



## **Bureau of Air Quality Title V Operating Permit**

**Guardian Industries, LLC  
610 L&C Railway Distribution Park  
Richburg, South Carolina 29729  
Chester County**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Title V permit application received on June 29, 2012, as amended.

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

**Permit Number: TV-0640-0018**

<b>Issue Date:</b>	<b>October 12, 2017</b>	<b>Effective Date:</b>	<b>January 1, 2018</b>
<b>Expiration Date:</b>	<b>December 31, 2022</b>	<b>Renewal Due Date:</b>	<b>June 30, 2022</b>

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

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<b>RECORD OF REVISIONS</b>		
<b>Date</b>	<b>Type</b>	<b>Description of Changes</b>

AA Administrative Amendment

MM Minor Modification

SM Significant Modification

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**A. EMISSION UNIT DESCRIPTION**

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>
01	Glass Production
02	Pattern Glass Production
03	Glass Storage
04	Glass Fabrication
05	Coating Process

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

**B.1 EQUIPMENT FOR EMISSION UNIT 01 – Glass Production**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
1.01	Melting Furnace	November 1988/ May 2006	ESP1, Scrubber	MELT1
1.02	Cullet Crusher Hopper	November 1988	0344-DC	N/A
1.03	Cullet Hopper	November 1988/ May 2006	None	N/A
1.04	Raw Material Conveyor	November 1988/ May 2006	None	RMC63
1.05	Raw Material Bucket Elevator	November 1988/ May 2006	0303-DC	N/A
1.06	Cullet Bucket Elevator	November 1988/ May 2006	0334-DC, 0333-DC	N/A
1.07	Cullet Cross Conveyor	November 1988	0338-DC	6.6 (CC66)
1.08	Bin #1	November 1988	0305-DC	6.7 (BIN67)
1.09	Bin #2	November 1988	0306-DC	6.8 (BIN68)
1.10	Bin #3	November 1988	0307-DC	6.9 (BIN69)
1.11	Bin #4	November 1988	0308-DC	6.10 (BIN620)
1.12	Bin #5	November 1988	0309-DC	N/A
1.13	Bin #6	November 1988	0310-DC	6.12 (BIN612)
1.14	Bin #7	November 1988/ February 2004	0311-DC	N/A
1.15	Bin #8	November 1988	0312-DC	N/A
1.16	Bin #9	November 1988	0313-DC	N/A
1.17	Bin #10	November 1988	0314-DC	N/A

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**B.1 EQUIPMENT FOR EMISSION UNIT 01 – Glass Production**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
1.18	Bin #11 & 12	November 1988	0315-DC	N/A
1.19	Spare Bin	November 1988	0317-DC	N/A
1.20	Rouge Bin	November 1988	0318-DC	N/A
1.21	Carbon/Charcoal Bin	November 1988	0319-DC	N/A
1.22	Check Scale	November 1988	0326-DC	N/A
1.23	Weigh Batch Elevator	November 1988	0325-DC	N/A
1.24	Mixer #1	November 1988/ May 2006	None	N/A
1.25	Mixer #2	May 2006	None	N/A
1.26	Mixed Batch Conveyor	November 1988	None	N/A
1.27	Surge Bin #1	November 1988	None	N/A
1.28	Surge Bin #2	May 2006	None	N/A
1.29	Major Scale	November 1988	None	N/A
1.30	Minor Scale	November 1988	None	N/A
1.31	Shuttle Carriage	November 1988	None	N/A
1.32	Cullet Conveyor	November 1988	0905-DC	5.0 (CC5)
1.33	Lehr SO <sub>2</sub> Sprayer	November 1988	None	N/A
1.34	Main Line Cutters	November 1988/ May 2006	None	N/A
1.35	Main Line	November 1988/ May 2006	None	N/A
1.36	Spur Line 1	May 2006	0909-DC-01	N/A
1.37	Spur Line 2	May 2006	0909-DC-02	N/A
1.38	Spur Line 3	May 2006	0909-DC-03	N/A
1.39	Spur Line 4	May 2006	0909-DC-04	N/A
1.40	Spur Line 5	May 2006	0909-DC-05	N/A
1.41	Load Share	May 2006	0909-DC-06, 0908-DC-01	N/A
1.42	SL 1 Glass Separating Powder	November 1988/ May 2006	None	N/A
1.43	SL 2 Glass Separating Powder	May 2006	None	N/A
1.44	SL 3 Glass Separating Powder	May 2006	None	N/A
1.45	SL 4 Glass Separating Powder	May 2006	None	N/A
1.46	SL 5 Glass Separating Powder	May 2006	None	N/A
1.47	LS Glass Separating Powder	May 2006	None	N/A
1.48	Propane Vaporizer #1	2017	None	N/A
1.49	Propane Vaporizer #2	2017	None	N/A
1.50	Batch House Waste Dump	November 1988	None	N/A
1.67	Spray System	January 1998	None	N/A
1.70	Unload Shed #1	November 1988	0302.1-DC	N/A

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**B.1 EQUIPMENT FOR EMISSION UNIT 01 – Glass Production**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/ Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
1.71	Unload Shed #2	September 1998	0302.2-DC	N/A
1.72	EP Dust Transport System	October 2004	None	N/A
1.73	Soda Ash Transport System	October 2004	None	N/A
1.74	SO <sub>2</sub> Storage Area	November 1988	None	N/A
1.75	Defect Marking System	June 2001	None	N/A
1.76	Reagent Tank	October 2004	None	N/A
1.77	Reagent Mixing Tank	May 2006	None	N/A
1.78	Soda Ash Day Bin	October 2004	1808-DC	N/A
1.81	EP Waste Hopper	October 2004	1808-DC	N/A
1.82	5.2 x 10 <sup>6</sup> Btu/hr Low NO <sub>x</sub> Burner for Color Glass Process	2013	None	MELT1
1.83	5.2 x 10 <sup>6</sup> Btu/hr Low NO <sub>x</sub> Burner for Color Glass Process	2013	None	MELT1

**B.2 CONTROL DEVICE(S) FOR EMISSION UNIT 01 – Glass Production**

<b>Control Device ID</b>	<b>Control Device Description</b>	<b>Installation/ Modification Date</b>	<b>Pollutant(s) Controlled</b>
ESP1	McGill Airclean ESP	October 2004	PM/PM <sub>10</sub> /PM <sub>2.5</sub> Se and Co
Scrubber	McGill Airclean Scrubber	October 2004	SO <sub>2</sub> /H <sub>2</sub> SO <sub>4</sub>
0344 - DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0303-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988/ May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0334-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988/ May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0333-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0338-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0305-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0306-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0307-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0308-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0309-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0310-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0311-DC	Flex-Kleen, 58-CTBS-18 IIG Dust Collector	November 1988/ October 2004	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0312-DC	Flex-Kleen, 84BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0313-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0314-DC	Flex-Kleen, 58BVBS-16IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>

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**B.2 CONTROL DEVICE(S) FOR EMISSION UNIT 01 – Glass Production**

<b>Control Device ID</b>	<b>Control Device Description</b>	<b>Installation/Modification Date</b>	<b>Pollutant(s) Controlled</b>
0315-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0317-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0318-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0319-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0326-DC	Flex-Kleen, 58BVBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0325-DC	Flex-Kleen, 58VBS-9IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0905-DC	Torit, 3DF24 Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0909-DC-01	Flex-Kleen, 28/36-PXBI-8(II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0909-DC-02	Flex-Kleen, 28/36-PXBI-8(II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0909-DC-03	Flex-Kleen, 28/36-PXBI-8(II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0909-DC-04	Flex-Kleen, 28/36-PXBI-8 (II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0909-DC-05	Flex-Kleen, 28/36-PXBI-8 (II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0909-DC-06	Flex-Kleen, 28/36-PXBI-8 (II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0908-DC-01	Flex-Kleen, 28/36-PXBI-8 (II) Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0302.1-DC	Flex-Kleen, 84-BVBS-38IIG Dust Collector	May 2006	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
0302.2-DC	Flex-Kleen, 84-BVBS-38IIG Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>
1808-DC	Flex-Kleen-58CTBS-18IIG Dust Collector	October 2004	PM/PM <sub>10</sub> /PM <sub>2.5</sub>

**B.3 EQUIPMENT FOR EMISSION UNIT 02 – Pattern Glass Production**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
2.01	Pattern Line Forehearth	September 1998	None	N/A
2.02	Pattern Line Cutters	September 1998	None	N/A
2.03	Pattern Line Cullet Conveyor	September 1998	2904-DC	7.0 (GCC7)
2.04	Pattern Line Glass Separator Powder Applicator	September 1998	None	N/A
2.05	Pattern Line SO <sub>2</sub> Sprayer	September 1998	None	N/A

**B.4 CONTROL DEVICE(S) FOR EMISSION UNIT 02 – Pattern Glass Production**

<b>Control Device ID</b>	<b>Control Device Description</b>	<b>Installation/Modification Date</b>	<b>Pollutant(s) Controlled</b>
2904-DC	Sly, STJ-811-10 Dust Collector	November 1999	PM/PM <sub>10</sub> /PM <sub>2.5</sub>

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**B.5 EQUIPMENT FOR EMISSION UNIT 03 – Glass Storage**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
3.01	Cullet Pad #1	November 1988	None	N/A
3.02	Cullet Pad #2a	November 1988	None	N/A
3.03	Cullet Pad #2b	November 1988	None	N/A

**B.6 EQUIPMENT FOR EMISSION UNIT 04 – Glass Fabrication**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
4.01	Tempering Seamer	February 1989	1119-DC	3.0 (SEAM3)
4.02	Bystronic Cutting Table	February 1989	None	N/A
4.03	96" Electric Tempering Furnace	June 1989	None	N/A
4.05	60" Electric Tempering Furnace	March 1990	None	N/A
4.06	60" SO <sub>2</sub> Sprayer	March 1989	None	N/A
4.07	Logo Machine	June 1990	None	N/A
4.08	Tempering Line Glass Separator Powder Applicator	November 1988	None	N/A

**B.7 CONTROL DEVICE(S) FOR EMISSION UNIT 04 – Glass Fabrication**

<b>Control Device ID</b>	<b>Control Device Description</b>	<b>Installation/Modification Date</b>	<b>Pollutant(s) Controlled</b>
1119-DC	Torit, 3DF24 Dust Collector	November 1988	PM/PM <sub>10</sub> /PM <sub>2.5</sub>

**B.8 EQUIPMENT FOR EMISSION UNIT 05 – Coating Process**

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Installation/Modification Date</b>	<b>Control Device ID</b>	<b>Emission Point ID</b>
5.01	Glass Washer	2012	None	N/A
5.02	Glass Coater	2012	None	N/A
5.03	Glass Cutter	2012	None	N/A
5.04	Packager	2012	None	N/A
5.05	Sandblast Cabinet equipped with an inherent dust collector/filter	2012	None	N/A
5.06	Glass Cutter	2012	None	N/A

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
C.1	<p><b>Emission Unit ID:</b> All  <b>Equipment ID:</b> All  <b>Control Device ID:</b> All</p> <p>Equipment capacities provided under the Equipment Description column of the Equipment Tables above are not intended to be permit limits unless otherwise specified within the Table of Conditions for the particular equipment. However, this condition does not exempt the facility from the construction permitting process, from PSD review, nor from any other applicable requirements that must be addressed prior to increasing production rates.</p>
C.2	<p><b>Emission Unit ID:</b> All  <b>Equipment ID:</b> All  <b>Control Device ID:</b> All</p> <p>(S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.</p>
C.3	<p><b>Emission Unit ID:</b> 01, 02, 04  <b>Equipment ID:</b> 1.01, 1.02, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.32, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.70, 1.71, 1.78, 2.03, 4.01  <b>Control Device ID:</b> ESP1/Scrubber, 0344-DC, 0303-DC, 0334-DC/0333-DC, 0338-DC, 0305-DC, 0306-DC, 0307-DC, 0308-DC, 0309-DC, 0310-DC, 0311-DC, 0312-DC, 0313-DC, 0314-DC, 0315-DC, 0317-DC, 0318-DC, 0319-DC, 0326-DC, 0325-DC, 0905-DC, 0909-DC-01, 0909-DC-02, 0909-DC-03, 0909-DC-04, 0909-DC-05, 0909-DC-06/0908-DC-01, 0302.1-DC, 0302.2-DC, 1808-DC, 2904-DC, 1119-DC</p> <p>The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.</p>
C.4	<p><b>Emission Unit ID:</b> 01, 02, 04  <b>Equipment ID:</b> 1.01, 1.02, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.32, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.70, 1.71, 1.78, 2.03, 4.01</p>



