



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

September 30, 2013

Mr. Gary Minck
 Johnson Controls Battery Group, Inc.
 1800 Paper Mill Road
 Florence, SC 29501

Re: CX Plant and PP Storage and Extrusion Emissions Testing – Conducted December 18, 2012 – Revision 1

Dear Mr. Minck;

The Department has reviewed the referenced tests and the results are summarized below:

CX Plant (ID 01) Average Emissions Summary			
Pollutant	Emission Concentration (gr/dscf)	Emission Rate (lb/hr)	Emission Limit (lb/hr)
Particulate Matter	5.00E-04	0.073	9.63 ¹
Sulfuric Acid	2.70E-04	0.041	0.275 ²

¹Based on a production rate of 28.3 tons per hour.

²Modeled emission rate.

Poly Plant Storage and Extrusion (ID 03) Emissions Summary			
Pollutant	Average Emissions (lb/hr)	Pollutant	Average Emissions (lb/hr)
Vinyl Chloride ¹	<1.07E-04	m-/p-Xylenes ¹	7.09E-04
1,3-Butadiene ¹	<9.25E-05	o-Xylene ¹	3.01E-04
Acrolein ¹	3.61E-04	Styrene ¹	<1.78E-04
Chloroform ¹	1.86E-03	HCl ²	<1.81E-03
Benzene ¹	1.67E-04	Formaldehyde ³	<8.34E-04
Toluene ¹	5.21E-04	Acetaldehyde ³	1.73E-03
Ethylbenzene ¹	2.08E-04	Propionaldehyde ³	1.07E-02

¹Determined using Method TO-15.

²Determined using NIOSH method 7093.

³Determined using method TO-11A.

During the test of the CX plant, the production rate averaged 28.3 short tons per hour, 114 percent of the nominal production rate of 24.8 tons per hour. Scrubber differential pressure ranged from 0.25 kPa to 0.38 kPa and averaged 0.28 kPa. Scrubber pH ranged from 8.86 to 9.33 and averaged 9.1. Scrubber liquid flow rate to the two sets of spray nozzles averaged 121.0 gpm and 60.0 gpm. Building pressure ranged from -0.041 in w.c. to 0.042 in w.c. and averaged 0.005 in w.c. The building pressure monitors meet the sensitivity and accuracy requirements of 40 CFR §63.548. The battery breaker met qualifications for total enclosure as required by 40 CFR §63.545.

During the test of the poly plant storage and extrusion area, the extruder ran at a constant production rate of 3 tons per hour, 164 percent of the nominal production rate of 1.82 tons per hour.

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Compliance Status:
CX Plant and Poly Plant Storage and Extrusion
(Permit No. 1040-0129-CA).....**Compliance**
(40 CFR 63, Subpart X).....**Compliance**

The next test for sulfuric acid mist and particulate matter for the CX Plant shall be conducted no later than **December 31, 2014**.

If I can be of further assistance, please do not hesitate to call me at (803) 898-0834 or e-mail me at williadt@dhec.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 Shroup Carol Boney Dawn Jordan
 Ted Ambrose James Myers Heinz Kaiser