



June 22, 2020

Mr. Matthew Hieshetter
 Clarios
 1800 Paper Mill Road
 Florence, SC 29501

Re: Furnace Nos. 1, 2, &3, Refining Process, Refining FEU Vent, Refining Combustion, CX Scrubber, CX FEU Vent, Melter, Foundry Ventilation, and Slag Warehouse Emissions Testing – Conducted December 9-14, 2019 - REDACTED Summary

Dear Mr. Hieshetter:

The results of the referenced source tests have been reviewed by the Department, and emission rates and operating parameters are summarized below:

CX Scrubber (ID: CD-FL-530)

Pollutant	Emissions	Limit
Lead (mg/dscm)	1.8E-02	1.0
Lead (gr/dscf)	7.9E-06	4.3E-04
Lead (lb/hr)	6.5E-04	-----
PM (lb/hr)	1.3E-01	10.19 ¹
H ₂ SO ₄ (lb/hr)	7.2E-03	-----

¹Based on SC Reg. 61-62.5, Standard No. 4, Section VIII.

CX FEU 5 (ID: PK-531e)

Pollutant	Emissions*	Limit
Lead (mg/dscm)	1.2E-02	1.0
Lead (gr/dscf)	5.1E-06	4.3E-04
Lead (lb/hr)	9.2E-04	2.0E-03**

*One FEU Vent was tested. These emission rates may be used as emission factors for all 5 CX FEU Vents.

**Modeled emission rate.

Melter and Charge Preparation (ID: CD-PK-730)

Pollutant	Emissions	Limit
Lead (mg/dscm)	1.9E-03	1.0
Lead (gr/dscf)	8.3E-07	4.3E-04
Lead (lb/hr)	7.4E-04	-----

Furnace 1 (ID: KL-711)

Pollutant	Emissions	Limit
Lead (mg/dscm)	9.0E-03	1.0
Lead (gr/dscf)	3.9E-06	4.3E-04
Lead (lb/hr)	1.1E-03	-----
SO ₂ (lb/hr)	<8.7E-02	-----

Furnace 2 (ID: KL-712)

Pollutant	Emissions	Limit
Lead (mg/dscm)	5.0E-03	1.0
Lead (gr/dscf)	2.2E-06	4.3E-04
Lead (lb/hr)	6.5E-04	-----
SO ₂ (lb/hr)	<5.4E-02	-----

Furnace 3 (ID: KL-713)

Pollutant	Emissions	Limit
Lead (mg/dscm)	1.4E-03	1.0
Lead (gr/dscf)	6.2E07	4.3E-04
Lead (lb/hr)	2.3E-04	-----
SO ₂ (lb/hr)	6.4E-01	-----

Refining Process (ID: CD-PK-820)

Pollutant	Emissions	Limit
Lead (mg/dscm)	8.1E-03	1.0
Lead (gr/dscf)	3.5E-06	4.3E-04
Lead (lb/hr)	2.5E-03	-----
CO Run 1 (lb/hr)	1.7	-----
CO Run 2 (lb/hr)	1.0	-----
CO Run 3 (lb/hr)	1.5	-----
SO ₂ (lb/hr)	<8.2E-02	-----

Refining Ventilation FEU 2 (ID: CD-PK-821b)

Pollutant	Emissions*	Limit
Lead (mg/dscm)	1.4E-02	1.0
Lead (gr/dscf)	6.0E-06	4.3E-04
Lead (lb/hr)	2.6E-04	-----

*One FEU Vent was tested. These emission rates may be used as emission factors for all 4 Refining FEU Vents.

Mr. Matthew Hieshetter
 June 22, 2020
 Page 3

Refining Combustion (ID: KT-810a-i)

Pollutant	Emissions*	Limit
CO (lb/hr)	1.7E-02	-----

Foundry Ventilation (ID: CD-PK-721)

Pollutant	Emissions*	Limit
Lead (mg/dscm)	6.1E-03	1.0
Lead (gr/dscf)	2.7E-06	4.3E-04
Lead (lb/hr)	1.6E-03	-----

Slag Warehouse (ID: SWC2)

Pollutant	Emissions	Limit
Lead (mg/dscm)	3.0E-03	1.0
Lead (gr/dscf)	1.3E-06	4.3E-04
Lead (lb/hr)	2.9E-04	-----
PM (lb/hr)	5.2E-02	25.3 ¹

¹Based on SC Reg. 61-62.5, Standard No. 4, Section VIII.

Compliance Status:

(Permit No. 1040-0129-CA).....**Compliance**
 (40 CFR 63, Subpart X).....**Compliance**

Source Test Schedule

Pollutant	Source	Due Date
Lead	ALL	12/31/2020
PM	CX Scrubber & Slag Warehouse	12/31/2021
SO ₂	Furnaces 1-3 & Refining Process	
CO	Refining Process & Refining Combustion	
H ₂ SO ₄	CX Scrubber	

Mr. Matthew Hieshetter
June 22, 2020
Page 4

If I can be of further assistance, please do not hesitate to call me at (803) 898-0834 or e-mail me at williad@dhc.sc.gov.

Sincerely,



Derek T. Williams
Environmental Health Manager
Source Evaluation Section
SC DHEC Bureau of Air Quality

Cc: Compliance File 1040-0129

Ec: Michael Verzwylt, BAQ Dawn Jordan, BAQ Briana Foust, BAQ
Brittany Staples, BAQ Bryan Nichols, BAQ
Breanna Lindler, BAQ Bryan Baxley, Pee Dee Region - Florence BEHS