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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p><b>Control Device ID:</b> ESP1/Scrubber, 0344-DC, 0303-DC, 0334-DC/0333-DC, 0338-DC, 0305-DC, 0306-DC, 0307-DC, 0308-DC, 0309-DC, 0310-DC, 0311-DC, 0312-DC, 0313-DC, 0314-DC, 0315-DC, 0317-DC, 0318-DC, 0319-DC, 0326-DC, 0325-DC, 0905-DC, 0909-DC-01, 0909-DC-02, 0909-DC-03, 0909-DC-04, 0909-DC-05, 0909-DC-06/0908-DC-01, 0302.1-DC, 0302.2-DC, 1808-DC, 2904-DC, 1119-DC</p> <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 be submitted to 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>
C.5	<p><b>Emission Unit ID:</b> 01, 02, 04  <b>Equipment ID:</b> 1.01, 1.02, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.32, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.70, 1.71, 1.78, 2.03, 4.01  <b>Control Device ID:</b> ESP1/Scrubber, 0344-DC, 0303-DC, 0334-DC/0333-DC, 0338-DC, 0305-DC, 0306-DC, 0307-DC, 0308-DC, 0309-DC, 0310-DC, 0311-DC, 0312-DC, 0313-DC, 0314-DC, 0315-DC, 0317-DC, 0318-DC, 0319-DC, 0326-DC, 0325-DC, 0905-DC, 0909-DC-01, 0909-DC-02, 0909-DC-03, 0909-DC-04, 0909-DC-05, 0909-DC-06/0908-DC-01, 0302.1-DC, 0302.2-DC, 1808-DC, 2904-DC, 1119-DC</p> <p>The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module of the baghouse when in operation. Pressure drop readings shall be recorded daily, during source operation. Operation and maintenance checks shall be made on at least a weekly basis for baghouse cleaning systems, dust collection hoppers, and conveying systems for proper operation. The baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.</p>
C.6	<p><b>Emission Unit ID:</b> 01, 02, 04  <b>Equipment ID:</b> 1.01, 1.02, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.32, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.70, 1.71, 1.78, 2.03, 4.01  <b>Control Device ID:</b> ESP1/Scrubber, 0344-DC, 0303-DC, 0334-DC/0333-DC, 0338-DC, 0305-DC, 0306-DC, 0307-DC, 0308-DC, 0309-DC, 0310-DC, 0311-DC, 0312-DC, 0313-DC, 0314-DC, 0315-DC, 0317-DC, 0318-DC, 0319-DC, 0326-DC, 0325-DC, 0905-DC, 0909-DC-01, 0909-DC-02, 0909-DC-03, 0909-DC-04, 0909-DC-05, 0909-DC-06/0908-DC-01, 0302.1-DC, 0302.2-DC, 1808-DC, 2904-DC, 1119-DC</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	Operational ranges for the monitored parameters have been established to ensure proper operation of the pollution control equipment. These operational ranges for the monitored parameters were derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment. The facility shall maintain the established ranges and supporting documentation for these monitored parameters. Operating ranges may be updated following submittal to the Director of Air Permitting.
C.7	<p><b>Emission Unit ID:</b> 01, 02, 03, 04, 05  <b>Equipment ID:</b> 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.32, 1.50, 1.81, 2.03, 3.01, 3.02, 4.01, 5.05  <b>Control Device ID:</b> 0305-DC, 0306-DC, 0307-DC, 0308-DC, 0309-DC, 0310-DC, 0905-DC, 1808-DC, 2904-DC, 1119-DC</p> <p>The owner/operator shall perform a visual inspection on a monthly basis during source operation. No periodic monitoring for opacity will be required during periods of burning natural gas or propane only. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If only natural gas or propane was combusted or if the unit did not operate during the semiannual period, the report shall state so.</p> <p>Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.</p>
C.8	<p><b>Emission Unit ID:</b> 01, 02, 03, 04, 05  <b>Equipment ID:</b> All except 1.01, 1.48, 1.49  <b>Control Device ID:</b> 0344-DC, 0303-DC, 0334-DC/0333-DC, 0338-DC, 0305-DC, 0306-DC, 0307-DC, 0308-DC, 0309-DC, 0310-DC, 0311-DC, 0312-DC, 0313-DC, 0314-DC, 0315-DC, 0317-DC, 0318-DC, 0319-DC, 0326-DC, 0325-DC, 0905-DC, 0909-DC-01, 0909-DC-02, 0909-DC-03, 0909-DC-04, 0909-DC-05, 0909-DC-06/0908-DC-01, 0302.1-DC, 0302.2-DC, 1808-DC, 2904-DC, 1119-DC</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these source(s) (including fugitive emissions) shall not exhibit an opacity greater than 20%, each.</p>
C.9	<p><b>Emission Unit ID:</b> 01, 02, 04, 05  <b>Equipment ID:</b> As specified in table below  <b>Control Device ID:</b> As specified in table below</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions										
	<p>the rate specified by use of the following equations:                      For process weight rates less than or equal to 30 tons per hour  <math>E = (F) 4.10P^{0.67}</math> and                      For process weight rates greater than 30 tons per hour  <math>E = (F) 55.0P^{0.11} - 40</math>                      Where E = the allowable emission rate in pounds per hour                      P = process weight rate in tons per hour                      F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4</p> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <table border="1" data-bbox="505 806 1300 1031"> <thead> <tr> <th>Process/Equipment IDs</th> <th>Max Process Weight Rate (ton/hr)</th> </tr> </thead> <tbody> <tr> <td>01 (total)*</td> <td>32.08</td> </tr> <tr> <td>02 (total)</td> <td>6.25</td> </tr> <tr> <td>04(total)</td> <td>10.42</td> </tr> <tr> <td>05</td> <td>30</td> </tr> </tbody> </table> <p>*Except ID 1.48, and 1.49</p>	Process/Equipment IDs	Max Process Weight Rate (ton/hr)	01 (total)*	32.08	02 (total)	6.25	04(total)	10.42	05	30
Process/Equipment IDs	Max Process Weight Rate (ton/hr)										
01 (total)*	32.08										
02 (total)	6.25										
04(total)	10.42										
05	30										
C.10	<p><b>Emission Unit ID:</b> 03  <b>Equipment ID:</b> All  <b>Control Device ID:</b> None</p> <p>(S.C. Regulation 61-62.6) Fugitive particulate matter (PM) emissions from material handling, process equipment, control equipment, or storage piles will be minimized to the maximum extent possible. This will include proper maintenance of the control system such as scheduled inspections, replacement of damaged or worn parts, etc. Fugitive emissions from dust buildup will be controlled by proper housekeeping and/or wet suppression.</p>										
C.11	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>These sources are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart A, General Conditions and Subpart CC, Standards of Performance for Glass Manufacturing Plants, and S.C. Regulation 61-62.60 Subparts A and CC, Standards of Performance for Glass Manufacturing Plants, as applicable. These sources shall comply with all applicable requirements of these Subpart A and CC.</p>										
C.12	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>(40 CFR 60, Subpart CC, 60.292(a)) On and after the date on which the performance test is required</p>										

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>to be conducted by 40 CFR 60.8 is completed, no owner or operator of a glass melting furnace subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the affected source particulate matter at emission rates exceeding 0.225 gram of particulate per kilogram of glass produced for flat glass melting furnaces. The owner/operator shall calculate and record on a daily basis the rate of PM emission from the melting furnace in gram per kilogram of glass produced. All necessary parameters used in the calculations shall be recorded as well. Semi-annual reports including all recorded parameters and calculated values shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality postmarked no later than 30 calendar days after the end of the reporting period. 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>
C.13	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>For any source test required under an applicable standard or permit condition, the owner, operator, or representative shall comply with S.C. Regulation 61-62.1, Section IV - Source Tests.</p> <p>Unless approved otherwise by the Department, the owner, operator, or representative shall ensure that source tests are conducted while the source is operating at the maximum expected production rate or other production rate or operating parameter which would result in the highest emissions for the pollutants being tested. Some sources may have to spike fuels or raw materials to avoid being subjected to a more restrictive feed or process rate. Any source test performed at a production rate less than the rated capacity may result in permit limits on emission rates, including limits on production if necessary.</p> <p>The owner or operator shall comply with any limits that result from conducting a source test at less than rated capacity. A copy of the most recent Department issued source test summary letter, whether it imposes a limit or not, shall be maintained with the operating permit, for each source that is required to conduct a source test.</p> <p>Site-specific test plans and amendments, notifications, and source test reports shall be submitted to the Manager of the Source Evaluation Section, Bureau of Air Quality.</p>
C.14	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>The owner/operator shall perform source testing of the Melting Furnace (1.01) to demonstrate the unit is operating in compliance with particulate matter (PM), and sulfuric acid mist limitations and other requirements. Periodic testing for PM and sulfuric acid mist shall be performed annually.</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
C.15	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>A notification shall be submitted of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which NSPS Subpart CC applies, unless that change is specifically exempted in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Bureau may request additional relevant information subsequent to this notice.</p>
C.16	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>If a glass-melting furnace with modified processes is changed to one without modified processes, the owner/operator shall notify the Bureau at least 60 days before the change is scheduled to occur.</p>
C.17	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>This source is permitted to burn only air/oxygen/natural gas, with propane as backup, as fuel. When propane is utilized as backup fuel, it must be diluted with compressed air, down to a Btu content of approximately 1,025 BTU/ft<sup>3</sup>. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>
C.18	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Best Available Control Technology (BACT) as specified in the Final Determination for the Prevention of Significant Deterioration (PSD) Construction permit 0640-0018-CA:</p> <p>BACT for Particulate matter (PM) was determined to be process modification, recycling all available cullet, and limiting the amount of salt cake in each batch. Process modification entailed adding moisture to each batch to improve cohesion, burner modification to allow for non-direct contact with batch material, and elimination of fine particle introduction to the batch.</p> <p>BACT for Sulfur dioxide (SO<sub>2</sub>) was determined to be batch reformulation thereby reducing and/or removing sulfur containing compounds from the batch and recycling all available cullet. The same was determined to be BACT for sulfuric acid mist.</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>BACT for Nitrogen oxides (NO<sub>x</sub>) was determined to be recycling all available cullet, maintain as low a furnace temperature as functionally possible, and use a flue system to precisely control excess air and improve the furnaces efficiency.</p> <p>As part of the final BACT determination, the melting furnace is limited to a maximum production rate of 770 tons flat glass per day. The emissions from the melting furnace shall not exceed the following: 14.4 lb/hr of particulate matter, 30 lb/hr of sulfur dioxide, 450.0 lb/hr of nitrogen oxides, and 1.0 lb/hr of sulfuric acid mist. Nitrogen oxides and sulfur dioxide Continuous Emissions Monitors (CEMs) may be used to demonstrate compliance with the lb/hr limits. For normal operational days, the facility shall use 30-day rolling average. For start-up, maintenance, and abnormally low production days, a 24-hr block average shall be used.</p>
C.19	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>As per SC Regulation 61-62.1, Section II(E), this source is limited to a maximum production rate of 770 tons flat glass/day. This source is also limited to 14.4 lb/hr of particulate matter (PM), 30 lb/hr of sulfur dioxide, 450.0 lb/hr of nitrogen oxides, and 1.0 lb/hr of sulfuric acid mist. The owner/operator must record the actual production rates daily and calculate the pound per hour emission rates for PM, sulfur dioxide, and sulfuric acid mist on at least a monthly basis. Nitrogen oxides and sulfur dioxide Continuous Emissions Monitors (CEMs) may be used to demonstrate compliance with the NO<sub>x</sub> and SO<sub>2</sub> lb/hr limits. If the furnace production rate, batch composition, or any other changes occurs that effects the emissions, the production rate and the pound per hour emission rates shall be recorded upon completion of the change. All necessary parameters used in the calculations shall be recorded as well. These records shall be maintained on-site for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request. Semi-annual reports including all recorded parameters and calculated values shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality postmarked no later than 30 calendar days after the end of the reporting period. 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>
C.20	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>During routine maintenance of add-on pollution controls, the furnace is exempt from the PM, SO<sub>2</sub>, and Sulfuric Acid Mist emission limitations of condition C.18 but is subject to the following emission limitations:</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions									
	<table border="1" data-bbox="609 449 1195 600"> <thead> <tr> <th data-bbox="609 449 847 485">Pollutant</th> <th data-bbox="852 449 1195 485">Emission Limit (lbs/hr)</th> </tr> </thead> <tbody> <tr> <td data-bbox="609 491 847 527">PM</td> <td data-bbox="852 491 1195 527">50</td> </tr> <tr> <td data-bbox="609 533 847 569">SO<sub>2</sub></td> <td data-bbox="852 533 1195 569">150</td> </tr> <tr> <td data-bbox="609 575 847 600">H<sub>2</sub>SO<sub>4</sub></td> <td data-bbox="852 575 1195 600">4</td> </tr> </tbody> </table> <p data-bbox="277 638 1528 1031">The routine maintenance shall not exceed 144 hours (the equivalent of six days) in each calendar year and shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. A report of the planned routine maintenance shall be submitted to the Bureau at least 10 days before the start of the routine maintenance (if 10 days cannot be provided, the report must be submitted as soon as practicable) and the report shall contain an explanation of the schedule of the maintenance. Semiannual reports shall be submitted to the Technical Management Section, Bureau of Air Quality postmarked no later than 30 days after the end of the reporting period. The semiannual report shall include: date and time, magnitude of excess emissions, cause, and corrective actions taken, and preventative measures adopted for each maintenance activities that occurred during the reporting period. If no incidences occurred during the reporting period then the report shall indicate such.</p>		Pollutant	Emission Limit (lbs/hr)	PM	50	SO <sub>2</sub>	150	H <sub>2</sub> SO <sub>4</sub>	4
Pollutant	Emission Limit (lbs/hr)									
PM	50									
SO <sub>2</sub>	150									
H <sub>2</sub> SO <sub>4</sub>	4									
C.21	<p data-bbox="277 1037 548 1142"><b>Emission Unit ID:</b> 01 <b>Equipment ID:</b> 1.01 <b>Control Device ID:</b> ESP1/Scrubber</p> <p data-bbox="277 1184 1528 1394">The owner/operator shall continue to operate and maintain primary and secondary voltage meters, primary and secondary current meters, spark rate meters for each field of the ESP, and continue to operate, and maintain reagent flow meters on each scrubber module. Each monitored parameter shall be recorded continuously during source operation. The ESP and scrubber shall be in place and operational whenever processes controlled by the ESP/scrubber are running, except during periods of ESP/scrubber malfunction or mechanical failure.</p>									
C.22	<p data-bbox="277 1400 711 1505"><b>Emission Unit ID:</b> 01 <b>Equipment ID:</b> 1.01 <b>Control Device ID:</b> ESP1/Scrubber</p> <p data-bbox="277 1547 1528 1896">The owner/operator shall install, operate and maintain temperature indicators prior to the control device on the glass furnace. All temperature indicators shall be readily accessible for verification by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Temperature readings shall be recorded at least every fifteen (15) minutes during source operation. Maintenance checks for proper temperature indicator operation will be made on at least a weekly basis. Operational ranges shall be determined and available for triggering corrective actions and assuring proper operation. Records of monitoring data and inspection checks, including corrective actions taken shall be maintained on site in written or electronic logs for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request. Each incidence of operation outside these operational ranges, including date and time, cause, and</p>									

