chlorine	Chromium (+6) Compounds	Formaldehyde	HCl
	7782-50-5	N/A	50-00-0	7647-01-0
RE5-Refining Area 5	--	1.12E-04	--	--
RV-Ridge Vent	--	2.08E-09	6.96E-02	--
SW1-Slag Warehouse	--	3.36E-06	--	--
FACILITY TOTAL	0.109	9.42E-03	6.96E-02	1.01
Listed emission rates for the Ridge Vent are for the entire vent, not each individual portion of the volume source.				

STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES TABLE 3 (LBS/HR)				
STACK ID	Mercury	Propionaldehyde	Sulfuric Acid	
	7439-97-6	123-38-6	7664-93-9	
CB1-Melter/Charge Prep	3.08E-04	--	--	
CS1-CX Plant Scrubber	--	--	0.275	
BB1-CX Plant Vent 1	--	--	0.0449	
BB2-CX Plant Vent 2	--	--	0.0449	
BB3-CX Plant Vent 3	--	--	0.0449	
BB4-CX Plant Vent 4	--	--	0.0449	
BB5-CX Plant Vent 5	-	--	0.0449	
BB6-CX Plant Vent 6	--	--	0.0449	
BB7-CX Plant Vent 7	--	--	0.0449	
BB8-CX Plant Vent 8	--	--	0.0449	
BB9-CX Plant Vent 9	--	--	0.0449	
BB10-CX Plant Vent 10	--	--	0.0449	
F1-Smelting Furnace 1	0.00123	--	--	
F2-Smelting Furnace 2	0.00123	--	--	
F3-Smelting Furnace 3	0.00123	--	--	
FB1-Foundry Ventilation	0.00185	--	--	
FT1-Flash Tube	4.79E-06	--	--	
RB1-Refining Kettles	3.44E-04	--	--	
RE1-Refining Area 1	7.86E-05	--	--	
RE2-Refining Area 2	7.86E-05	--	--	
RE3-Refining Area 3	7.86E-05	--	--	
RE4-Refining Area 4	7.86E-05	--	--	

ATTACHMENT A

Modeled Emission Rates

Johnson Controls Inc. – Florence Recycling Plant

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STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES TABLE 3 (LBS/HR)				
STACK ID	Mercury	Propionaldehyde	Sulfuric Acid	
	7439-97-6	123-38-6	7664-93-9	
RE5-Refining Area 5	7.86E-05	--	--	
RV-Ridge Vent	1.46E-09	5.85E-03	--	
FACILITY TOTAL	6.59E-03	5.85E-03	0.724	

Listed emission rates for the Ridge Vent are for the entire vent, not each individual portion of the volume source.

STANDARD NO. 8 – TOXIC AIR POLLUTANTS LEVEL I DE MINIMIS ANALYSIS				
POLLUTANT	CAS NUMBER	EMISSION RATE (LBS/DAY)	DE MINIMIS (LBS/DAY)	PASS (Y or N)
Acetaldehyde	75-07-0	1.38	21.6	Yes
Acrylic Acid	79-10-7	1.38	1.77	Yes
Formic Acid	64-18-6	0.35	2.7	Yes
MEK	78-93-3	0.84	177.000	Yes
Tetrachlorinated Dibenzo-p-dioxins	1746-01-6	0.000033	0.00	Yes
Polycyclic Organic Matter	---	0.000033	1.920	Yes

Via Certified Mail
91 7108 2133 3934 4680 6460

February 5, 2010

Johnson Controls Battery Group Inc. – Florence Recycling Plant
5757 N Green Bay Ave
Milwaukee, WI 53209

ATTENTION: Timothy J. Lafond

Dear Mr. Lafond:

Enclosed is Construction Permit No. 1040-0129-CA. Please note the conditions on this permit by reading it carefully. Pursuant to the South Carolina Administrative Procedures Act, this permit decision may be appealed in accordance with applicable state law. Please see the enclosed Notice of Appeal Procedure, effective July 01, 2006, for guidelines on appeal submittals.

In addition to this permit to construct, a permit to operate is required in accordance with the Air Pollution Control Regulations and Standards for the State of South Carolina. The regulations require a written request for a new or revised operating permit to cover any new, or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source unless a more stringent time frame is required.

Please examine this new permit carefully for errors or omissions and notify the appropriate staff member, James M. Myers, (803-898-4621) or e-mail at myersjm@dhec.sc.gov promptly if any are discovered.

Sincerely,



Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

EJB:JMM:kal

Enclosures

cc: Keith Lane, Region 4, Florence EQC Office
Rob vandenMeiracker, RMT Inc., 30 Patewood Dr., Ste 100, Greenville, SC 29615-3535
Permit File: 1040-0129-CA

Notice of Appeal Procedure

The following procedures are in effect beginning July 1, 2006, pursuant to 2006 Act No. 387:

1. This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.
2. An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3393.

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201

3. The request for final review should include the following:
 - a. the grounds on which the Department's decision is challenged and the specific changes sought in the decision
 - b. a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
 - c. a copy of the Department's decision or action under review
4. In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.
5. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.
6. The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.
7. If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.