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>corrective action taken, shall be recorded and kept on site for five (5) years. Semiannual reports of these incidences shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality postmarked no later than 30 days after the end of the reporting period. If no incidences occurred during the reporting period then a letter shall indicate such.</p>
C.23	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>The owner/operator shall maintain records of the occurrence and duration of any start up, shut down, or malfunction in the operation of the affected source(s) and associated air pollution control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative. These records shall be kept onsite for five (5) years from the date generated and made available to Department personnel upon request.</p>
C.24	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>The owner/operator shall implement the following Best Practices Plan prior to and during all routine maintenance of add-on emission control equipment to minimize excess emissions:</p> <ol style="list-style-type: none"> <li>1) Provide a minimum of 10 Day notification to necessary plant personnel and administrator of planned maintenance to emission control equipment for the onsite flow glass furnace system which shall include: <ol style="list-style-type: none"> <li>a) Specific equipment to be shutdown,</li> <li>b) Reason for the shutdown,</li> <li>c) Expected length of the time of shutdown,</li> <li>d) Predicted emissions during the shutdown,</li> <li>e) Measures including extra labor and equipment which will be used to minimize the shutdown,</li> <li>f) Measures taken to reduce or curtail the affected sources or the reasons why it is impossible or impractical to shut down or curtail the affected source during the control equipment shutdown.</li> </ol> </li> <li>2) During periods of time when the control devices are bypassed due to routine maintenance of the control devices, the facility must follow BACT as outlined in Condition C.18 to minimize excess emissions.</li> <li>3) Limit maintenance time to 144 hr/calendar year. Prepare and maintain onsite a full follow up report per incident, which includes the following information: <ol style="list-style-type: none"> <li>a) Identification of specific equipment shutdown,</li> </ol> </li> </ol>



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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions																																								
	b) Reason for the shutdown, c) Length of time the unit was shutdown, d) Daily batch moisture data, e) Uncontrolled emission calculations, f) Summary of repairs conducted and expected future repairs if noted, g) Measures (if any) taken to curtail affected source.																																								
C.25	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>These sources are subject to 40 CFR 64, Compliance Assurance Monitoring and shall comply with all applicable provisions.</p> <p>To meet the requirements of 40 CFR 64 the owner/operator shall continue to operate and maintain the indicators shown below as the measurement approach:</p> <table border="1" data-bbox="289 1024 1511 1759"> <thead> <tr> <th>Emission Unit</th> <th>Equipment Name and ID</th> <th>Applicable Requirement</th> <th>Indicator and Measurement Approach</th> <th>Monitoring Frequency</th> <th>Range</th> <th>Excursion</th> <th>Averaging Period</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>1.01</td> <td>PM: 0.45 lb/ton</td> <td>Total Power Input</td> <td>Continuous</td> <td>≥ 17.3 kW</td> <td>&lt; 17.3 is out of range</td> <td>24-hr block average</td> </tr> <tr> <td>01</td> <td>1.01</td> <td>Opacity: 20%</td> <td>Visible Emissions (method9)</td> <td>Once/month</td> <td><u>0%</u>- <u>20%</u></td> <td>&gt; 20% out of range</td> <td>6 minute</td> </tr> <tr> <td>01</td> <td>1.01</td> <td>NOx: 450 lb/hr</td> <td>CEMs</td> <td>Continuous</td> <td>--</td> <td>&gt; 450 lb/hr</td> <td>24-hr block average, 30-day rolling average*</td> </tr> <tr> <td>01</td> <td>1.01</td> <td>SO<sub>2</sub>: 30 lb/hr</td> <td>CEMs</td> <td>Continuous</td> <td>--</td> <td>&gt; 30 lb/hr</td> <td>24-hr block average, 30-day rolling average*</td> </tr> </tbody> </table>	Emission Unit	Equipment Name and ID	Applicable Requirement	Indicator and Measurement Approach	Monitoring Frequency	Range	Excursion	Averaging Period	01	1.01	PM: 0.45 lb/ton	Total Power Input	Continuous	≥ 17.3 kW	< 17.3 is out of range	24-hr block average	01	1.01	Opacity: 20%	Visible Emissions (method9)	Once/month	<u>0%</u> - <u>20%</u>	> 20% out of range	6 minute	01	1.01	NOx: 450 lb/hr	CEMs	Continuous	--	> 450 lb/hr	24-hr block average, 30-day rolling average*	01	1.01	SO <sub>2</sub> : 30 lb/hr	CEMs	Continuous	--	> 30 lb/hr	24-hr block average, 30-day rolling average*
Emission Unit	Equipment Name and ID	Applicable Requirement	Indicator and Measurement Approach	Monitoring Frequency	Range	Excursion	Averaging Period																																		
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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions							
	01	1.01	H <sub>2</sub> SO <sub>4</sub> : 1 lb/hr	CEMs**	Continuous	--	> 1 lb/hr	24-hr block average, 30-day rolling average*
<p>*For normal operational days, a 30-day rolling average. For start-up, maintenance, and abnormally low production days, a 24-hr block average shall be used.</p> <p>** SO<sub>2</sub> CEMs data with EPA Conditional Test Method CTM 13A or B.</p> <p>The emissions resulting from control device bypass, to the extent allowed elsewhere in the permit, shall be excluded from the data used to demonstrate compliance with this condition.</p> <p>The indicators shown shall be used to provide assurance of compliance with each applicable requirement. The ESP and Scrubber shall be in place and operational whenever processes controlled by it are running, except during periods of ESP and Scrubber malfunction or mechanical failure.</p> <p>These operational ranges for the monitored parameters were derived from data, which demonstrate a reasonable assurance of compliance.</p> <p>QA/QC practices, etc. shall consist of:</p> <ol style="list-style-type: none"> <li>1. Daily Inspection of all control devices and monitoring system, including CEMs.</li> <li>2. Visible Emissions Evaluation certification will be obtained for all potential Method 9 evaluators. The facility will have at least one certified evaluator on staff.</li> <li>3. Alarms shall be installed and maintained on the control systems to warn operator(s) if a process value specified in this condition gets out of range.</li> <li>4. Any other practices that are required by the consent decree 15-CV-13426 effective January 13, 2016.</li> </ol> <p>An excursion is defined as any operating condition where the indicator is outside of the approved range for the specified averaging period. Upon detecting an excursion, the owner/operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing any startup, shutdown, or malfunction period and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup and shutdown conditions).</p> <p>The owner/operator shall develop, implement, and maintain a Quality Improvement Plan (QIP) as specified in §64.8, when a pollutant-specific emission unit has accumulated exceedances or</p>								

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>excursions exceeding 5 percent duration of the unit’s operating time for a reporting period, or when instructed to do so by the Department pursuant to §64.7(d)(2).</p> <p>A semiannual report for monitoring shall include, at a minimum, the information required under § 70.6(a)(3)(iii) and the following information as applicable:</p> <p style="padding-left: 40px;">Summary information of the number, duration, and cause (including unknown cause, if applicable) of excursions, as applicable, and the corrective actions taken;</p> <p style="padding-left: 40px;">Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable);</p> <p style="padding-left: 40px;">If applicable, a description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner/operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring.</p> <p>The owner/operator shall maintain records of monitoring data, monitor performance data, corrective action, and quality improvement plans. The records shall include calculations of the percent duration of accumulated exceedances or excursions during the reporting period per pollutant-specific emission unit, updated monthly.</p>
C.26	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Guardian Industries, LLC (Guardian) has entered into a consent decree (settlement agreement) with the Environmental Protection Agency (EPA) that became effective on January 13, 2016. Guardian shall be responsible for ensuring all work is performed in accordance with the requirements of the consent decree. The obligations of the consent decree apply to Guardian and any successors, assigns, or other entities or persons otherwise bound by law. For work performed after the effective date, Guardian shall provide a copy of the consent decree to all vendors, suppliers, consultants, contractors, agents, and any other company or organization retained to perform any of the work required by the consent decree.</p>
	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>For conditions C.26 thru C.41, the following definitions will apply:</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<ul style="list-style-type: none"><li>a) <b>Abnormally Low Production Rate</b> – A glass production rate for a Furnace that is at or below the production rate of 270 tons/day, which reflects 35% of the permitted production rate.</li><li>b) <b>Abnormally Low Production Rate Day</b> – Operating day where glass production at a Furnace occurs at or below the applicable Abnormally Low Production Rate for at least one continuous hour.</li><li>c) <b>Ammonia Slip</b> – Emissions of unreacted ammonia that result from incomplete reaction of NOx and the reagent.</li><li>d) <b>Applicable State(s)</b> – the state, commonwealth, or local authority that has jurisdiction over a Covered facility.</li><li>e) <b>Calendar Year</b> – The period commencing on January 1 and ending on December 31 of the same year.</li><li>f) <b>Canal Change</b> – The replacement of a refractory device used to transfer the molten glass from the Furnace to the forming process. Canal Change includes the stoppage of molten glass into the forming process, replacement and installation of a new canal, heat-up the canal, and restart of production.</li><li>g) <b>CD Emission Reduction</b> – any reductions that are generated or results from complying with the requirements of Section IV and V of the consent decree, including but not limited to, installing and using any control devices required by the consent decree.</li><li>h) <b>CEMS</b> – Continuous Emission Monitoring System.</li><li>i) <b>CEMS Certification or CEMS re-certification</b> – the certification of a CEMS as required by 40 CFR 60.13, 40 CFR 60 Appendix B (performance specification 2), and 40 CFR 60 Appendix F (quality assurance procedures).</li><li>j) <b>CEMS Certification Event</b> – any event that triggers the requirement to complete a first CEMS certification or subsequent CEMS re-certification.</li><li>k) <b>Cold Tank Repair</b> – the process of stopping glass production, stopping the flow of fuel, fully cooling down a furnace, replacing some or all of the refractory in the furnace, the crown and/or the regenerators (if applicable), and beginning a new campaign by starting up the furnace again by firing fuel again and starting the production of glass. Cold Tank Repair, for the purposes of the consent decree, does not include any refractory repairs conducted when the furnace is still hot, and repairs solely required for restart of a furnace which has temporarily ceased operation due to economic reasons.</li><li>l) <b>Complaints</b> – the complaints filed by the United States Plaintiff-Intervenors in this action.</li><li>m) <b>Consent Decree and Decree</b> – consent decree 15-CV-13426 effective January 13, 2016 and all appendices attached (as listed in section XXV). In the event of any conflict between the text of the consent decree and any appendix, the text of the consent decree shall control.</li><li>n) <b>Continuous Operating Year</b> – a calendar year during which a furnace that is connected to a control device operates on every day of that calendar year.</li><li>o) <b>Control device</b> – a SCR, DS, PD or similar add-on air pollution control device.</li><li>p) <b>Control device startup</b> – the period of time from the initial commencement of operation of a control device until operation of the device is stable and the device has achieved normal</li></ul>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>operating conditions. A control device startup shall not exceed thirty (30) days. Control device startup does not include subsequent startups of the control device, unless the subsequent startup of the control device occurs during a restart after a downtime of more than six months.</p> <p>q) <b>Daily Glass Production</b> - tons of glass produced per day from the furnace as measured by the measurement method of the weight method. It will be the composite of approximately 18 samples at approximately 80 minute intervals which are averaged to give a daily production rate.</p> <p>r) <b>Day</b> - a calendar day unless expressly stated to be a business day. In computing any period of time under the consent decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until close of business of the next business day. A day starts at 12:00 am and ends at 11:59 pm.</p> <p>s) <b>District</b> - San Joaquin Valley Unified Air Pollution Control District.</p> <p>t) <b>Dry Scrubber and DS</b> - a pollution control system, sometimes referred to as a sorbent injection system, which involves the addition of an alkaline material into the gas stream to react with the acid gases. The acid gases react with the alkaline sorbents to form solid salts. There is no moisture added into the reaction chamber or reaction area. DSs include traditional add-on DS and ceramic filter systems.</p> <p>u) <b>Effective Date</b> - definition provided in section XVIII of the consent decree.</p> <p>v) <b>Emission Credit(s)</b> - an authorization or credit to emit a specified amount of the pollutants NO<sub>x</sub>, SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub>, and PM<sub>2.5</sub> that is authorized by, allocated, or issued under an emissions trading or marketable permit program of any kind established under the CAA or a SIP.</p> <p>w) <b>EPA</b> - the United States Environmental Protection Agency and any of its successor departments or agencies.</p> <p>x) <b>Furnace</b> - a unit comprised of a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.</p> <p>y) <b>Furnace startup</b> - the period of time during which a Furnace's refractory is heated from ambient temperature to Operating temperature. A Furnace startup shall last no more than 30 days and includes the slow heating of the Furnace refractory, initially with portable burners and transitioning to main burners once the Furnace reaches a temperature at which they can commence operation. Furnace startup also includes the initial filling of the Furnace, following the heat-up, with cullet and/or raw materials, to a level at which production launch can commence.</p> <p>z) <b>H<sub>2</sub>SO<sub>4</sub></b> - sulfuric acid mist.</p> <p>aa) <b>Inlet</b> - the concentration of NO<sub>x</sub> (in ppmv corrected to 7% O<sub>2</sub> unless the permit states otherwise) measured prior to a SCR.</p> <p>bb) <b>Installation of Controls</b> - solely for the purpose of the Consent Decree include:</p> <ol style="list-style-type: none"> <li>i. The installation of a SCR, DS, or PD; or</li> <li>ii. The installation of any alternative controls or alternative Primary Control</li> </ol>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p align="center">Technology approved in paragraphs 32-38 of the consent decree.</p> <p>cc) <b>Maintenance</b> – activities necessary to keep control devices in normal operation condition, as described in the consent decree paragraph 30.</p> <p>dd) <b>Malfunction</b> – consistent with 40 CFR 60.2, any sudden, infrequent, and not reasonably preventable failure of a control device to operate in a normal or usual manner, but shall not include failures that are caused in part by poor maintenance or careless operation.</p> <p>ee) <b>NOx</b> – the sum of oxides of nitrogen in the flue gas, collectively expressed as NO<sub>2</sub>.</p> <p>ff) <b>Operate, Operation, Operating, and Operated</b> – any time when fuel is fired in a furnace.</p> <p>gg) <b>Operating Day</b> – any day where any fuel is fired in a Furnace.</p> <p>hh) <b>Outlet</b> – the NOx concentration (in ppmv corrected to 7% O<sub>2</sub> unless the permit states otherwise) measured after a SCR.</p> <p>ii) <b>Paragraph</b> – a portion of the Consent Decree identified by an Arabic numeral.</p> <p>jj) <b>Particulate Device and PD</b> – a control device that uses filtration technology to reduce Particulate Matter emissions, including but not limited to electrostatic precipitators, baghouses, and ceramic filter systems.</p> <p>kk) <b>Particulate Matter and PM</b> – any finely divided solid or liquid material, other than uncombined water, as measured using EPA Test Method 5 (40 CFR Part 60, Appendix A-3).</p> <p>ll) <b>Party and Parties</b> – one or more of the following: the Unites States, State of Iowa, State of New York, the District, and Guardian.</p> <p>mm) <b>Permit</b> – any and all interim and final authorizations issued pursuant to federal, state, or local law that is necessary: (1) to construct, modify, or operate a Furnace, or (2) to construct, install, and operate a control device or monitoring device required by the Consent Decree or other applicable law.</p> <p>nn) <b>Plaintiff-Intervenors</b> – the State of Iowa, State of New York, and the San Joaquin Valley Unified Air Pollution Control District.</p> <p>oo) <b>Primary Control Technology for NOx, SO<sub>2</sub>, PM, and H<sub>2</sub>SO<sub>4</sub></b> – any new process design, equipment or operating methodology that allows for the emissions limits to be met without the installation of a Control Device.</p> <p>pp) <b>Removal Efficiency for NOx</b> – the percent reduction in concentration of NOx achieved by a Furnace’s control device. This percent reduction shall be calculated by subtracting the Outlet concentration of NOx (corrected to 7% O<sub>2</sub> unless the Permit states otherwise) from the Inlet concentration of NOx (corrected to 7% O<sub>2</sub> unless the Permit states otherwise), dividing the difference by the Inlet concentration and then multiplying the result by 100.</p> <p>qq) <b>Section</b> – portion of the Consent Decree identified by a Roman numeral.</p> <p>rr) <b>Selective Catalytic Reduction and SCR</b> – a pollution control device that reacts ammonia (NH<sub>3</sub>) or urea with NOx to form nitrogen (N<sub>2</sub>) and water (H<sub>2</sub>O) using a catalyst to speed the reaction. SCRs include traditional add-on SCRs and catalyst-impregnated ceramic filters.</p> <p>ss) <b>Semi-Dry Scrubber and SDS</b> – a pollution control system, sometimes referred to as a sorbent injection system, which involves the addition of a finely atomized water-based alkaline slurry material injected into the gas stream to react with the acid gases. The acid gases are</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>absorbed by the slurry droplets and react to form solid salts. The heat of the flue gas is used to evaporate all the water droplets, with a non-saturated (i.e. dry) flue gas leaving the reaction chamber or reaction area.</p> <p>tt) <b>SO<sub>2</sub></b> - the pollutant sulfur dioxide.</p> <p>uu) <b>Ton and Tons</b> - short ton (equal to 2000 pounds) or short tons.</p> <p>vv) <b>United States</b> - The United States of America, acting on behalf of EPA.</p> <p>ww) <b>24-hour Block Average</b> - calculated by averaging all valid one-hour emissions data outputs (concentrations or pounds) for a given Operating Day and using the Daily Glass Production on that Operating Day where applicable.</p> <p>xx) <b>30-day Rolling Average Emission Rate</b> - expressed as pounds of pollutant emitted per TON of glass produced and calculated at a Furnace in accordance with the following formula and subparagraphs i and ii below:</p> $30\text{-day average } \frac{\text{lb } E}{\text{Ton}} = \frac{\text{COD}_E(\text{lbs}) + \text{P29D}_E(\text{lbs})}{\text{COD}_{\text{prod}}(\text{Tons}) + \text{P29D}_{\text{prod}}(\text{Tons})}$ <p>Where: 30-day average (lb E/Ton) = The 30-day Rolling Average Emission Rate  E = emissions of NO<sub>x</sub> or SO<sub>2</sub>  COD = Current Operating Day where the relevant 3-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data.  COD<sub>E</sub> = The daily emissions as measured by a CEMS on the COD, in pounds  COD<sub>prod</sub> = Daily Glass Production on the COD in Tons of glass  P29D = The previous 29 Operating Days where the relevant 3-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data  P29D<sub>E</sub> = The sum of the daily NO<sub>x</sub> or SO<sub>2</sub> emissions as measured by a CEMS during the P29D, in pounds  P29D<sub>prod</sub> = the sum of the Daily Glass Production during the P29D, in tons of glass</p> <p>i. A new 30day Rolling Average Emission Rate shall be calculated for each new Operating Day where the 30-day Rolling Average Emission Rate is the applicable standard and the CEMS measures at least 1 full hour of emissions data. Any Operating Day where the newly calculated 30-day Rolling Average Emission Rate exceeds the limit is a separate on Day violation; and</p> <p>ii. As specified in paragraphs 10-12 and 15-16 of the Consent Decree, certain Abnormally Low Production Rate Days, Furnace and/or Control Device Startup Days, Malfunction Days, Idling, and Maintenance Days may be excluded from the 30-day Rolling Average Emission Rate.</p> <p>yy) <b>30-Day Rolling NO<sub>x</sub> Removal Efficiency</b> - shall be calculated each Day where the 30-day Rolling Average NO<sub>x</sub> Removal Efficiency is the applicable standard and the CEMS measures at least 1 full hour of emissions data. It is calculated by summing the Removal Efficiency 24-hour Block Averages from the Furnace for each Operating Day and previous twenty-nine (29)</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>Operating Days when the 30-day Rolling Average NOx Removal Efficiency was applicable standard and the CEMS measured at least 1 full hour of emissions data and then dividing by 30. A new 30-day Rolling Average NOx Removal Efficiency shall be calculated for each new Operating Day. Any Operating Day where the newly calculated 30-day Rolling Average NOx Removal Efficiency is less than the Removal Efficiency limit is a separate one-day violation.</p>
C.27	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>NOx limits:  NOx Emission Controls: In accordance with the consent decree, by no later than the first operating day after December 31, 2021, Guardian shall operate each furnace passing all stack gasses (except during furnace startup; control device startup; malfunction of the selective catalytic reduction (SCR), dry scrubber (DS), or particulate device (PD); or maintenance of the SCR, DS, or PD) through a SCR in compliance with the following:</p> <ul style="list-style-type: none"> <li>i. SCRs must be designed for a removal efficiency of at least 90 percent; and</li> <li>ii. While each SCR is operating, Guardian shall continuously operate the SCR in accordance with good air pollution control practice for minimizing emissions to the extent practicable, consistent with 40 CFR 60.11(d), taking into consideration Ammonia Slip.</li> </ul> <p>Final NOx Emission Limit: Commencing on the first operating day after completing the control device startup period (but in no case later than the compliance deadlines in Table 1), Guardian shall comply with an 80% 30-day rolling average NOx removal efficiency, except as provided in paragraph below. Guardian shall demonstrate compliance with 80% 30-day rolling average NOx removal efficiency using NOx continuous emission monitoring system (CEMS).</p> <p>NOx limit during furnace startup, control device startup, malfunction of the SCR, DS, or PD, and maintenance of the canals, SCR, DS, or PD:</p> <ul style="list-style-type: none"> <li>i. NOx limit during furnace startup: For no more than 30 days allowed for furnace startup, the furnace exhaust may bypass the SCR to avoid having the operating inlet temperature of the SCR fall below its operating range. During these bypass days Guardian shall burn no more than five (5) million standard cubic feet of natural gas in that furnace per day. When technically feasible and available, Guardian will operate the SCR on the furnace exhaust.</li> <li>ii. NOx limit during control device startup or malfunction of the SCR, DS, or PD: For each operating day that the SCR does not operate or is not operating normally, because of the control device startup or malfunction of the SCR, DS, or PD for any period of time, Guardian may exclude that day's removal efficiency from the 30-day rolling average NOx removal efficiency. During the days excluded from the 30-day rolling average NOx removal efficiency, a NOx CEMS shall be used to demonstrate compliance with NOx limit of 10,800 lb/day on a 24-hr block average.</li> </ul>



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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>iii. NOx limit during maintenance of the canals, SCR, DS, or PD: For any operating day where maintenance activities on the canals, SCR, or DS/PD are performed, Guardian may exclude the maintenance day from the 30-day rolling average NOx removal efficiency. For any day which excluded from the 30-day rolling average NOx removal efficiency, a NOx CEMS shall be used to demonstrate compliance on a 24-hr block average with the following pound per day limit:</p> $NOx\ scr\ maint = \frac{MH \times NOx\ w/o\ SCR}{24} + \frac{NH \times NO\ w/oscr \times 0.2}{24}$ <p>Where:            NOx scr main = NOx emission limit for a furnace during maintenance of the canals, SCR, DS or PD, in pounds per day            NOx w/o scr = NOx emission limit for a furnace using SCR during an event where the SCR is not operating, in pounds per day (10,800 lb/day)            MH = hours of maintenance            NH = normal hours = 24 - MH</p> <p>Alternative Compliance Option:            Guardian may elect to use the following compliance option in lieu of complying with the NOx emission limits, provided that Guardian satisfies the requirements below:</p> <ol style="list-style-type: none"> <li>a. If Guardian is able to reduce the 30-day rolling average emission rate into the SCR to less than 8.0 lb NOx per ton glass produced for at least 180 consecutive days of normal operation (excluding periods that qualify as Maintenance, Malfunction, Furnace Startup, Control Device Startup, or Abnormally Low Production Rate Days), Guardian may notify EPA and the applicable Plaintiff Intervenor (State of Iowa, State of New York, and San Joaquin Valley Unified Air Pollution Control District), that it elects to comply with a 30-day rolling average emission rate of 1.6 lb NOx per ton of glass produced (measured after the SCR) in lieu of the final NOx emission limit(s) above. Guardian shall comply with the 30-day rolling average emission rate of 1.6 lb NOx per ton of glass produced 60 days after Guardian provides notice to EPA and the Plaintiff Intervenor. After electing to complying with the alternative compliance option, Guardian may not revert to complying with the final NOx emission limits stated above. If EPA determines that Guardian has not satisfied any of the following criteria, Guardian must continue to comply with the applicable final NOx emission limits above.</li> <li>b. Guardian’s notice must include all 30-day rolling average data for NOx for the 12 month period prior to the date the notice is submitted. Guardian must clearly identify any days that it believes are exempted from the 30 day rolling average emission rate and indicate which exemption applies (i.e., maintenance, malfunction, furnace or control device startup, or abnormally low production rate days).</li> <li>c. Guardian’s notice must identify any equipment that it installed and explain all actions</li> </ol>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>that it took in order to achieve reduced emissions at the furnace for which it seeks alternative compliance option. Guardian shall continue to operate any equipment and continue all actions necessary to maintain such emission reductions.</p> <p>d. Guardian may not elect to comply with an alternative compliance option for a furnace that has had any exceedances of the final NOx emission limit(s) above within the last twelve (12) months prior to the election allowed by this compliance options.</p> <p>e. Guardian must continue to operate the SCR at all times as required above (NOx limits). However, Guardian may also comply with a NOx limit for abnormally low production rate days, which shall be calculated as follows:</p> <p style="padding-left: 40px;">Guardian may exclude the NOx emissions generated from that furnace during an abnormally low production rate day (or days) from the 30 day rolling average emission rate. During these days, a CEMS shall be used to demonstrate Guardian's compliance on a 24-hr block average with the following pound per day limit:</p> $\text{NOx abn} = 1.6 \frac{\text{lb NOx}}{\text{ton}} \times \left\lfloor \frac{P}{0.35} \right\rfloor$ <p>Where:            NOx abn = NOx emission limit in pounds per day for a furnace using SCR during days when a abnormally low production rate is occurring.            P = 270 tons of glass produced per day.</p>
C.28	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>SO<sub>2</sub> limits:            By no later than December 31, 2021, Guardian must install a DS for each furnace. If a furnace undergoes a cold tank repair prior to this day, it must install a DS at the time of the cold tank repair.</p> <p>Interim Emission Limit:            Guardian shall comply with an interim emission limit of no more than 30 lb/hr of SO<sub>2</sub> using a semi-dry scrubber until Guardian installs the SCR or the deadline above, whichever occurs first.</p> <p>Final SO<sub>2</sub> emission controls:            By no later than first operating day after December 31, 2021, Guardian shall operate each furnace passing all stack gases (except during furnace startup, control device startup, malfunction of the DS or PD, or maintenance of the DS or PD) through a DS.</p> <p>Final SO<sub>2</sub> emission limits:            By no later than first operating day after December 31, 2021, Guardian shall not exceed a 30-day rolling average emission rate of 1.2 lb SO<sub>2</sub> per Ton of glass produced, except as provided below. Guardian shall demonstrate compliance with the 30 day rolling average emission rate using SO<sub>2</sub> CEMS.</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>SO<sub>2</sub> limit during furnace startup, control device startup, malfunction of the DS or PD, maintenance of the DS or PD, and abnormally low production rate days:</p> <ul style="list-style-type: none"> <li>i. SO<sub>2</sub> limit during furnace startup: For no more than 30 days allowed for furnace startup, furnace exhaust may bypass the DS to avoid having the operating inlet temperature of the DS fall below its operational range. During the days that furnace exhaust bypasses the DS, Guardian shall burn no more than five (5) million standard cubic feet of natural gas in that furnace per day. When technically feasible and available, Guardian will operate the DS on the furnace exhaust.</li> <li>ii. SO<sub>2</sub> limit during control device startup or malfunction of the DS or PD: For any operating day during control device startup or on which a malfunction of the DS or PD occurs, Guardian may exclude the emissions generated during that operating day (or days) from all furnaces connected to that DS or PD from the 30 day rolling average emission rate. During the days excluded from the 30 day rolling average emission rate, a CEMS shall be used to demonstrate compliance with 3,819 pound per day SO<sub>2</sub> limit on a 24-hr block average.</li> <li>iii. SO<sub>2</sub> limit during maintenance of the DS or PD: For any operating day when maintenance is performed on the DS or PD, Guardian may exclude the emissions generated during that operating day (or days) from that furnace from the 30 day rolling average emission rate. During the days excluded from the 30 day rolling average emission rate, a CEMS shall be used to demonstrate compliance with the following pound per day SO<sub>2</sub> limit on a 24-hr block average: <ul style="list-style-type: none"> <li> <math display="block">SO_2 \text{ scrub maint} = \frac{MH \times SO_2 \text{ w/o DS}}{24} + \frac{NH \times \left[ 1.2 \times \left( \frac{P}{0.35} \right) \right]}{24}</math> </li> </ul> <p>Where:  SO<sub>2</sub> scrub maint = SO<sub>2</sub> emission limit (in pounds per day) for a furnace with a DS during maintenance of the DS or PD.  SO<sub>2</sub> w/o DS = 3,819 pounds per day  P = 270 tons of glass produced per day  MH = hours of maintenance  NH = normal hours = 24 - MH</p> </li> <li>iv. SO<sub>2</sub> limit during abnormally low production rate days: When operating at an abnormally low production rate, Guardian may exclude SO<sub>2</sub> emissions generated from that furnace during that operating day (or days) from the 30 day rolling average emission rate. During these days, a CEMS shall be used to demonstrate Guardian's compliance on a 24-hr block average with the following pound per day limit: <ul style="list-style-type: none"> <li> <math display="block">SO_2 \text{ abn} = 1.2 \frac{lb \text{ SO}_2}{ton} \times \left[ \frac{P}{0.35} \right]</math> </li> </ul> <p>Where:</p> </li> </ul>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>SO<sub>2</sub> abn = SO<sub>2</sub> emission limit in pounds per day for a furnace during days when a abnormally low production rate is occurring.                      P = 270 tons of glass produced per day.</p>
C.29	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Increased Production Capacity: If increased production capacity at a furnace is authorized by a revised permit limit, the applicable pound per day limit(s) established in conditions C.27 and C.28 will be increased using the following formula:                      New pound per day limit = original pound per day limit X CODnew/CODold                      Where:                      CODnew = New daily glass production in tons of glass per day                      CODold = Originally daily glass production in tons of glass per day.</p>
C.30	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>PM Emission Controls:                      Guardian shall operate each furnace passing all stack gases (except during furnace startup, control device startup, malfunction of the PD, or maintenance of the PD) through a PD.</p> <p>Final PM Emission Limit: Guardian shall not exceed a limit of 0.45 lb PM per ton glass produced.</p> <p>Compliance with the PM limit shall be demonstrated through annual stack tests and using EPA test method 5 (40 CFR 60, Appendix A-3). Guardian shall conduct an initial stack test on each furnace by no later than 180 days after the effective date of the consent decree (September 29, 2015) and once each calendar year thereafter.</p>
C.31	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>H<sub>2</sub>SO<sub>4</sub> Emission Controls:                      By no later than the first operating day after December 31, 2021, Guardian shall operate each furnace equipped with a DS passing all stack gases through the DS (except during furnace startup, control device startup, malfunction of the DS and PD, or maintenance of the DS or PD).</p> <p>Final H<sub>2</sub>SO<sub>4</sub> Limits: Guardian shall not exceed a H<sub>2</sub>SO<sub>4</sub> emission limit of 1.6 lb of H<sub>2</sub>SO<sub>4</sub> per hour.</p> <p>Compliance with the H<sub>2</sub>SO<sub>4</sub> emission limit shall be demonstrated through annual stack tests and</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>using EPA conditional test method CTM 13A or B. Guardian shall conduct an initial stack test no later than 180 days after December 31, 2021 and once each calendar year thereafter.</p>
C.32	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Guardian shall install, calibrate, certify, maintain, and operate NOx CEMS (on both inlet and outlet of the SCR) and SO<sub>2</sub> CEMS in accordance with the requirements specified below by no later than December 31, 2016:</p> <ul style="list-style-type: none"> <li>a) NOx and SO<sub>2</sub> CEMS shall continuously monitor and record the hourly NOx and SO<sub>2</sub> emission concentrations (in parts per million, ppm) during each operating day of the furnace.</li> <li>b) NOx and SO<sub>2</sub> CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR 60 Appendix B (performance specification 2), and 40 CFR 60, Appendix F (quality assurance procedures).</li> <li>c) The first CEMS certification shall be required no later than December 31, 2016.</li> <li>d) Events that will trigger subsequent CEMS certification (or CEMS re-certification) include any furnace startup or control device startup. Guardian shall commence such CEMS re-certification no later than thirty (30) days after furnace startup commences or a control device startup period concludes. If a furnace startup and a control device startup happen at the same time, then the CEMS re-certification shall not be conducted until the first operating day after the later startup event concludes.</li> </ul> <p>Where the consent decree requires the use of CEMS to determine compliance with an emission rate, the data acquisition and handling system for the CEMS shall convert the ppm values into pounds per hour values using an O<sub>2</sub> CEMS or a flow monitor installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR 60 Appendix B (performance specification 2 or 6 as applicable), and 40 CFR 60, Appendix F (quality assurance procedures). At the end of each operating day, the data acquisition and handling shall divide the total daily emissions in pounds per day or valid CEMS hourly data by the total tons of glass produced during the operating day (reduced proportionally based on the valid CEMS data hours) to describe the pound per ton emission rate for the operating day. The resulting number shall be recorded in units of pounds of pollutant per ton of glass produced for the applicable operating day.</p> <p>CEMS certification and CEMS certification events: Guardian shall no perform CEMS certification or CEMS re-certifications during abnormally low production days, idling, furnace startup, control device startup, malfunction of any control device, or maintenance of any control device. By no later than the first operating day after any CEMS certification event concludes, a new CEMS certification or CEMS recertification shall be performed for that furnace. If a CEMS certification even occurs, the requirement to demonstrate compliance continuously with the applicable final NOx or SO<sub>2</sub> emission limit for that furnace will be suspended until CEMS certification or CEMS re-certification is complete</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	(provided that the seven-day test required for CEMS certification is commenced on the first operating day following the conclusion of the CEMS certification event).
C.33	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Good Air Pollution Control Practices: At all times, including during abnormally low production rate days, idling, a furnace startup, a control device startup, malfunction, and maintenance, Guardian shall maintain and operate all furnaces, all control devices, and any other associated air pollution control equipment in accordance with 40 CFR 60.11(d).</p>
C.34	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Maintenance for Control Devices and Canal Changes:</p> <ul style="list-style-type: none"> <li>a) Scheduled or Preventive Maintenance on Control Devices: Any operating hour that is exempted from the applicable 30-day rolling average emission rate because of maintenance being performed on a control device is subject to the following requirements: scheduled or preventive maintenance of control devices shall occur and shall be completed while the furnace connected to the control devices is not operating, unless the furnace connected to the control device is scheduled to have a continuous operating year. During a continuous operating year, scheduled or preventive maintenance on the control devices may be conducted while the furnace connected to the control devices is operating. All control device maintenance occurring during a continuous operating year must also be performed in accordance with the following requirements: <ul style="list-style-type: none"> <li>i. Maintenance on all add-on control devices shall not exceed 144 hours total per calendar year.</li> <li>ii. Bypassing a SCR for the purpose of preventive maintenance shall not exceed 144 hour per calendar year. Bypass of the SCR required as a result of bypassing the PD or DS shall count towards the 144 hour limit.</li> <li>iii. Bypassing a PD for the purpose of preventive maintenance shall not exceed 144 hours per calendar year. Furthermore, if a PD is bypassed, the associated DS and SCR must be bypassed as well.</li> </ul> </li> </ul> <p>Bypassing a DS for the purpose of preventive maintenance shall not exceed 144 hours per calendar year. Bypass of the DS required as a result of bypassing the PD shall count towards the 144 hour limit.</p>
C.35	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>Canal Changes: No more than once every 2 calendar years, Guardian is permitted 96 hours to complete a canal change on their downstream equipment. In the even a canal change becomes necessary in less than 2 years, Guardian shall notify EPA and the applicable plaintiff intervenor at least 30 days prior to the canal change to provide them opportunity to investigate the necessity of canal change and object. During this period, the furnace will operate at abnormally low production rate, good air pollution control practices will be used at all times, the DS and PD (if technologically feasible for the catalyst-impregnated ceramic filter system) must be operated, and the SCR must be operated unless the inlet temperature or flow to the SCR drops to less than 115% of the minimum operating temperature or flow (as defined by SCR vendor) for 15 consecutive minutes, and then Guardian may discontinue use of the SCR until temperature and flow stabilize at 115% of the recommended minimum.</p>
C.36	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Source/Stack Testing: All source/stack tests required by the consent decree shall be conducted in accordance with the requirements of the specified test method and shall be performed under representative operating conditions or applicable state requirements for the furnace being tested. Each test shall be comprised of at least three (3) valid one-hour stack test runs. Guardian shall report the results of the discarded test runs to EPA and shall provide all information to document why the test run was not valid. Source/stack testing shall not be conducted during abnormally low production rate days, idling, a furnace startup, control device startup, malfunction of the furnace or relevant control device, or maintenance of the furnace or relevant control device.</p>
C.37	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Alternative Primary Control Technology: At any time before termination of the consent decree, Guardian may request approval from EPA and the applicable Plaintiff-Intervenor to install and operate alternative primary control technology for controlling NO<sub>x</sub>, SO<sub>2</sub>, PM, or H<sub>2</sub>SO<sub>4</sub> emissions in addition to or in lieu of the control devices required in the consent decree. In seeking such approval, Guardian must demonstrate that the proposed alternative primary control technology is capable of achieving and maintaining compliance with the final emissions limits required by the consent decree unless Guardian requests and EPA approves different final emission limit(s) pursuant to Paragraph 38 of consent decree. If Guardian chooses to request alternative primary control technology, Paragraphs 32-38 of the consent decree outlines the requirements that should be followed.</p>
C.38	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>Abnormally Low Production Rate Days: Richburg facility is limited to 270 tons per day for abnormally low production rate threshold. If increased production capacity is authorized by a revised permit limit, the abnormally low production rate day threshold will be 35 percent of the new permitted production (or design production, where there is no permitted production) as determined on a daily basis.</p>
C.39	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>Recordkeeping: Guardian shall record the hourly NOx emissions (ppm) before and after the SCR as calculated using CEMS data, the hourly SO<sub>2</sub> emissions (lb per hour) as calculated using CEMS data, daily production rate, and if applicable, the 30-day rolling average emissions (removal efficiency or rate).</p> <p>For any operating day(s) that Guardian excludes from the relevant 30-day rolling average NOx removal efficiency or 30-day rolling average NOx or SO<sub>2</sub> emission rate, it shall record:</p> <ol style="list-style-type: none"> <li>1. The date</li> <li>2. The relevant exception pursuant to which Guardian is excluding the emissions generated during that operating day(s) (i.e. abnormally low production day, idling, start-up as defined by SIP approved district rule 4354, furnace startup, control device startup, malfunction, or maintenance)</li> <li>3. A calculation of the applicable emission limit (in pounds NOx and or SO<sub>2</sub> per day) according to the equations in conditions C.27 and C.28</li> <li>4. The emissions recorded by the CEMS (in pounds of NOx and/or SO<sub>2</sub> per day)</li> <li>5. If it was a malfunction an explanation and any corrective actions taken.</li> </ol> <p>For any operating day(s) excluded for maintenance of a control device or furnace, Guardian shall also record the total number of hours during which maintenance occurred.</p> <p>Recordkeeping during furnace startup: In addition to the recordkeeping requirements listed above, Guardian must also keep the following records during furnace startup:</p> <ol style="list-style-type: none"> <li>1. The amount of salt cake added to the batch materials in pounds per ton of total batch material (including cullet)</li> <li>2. The total natural gas usage in that furnace (in million standard cubic feet)</li> <li>3. The excess oxygen percentage (as measured and recorded by the oxygen sensor in the crown of each furnace regenerator at least once per shift)</li> </ol> <p>A description of whether thermal blankets or similar techniques were used during this period.</p>
C.40	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01  <b>Control Device ID:</b> ESP1/Scrubber</p>



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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>Reporting Requirements: Until termination of the consent decree, Guardian shall submit to EPA and the Plaintiff-Intervenors a written, annual progress report by no later than March 1 of each calendar year.</p> <p>Each annual report shall include the following information for the proceeding calendar year</p> <ol style="list-style-type: none"><li>1. The status of Guardian's progress toward implementing compliance requirements</li><li>2. Identification of which facilities will have control devices installed by December 31 of that year (or if applicable, will shut down)</li><li>3. A description of any compliance requirement completed</li><li>4. Any problems encountered or anticipated in implementing compliance requirements, together with implemented or proposed solutions</li><li>5. A summary of all permitted activity pertaining to compliance with the consent decree and the status of any necessary permit applications</li><li>6. For each furnace that is subject to a final emissions limit in section IV of the consent decree, a record of that furnace's daily 30-day rolling average removal efficiency or 30-day rolling average rate for NOx and SO<sub>2</sub></li><li>7. The actual monthly emissions of NOx and SO<sub>2</sub> measured using CEMS, and for PM and H<sub>2</sub>SO<sub>4</sub> emissions as estimated based on the most recent source/stack test</li><li>8. The results of any source/stack testing performed at any furnace</li><li>9. Monthly production of glass</li><li>10. A list of days excluded from the 30-day rolling average emission rate and 30-day rolling average NOx removal efficiency due to an abnormally low production rate day, idling, furnace startup, malfunction, maintenance</li><li>11. The pounds of NOx or SO<sub>2</sub> emitted from each day excluded from the 30-day rolling averages (where applicable)</li><li>12. Payment of any civil or stipulated penalties</li><li>13. Any other information required to be recorded in condition C.39.</li></ol> <p>Each annual report should also include a description of any non-compliance with the requirements of the consent decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If Guardian violates, or has reason to believe that it may have violated, any requirements of the consent decree, Guardian shall notify the United States (Chief of Environmental Enforcement Section - Environmental and Natural Resource Division - US Department of Justice) and applicable Plaintiff-Intervenor of such violation and its likely duration, in writing and by telephone, fax, or email, within ten (10) days of the day Guardian first became aware of the violation of potential violation. This notice shall provide an explanation of the violations likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Guardian shall explain this in the report. Guardian shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

<b>Condition Number</b>	<b>Conditions</b>
	<p>30-days of the day Guardian first becomes aware of the cause of the violation.</p> <p>Whenever any violation of the consent decree or any other event affecting Guardian's performance under the decree, or affecting the performance of a furnace, may pose an immediate threat to the public health or welfare of the environment, Guardian shall notify EPA and the applicable Plaintiff-Intervenor orally or by electronic or facsimile transmission as soon as possible, but in no case no later than 24 hours after Guardian first knew of the violation or event. This procedure is in addition for the requirements in preceding paragraph.</p> <p>Guardian shall notify EPA if it makes a decision to change the furnace intended for the next installation of controls or the furnace intended for permanent shutdown from that reported in the annual report. All reports shall be submitted to the persons designated in Section XVI of the consent decree. Each report submitted by Guardian under this condition shall be signed by an official of the submitting party and shall include the following certification:</p> <p style="padding-left: 40px;">I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.</p> <p>This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.</p> <p>The reporting requirements of the consent decree do not relieve Guardian of any reporting obligations required by the Clean Air Act or its implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement. Any information provided pursuant to the terms and implementation of the consent decree may be used by the United States or any Plaintiff-Intervenor in any proceeding to enforce the provisions of the consent decree and as otherwise permitted by law.</p>
C.41	<p><b>Emission Unit ID:</b> 01 <b>Equipment ID:</b> 1.01, 148, 1,49 <b>Control Device ID:</b> ESP1/Scrubber</p> <p>(S.C. Regulation 61-62.5, Standard No. 1, Section II) The maximum allowable discharge of particulate matter resulting from these source(s) is 0.6 pounds per million BTU input.</p>
C.42	<p><b>Emission Unit ID:</b> 01 <b>Equipment ID:</b> 1.01, 1.48, 1.49 <b>Control Device ID:</b> ESP1/Scrubber</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	(S.C. Regulation 61-62.5, Standard No. 1, Section III) The maximum allowable discharge of sulfur dioxide (SO <sub>2</sub> ) resulting from these source(s) is 2.3 pounds per million BTU input.
C.43	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01, 1.48, 1.49  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>(S.C. Regulation 61-62.5, Standard No. 1, Section I) The fuel burning source(s) shall not discharge into the ambient air smoke which exceeds opacity of 20%. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.</p>
C.44	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.01, 1.48, 1.49  <b>Control Device ID:</b> ESP1/Scrubber</p> <p>No periodic monitoring for opacity will be required during periods of burning natural gas or propane. If only natural gas or propane was combusted or if the unit did not operate during the semiannual period, the report shall state so.</p>
C.45	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.48, 1.49  <b>Control Device ID:</b> None</p> <p>These source(s) are permitted to burn only natural gas and propane as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Department.</p>
C.46	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> 1.82, 1.83  <b>Control Device ID:</b> None</p> <p>(S. C. Regulation 61-62.5, Standard No. 5.2) Any existing source where a burner assembly is replaced with another burner assembly after June 25, 2004, regardless of size or age of the burner assembly to be replaced shall be replaced with a low NO<sub>x</sub> burner assembly or equivalent technology, and shall achieve a 30 percent reduction from uncontrolled NO<sub>x</sub> emission levels based upon manufacturer's specifications. An exemption from this requirement shall be granted when a single burner assembly is being replaced in an existing source with multiple burners due to non-routine maintenance. The replacement of individual components such as burner heads, nozzles, or windboxes does not trigger this requirement.</p> <p>The owner or operator shall notify and register the burner assembly replacement with the Department, in writing, within 7 days of replacing the existing burner assembly. Notification will be provided on the Department's Low NO<sub>x</sub> Burner Assembly Replacement Notification Form D-2935.</p>

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**C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS**

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>Those affected sources that wish to receive an emission reduction credit for the control device will be required to submit a construction permit application. Those affected sources requesting an alternative control methodology must receive written approval prior to burner replacement.</p> <p>The owner or operator shall perform tune-ups every twenty-four (24) months in accordance with manufacturer's specifications or with good engineering practices. The first tune-up shall be conducted no more than twenty-four (24) months from replacement of a burner assembly for affected existing sources. Each subsequent tune-up shall be conducted no more than twenty-four (24) months after the previous tune-up. If burners are not currently in operation, tune-ups are not required to be conducted. The burners are not required to be placed into operation solely for the purpose of performing tune-ups. If 24 months have passed since the previous tune-up, the burners shall be tuned-up prior to being placed into operation.</p> <p>All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.</p> <p>The owner or operator shall develop and retain a tune-up plan on file.</p>

**D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY**

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ (Emergency Generators see note 3 and 4)	N/A	N/A	N/A

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with 40 CFR 63.10(a)(5). This request may be made 1 year after the compliance date for the associated MACT standard.
3. Facilities with emergency generators are not required to submit reports. Only facilities with non-emergency engines are required to submit semiannual reports.
4. Facilities with emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).

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**E. NESHAP - CONDITIONS**

<b>Condition Number</b>	<b>Conditions</b>
E.1	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South Carolina Department of Health and Environmental Control - Bureau of Air Quality.
E.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address or electronically as required by the specific subpart:  <b>US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street SW Atlanta, GA 30303</b>
E.3	Emergency power generators less than or equal to 150 kilowatt (kW) rated capacity or greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance with a method to record the actual hours of use such as an hour meter have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1. These sources shall still comply with the requirements of all applicable regulations including but not limited to the following:  New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions); NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines); NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines); National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines).

**F. COMPLIANCE SCHEDULE - RESERVED**

**G. PERMIT SHIELD**

<b>Condition Number</b>	<b>Conditions</b>
G.1	(S.C. Regulation 61-62.70.6.f) A copy of the "applicability determination" submitted with the Part 70 permit application is included as Attachment – Applicable and Non-Applicable Federal and State Regulations. With the exception of those listed below, compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements specified in Attachment – Applicable and Non-Applicable Federal and State Regulations as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in the permit. Exceptions to this are stated below in the Permit Shield Exceptions Table. The owner or operator shall

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**G. PERMIT SHIELD**

<b>Condition Number</b>	<b>Conditions</b>
	<p>also be shielded from the non-applicable requirements specified in Attachment – Applicable and Non-Applicable Federal and State Regulations. Exceptions to this are stated below in the Permit Shield Exceptions Table.</p> <p>Nothing in the permit shield or in any Part 70 permit shall alter or affect the provisions of Section 303 of the Act, Emergency Orders, of the Clean Air Act; the liability of the owner or operator for any violation of applicable requirements prior to or at the time of permit issuance; the applicable requirements of the Acid Rain Program, consistent with Section 408.a of the Clean Air Act; or the ability of US EPA to obtain information from a source pursuant to Section 114 of the Clean Air Act. In addition, the permit shield shall not apply to emission units in noncompliance at the time of permit issuance, minor permit modifications (S.C. Regulation 61-62.70.7.e.2), group processing of minor permit modifications (S.C. Regulation 61-62.70.7.e.3), or operational flexibility (S.C. Regulation 61-62.70.7.e.5.i), except as specified in S.C. Regulation 61-62.70.7.e.5.iii.</p>
<b>Permit Shield Exceptions</b>	
SC Regulation 61-62.1, Section II	
SC Regulation 61-62.3, Air Pollution Episodes	
SC Regulation 61-62.5, Standard No. 5.2, Control of Oxides of Nitrogen	
SC Regulation 61-62.5, Standard No. 7, Prevention of Significant Deterioration	
SC Regulation 61-62.5, Standard No. 7.1, Nonattainment New Source Review	
40 CFR 59, National Volatile Organic Compound Emission Standards for Consumer and Commercial Products	
40 CFR 61 Subpart M, National Emission Standard for Asbestos	
40 CFR 82, Protection of Stratospheric Ozone	

**H. PERMIT FLEXIBILITY**

<b>Condition Number</b>	<b>Conditions</b>
H.1	<p>The facility may install, remove, and modify insignificant activities as defined in S.C. Regulation 61-62.70.5.c and exempt sources as listed in S.C. Regulation 61-62.1, Section II.B, without revising or reopening the Title V Operating Permit. A list of insignificant activities/exempt sources must be maintained on site, along with any necessary documentation to support the determination that the activity is insignificant and/or exempt, and shall be made available to a Department representative upon request. The list shall be submitted with the next renewal application.</p>

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**I. AMBIENT AIR STANDARDS REQUIREMENTS**

Condition Number	Conditions
I.1	<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 this demonstration 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 - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards 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 - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.</p>

**J. PERIODIC REPORTING SCHEDULE**

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Quarterly	January-March April-June July-September October-December	April 30 July 30 October 30 January 30
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30

Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.

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

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

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

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



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

<b>Condition Number</b>	<b>Conditions</b>
	application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
L.6	<p>(S.C. Regulation 61-62.1, Section II.J) For sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department's local Environmental Quality Control Regional office within 24 hours after the beginning of the occurrence.</p> <p>The owner/operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include, at a minimum, the following:</p> <ol style="list-style-type: none"><li>1. The identity of the stack and/or emission point where the excess emissions occurred;</li><li>2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;</li><li>3. The time and duration of excess emissions;</li><li>4. The identity of the equipment causing the excess emissions;</li><li>5. The nature and cause of such excess emissions;</li><li>6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;</li><li>7. The steps taken to limit the excess emissions; and,</li><li>8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.</li></ol>
L.7	<p>(S.C. Regulation 61-62.70.6.c.5.iii) The responsible official shall certify, annually, compliance with the conditions of this permit as required under S.C. Regulation 61-62.70.6.c. The compliance certification shall include the following:</p> <ol style="list-style-type: none"><li>1. The identification of each term or condition of the permit that is the basis of the certification.</li><li>2. The identification of the method(s) or means used by the owner or operator for determining the compliance status with each term and condition of the permit during the certification period.</li><li>3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in S.C. Regulation 61-62.70.6.c.5.iii.B. The certification shall identify each deviation and take it into account in the compliance certification.</li><li>4. Such other facts as the Department may require to determine the compliance status of the source.</li></ol>
L.8	<p>(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Director</p>

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

<b>Condition Number</b>	<b>Conditions</b>
	of Engineering Services a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner or operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.

**M. GENERAL FACILITY WIDE**

<b>Condition Number</b>	<b>Conditions</b>
M.1	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
M.2	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."
M.3	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."
M.4	The owner or operator shall comply with S.C. Regulation 61-62.6 "Control of Fugitive Particulate Matter", Section III "Control of Fugitive Particulate Matter Statewide."
M.5	The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to 40 CFR Part 61.145, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
M.6	The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to S.C. Regulation 61-86.1, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
M.7	The owner or operator shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Protection of Stratospheric Ozone, Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. If the owner or operator performs a service on motor (fleet) vehicles that involves ozone-depleting substance refrigerant in MVACs, the owner or operator is subject to all applicable requirements of 40 CFR Part 82, Subpart B, Servicing of MVACs.
M.8	(S.C. Regulation 61-62.70.6.a.5) The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
M.9	(S.C. Regulation 61-62.70.6.a.6.i) The owner or operator must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the S.C. Pollution Control Act and/or the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of permit renewal application.
M.10	(S.C. Regulation 61-62.70.6.a.6.ii) It shall not be a defense for an owner or operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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**M. GENERAL FACILITY WIDE**

Condition Number	Conditions
M.11	(S.C. Regulation 61-62.70.6.a.6.iii) The permit may be modified, revoked, reopened and reissued, or terminated for cause by the Department. The filing of a request by the owner or operator for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
M.12	(S.C. Regulation 61-62.70.6.a.6.iv) The permit does not convey any property rights of any sort, or any exclusive privilege.
M.13	(S.C. Regulation 61-62.70.6.a.6.v) The owner or operator shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the owner or operator shall also furnish to the Department copies of records required to be kept by the permit or, for information claimed to be confidential, the owner or operator may furnish such records directly to the Administrator along with a claim of confidentiality. The Department may also request that the owner or operator furnish such records directly to the Administrator along with a claim of confidentiality.
M.14	(S.C. Regulation 61-62.70.6.a.8) No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
M.15	(S.C. Regulation 61-62.70.6.c.2) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following: <ol style="list-style-type: none"><li>1. Enter upon the owner or operator's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit.</li><li>2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.</li><li>3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.</li><li>4. As authorized by the Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.</li></ol>
M.16	(S.C. Regulation 61-62.70.6.g) In the case of an emergency, as defined in S.C. Regulation 61-62.70.6.g.1, the owner or operator shall demonstrate an affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that: <ol style="list-style-type: none"><li>1. An emergency occurred and that the owner or operator can identify the cause(s) of the emergency;</li><li>2. The permitted facility was at the time being properly operated; and</li><li>3. During the period of the emergency the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and</li><li>4. The owner or operator shall submit verbal notification of the emergency to the Department within twenty-four (24) hours of the time when emission limitations were exceeded, followed</li></ol>

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**M. GENERAL FACILITY WIDE**

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

## ATTACHMENT - Emission Rates for Ambient Air Standards

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

<b>AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2</b>						
<b>Emission Point ID</b>	<b>Emission Rates (lbs/hr)</b>					
	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>Lead</b>
BIN67	0.108	0.044	---	---	---	---
BIN68	0.108	0.044	---	---	---	---
BIN69	0.108	0.044	---	---	---	---
BIN612	0.108	0.044	---	---	---	---
BIN620	0.108	0.044	---	---	---	---
CC5	0.108	0.044	---	---	---	---
CC66	0.108	0.044	---	---	---	---
GCC7	0.108	0.044	---	---	---	---
FUG1	0.07	0.07	---	---	---	---
MELT1	50	50	150	450	7.698	---
RMC63	0.108	0.044	---	---	---	---
SEAM3	0.108	0.044	---	---	---	---
SF2A	0.07	0.07	---	---	---	---
SF2B	0.2575	0.2575	---	---	---	---
SF2C	0.2575	0.2575	---	---	---	---

<b>TOXIC AIR POLLUTANTS – STANDARD NO. 8</b>					
<b>Emission Point ID</b>	<b>Emission Rates (lbs/hr)</b>				
	<b>Cobalt</b> 7440-48-4	<b>Selenium</b> 7782-49-2	<b>Sulfuric Acid</b> 7664-93-9	<b>N/A</b>	<b>N/A</b>
MELT1	0.02	1.67	5.5	---	---

<b>TOXIC AIR POLLUTANTS – STANDARD NO. 8</b>		
<b>POLLUTANT</b>	<b>CAS NUMBER</b>	<b>Facility Wide Emission Rates (lbs/day)</b>
Cobalt	7440-48-4	0.48
Selenium	7782-49-2	40.08

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

## Guardian Industries, LLC

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

PERMIT SHIELD				
1.Citation	2. Regulation	3. Applicable (Y/N)	4. Standard Reason Indicator	5. Comments (Use when choosing Indicator "J")
SC Regulation 61-62.1	Definitions and General Requirements	Y	D	
SC Regulation 61-62.2	Prohibition of Open Burning	Y	D	
SC Regulation 61-62.3	Air Pollution Episodes	N	J	Commissioner criteria
SC Regulation 61-62.4	Hazardous Air Pollution Conditions	Y	D	
SC Regulation 61-62.5, Std. No. 1	Emissions from Fuel Burning Operations	Y	I	
SC Regulation 61-62.5, Std. No. 2	Ambient Air Quality Standards	Y	D	
SC Regulation 61-62.5, Std. No. 3	Waste Combustion and Reduction	N	A	
SC Regulation 61-62.5, Std. No. 3.1	Hospital, Medical, Infectious Waste Incinerators (HMIWI)	N	A	
SC Regulation 61-62.5, Std. No. 4	Emissions from Process Industries	Y	I	
SC Regulation 61-62.5, Std. No. 5	Volatile Organic Compounds	N	F	
SC Regulation 61-62.5, Std. No. 5.1	LAER Applicable to VOCs	N	F	
SC Regulation 61-62.5, Std. No. 5.2	Control of Oxides of Nitrogen (NOx)	N	C	
SC Regulation 61-62.5, Std. No. 6	Alternative Emission Limitation Options	N	J	Facility is not using this compliance option
SC Regulation 61-62.5, Std. No. 7	Prevention of Significant Deterioration	Y	D	
SC Regulation 61-62.5, Std. No. 7.1	Nonattainment New Source Review	N	H	
SC Regulation 61-62.5, Std. No. 8	Toxic Air Pollutants	Y	D	
SC Regulation 61-62.6	Control of Fugitive Particulate Matter	Y	D	
SC Regulation 61-62.7	Good Engineering Practice Stack Height	Y	D	
SC Regulation 61-62.60	SC Designated Facility Plan and NSPS (Subparts A - DDDD)	Y	D	
SC Regulation 61-62.63	National Emission Standards for Hazardous Air Pollutants (Subparts A – FFFF, DDDDD, HHHHH)	Y	I	
SC Regulation 61-62.68	Chemical Accident Prevention Provisions	N	A	

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

**Guardian Industries, LLC**

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<b>PERMIT SHIELD</b>				
<b>1.Citation</b>	<b>2. Regulation</b>	<b>3. Applicable (Y/N)</b>	<b>4. Standard Reason Indicator</b>	<b>5. Comments (Use when choosing Indicator "J")</b>
SC Regulation 61-62.70	Title V Operating Permit Program	Y	J	Facility has a Title V permit.
SC Regulation 61-62.72	Acid Rain	N	A	
SC Regulation 61-62.96	NO <sub>x</sub> Budget Trading Program	N	A	
SC Regulation 61-62.99	NO <sub>x</sub> Budget Trading Program Requirements for Stationary Sources Not in the Trading Program	N	A	
40 CFR 59	National Volatile Organic Compound Emission Standards for Consumer and Commercial Products	N	A	
40 CFR 60 subpart A	General Provisions	Y	D	
40 CFR 60 subpart B	Adoption and Submittal of State Plans for Designated Facilities	N	A	
40 CFR 60 subpart C	Emission Guidelines and Compliance Times	N	A	
40 CFR 60 subpart Cb	Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are Constructed on or Before September 20, 1994	N	A	
40 CFR 60 subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	N	A	
40 CFR 60 subpart Cd	Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units	N	A	
40 CFR 60 subpart Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	N	A	
40 CFR 60 subpart D	Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	N	B	
40 CFR 60 subpart Da	Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978	N	B	
40 CFR 60 subpart Db	Industrial-Commercial-Institutional Steam Generating Units	N	B	
40 CFR 60 subpart Dc	Small Industrial-Commercial-Institutional Steam Generating Units	N	B	
40 CFR 60 subpart E	Incinerators	N	B	
40 CFR 60 subpart Ea	Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989 and on or Before September 20, 1994	N	A	

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

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<b>PERMIT SHIELD</b>				
<b>1.Citation</b>	<b>2. Regulation</b>	<b>3. Applicable (Y/N)</b>	<b>4. Standard Reason Indicator</b>	<b>5. Comments (Use when choosing Indicator "J")</b>
40 CFR 60 subpart Eb	Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996	N	A	
40 CFR 60 subpart Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	N	A	
40 CFR 60 subpart F	Portland Cement Plants	N	A	
40 CFR 60 subpart G	Nitric Acid Plants	N	A	
40 CFR 60 subpart H	Sulfuric Acid Plants	N	A	
40 CFR 60 subpart I	Hot Mix Asphalt Facilities	N	A	
40 CFR 60 subpart J	Petroleum Refineries	N	A	
40 CFR 60 subpart K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	N	B	
40 CFR 60 subpart Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	N	B	
40 CFR 60 subpart Kb	Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	N	B	
40 CFR 60 subpart L	Secondary Lead Smelters	N	A	
40 CFR 60 subpart M	Secondary Brass and Bronze Production Plants	N	A	
40 CFR 60 subpart N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	N	A	
40 CFR 60 subpart Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	N	A	
40 CFR 60 subpart O	Sewage Treatment Plants	N	A	
40 CFR 60 subpart P	Primary Copper Smelters	N	A	
40 CFR 60 subpart Q	Primary Zinc Smelters	N	A	
40 CFR 60 subpart R	Primary Lead Smelters	N	A	



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

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<b>PERMIT SHIELD</b>				
<b>1.Citation</b>	<b>2. Regulation</b>	<b>3. Applicable (Y/N)</b>	<b>4. Standard Reason Indicator</b>	<b>5. Comments (Use when choosing Indicator "J")</b>
40 CFR 60 subpart S	Primary Aluminum Reduction Plants	N	A	
40 CFR 60 subpart T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	N	A	
40 CFR 60 subpart U	Phosphate Fertilizer Industry: Super Phosphoric Acid Plants	N	A	
40 CFR 60 subpart V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	N	A	
40 CFR 60 subpart W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	N	A	
40 CFR 60 subpart X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	N	A	
40 CFR 60 subpart Y	Coal Preparation Plants	N	A	
40 CFR 60 subpart Z	Ferroalloy Production Facilities	N	A	
40 CFR 60 subpart AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and on or Before August 17, 1983	N	A	
40 CFR 60 subpart AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	N	A	
40 CFR 60 subpart BB	Kraft Pulp Mills	N	A	
40 CFR 60 subpart CC	Glass Manufacturing Plants	Y	I	
40 CFR 60 subpart DD	Grain Elevators	N	A	
40 CFR 60 subpart EE	Surface Coating of Metal Furniture	N	A	
40 CFR 60 subpart GG	Stationary Gas Turbines	N	A	
40 CFR 60 subpart HH	Lime Manufacturing Plants	N	A	
40 CFR 60 subpart KK	Lead-Acid Battery Manufacturing Plants	N	A	
40 CFR 60 subpart LL	Metallic Mineral Processing Plants	N	A	
40 CFR 60 subpart MM	Automobile and Light Duty Truck Surface Coating Operations	N	A	
40 CFR 60 subpart NN	Phosphate Rock Plants	N	A	
40 CFR 60 subpart PP	Ammonium Sulfate Manufacture	N	A	
40 CFR 60 subpart QQ	Graphic Arts Industry: Publication Rotogravure Printing	N	A	
40 CFR 60 subpart RR	Pressure Sensitive Tape and Label Surface Coating Operations	N	A	
40 CFR 60 subpart SS	Industrial Surface Coating: Large Appliances	N	A	

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

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<b>PERMIT SHIELD</b>				
<b>1.Citation</b>	<b>2. Regulation</b>	<b>3. Applicable (Y/N)</b>	<b>4. Standard Reason Indicator</b>	<b>5. Comments (Use when choosing Indicator "J")</b>
40 CFR 60 subpart TT	Metal Coil Surface Coating	N	A	
40 CFR 60 subpart UU	Asphalt Processing and Asphalt Roofing Manufacture	N	A	
40 CFR 60 subpart VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Mfg. Industry	N	A	
40 CFR 60 subpart WW	Beverage Can Surface Coating Industry	N	A	
40 CFR 60 subpart XX	Bulk Gasoline Terminals	N	A	
40 CFR 60 subpart AAA	New Residential Wood Heaters	N	A	
40 CFR 60 subpart BBB	Rubber Tire Manufacturing Industry	N	A	
40 CFR 60 subpart DDD	Volatile Organic Compound Emissions from the Polymer Manufacturing Industry	N	A	
40 CFR 60 subpart FFF	Flexible Vinyl and Urethane Coating and Printing	N	A	
40 CFR 60 subpart GGG	Equipment Leaks of VOC in Petroleum Refineries	N	A	
40 CFR 60 subpart HHH	Synthetic Fiber Production Facilities	N	A	
40 CFR 60 subpart III	Volatile Organic Compound Emissions from the Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes	N	A	
40 CFR 60 subpart JJJ	Petroleum Dry Cleaners	N	A	
40 CFR 60 subpart KKK	Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	N	A	
40 CFR 60 subpart LLL	Onshore Natural Gas Processing: SO2 Emissions	N	A	
40 CFR 60 subpart NNN	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations	N	A	
40 CFR 60 subpart OOO	Nonmetallic Mineral Processing Plants	N	A	
40 CFR 60 subpart PPP	Wool Fiberglass Insulation Manufacturing Plants	N	A	
40 CFR 60 subpart QQQ	VOC Emissions from Petroleum Refinery Wastewater Systems	N	A	
40 CFR 60 subpart RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry Reactor Processes	N	A	
40 CFR 60 subpart SSS	Magnetic Tape Coating Facilities	N	A	
40 CFR 60 subpart TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	N	A	

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40 CFR 60 subpart UUU	Calciners and Dryers in Mineral Industries	N	A	
40 CFR 60 subpart VVV	Polymeric Coating of Supporting Substrates Facilities	N	A	
40 CFR 60 subpart WWW	Municipal Solid Waste Landfills	N	A	
40 CFR 60 subpart AAAA	Small Municipal Waste Combustion Units After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	N	B	
40 CFR 60 subpart BBBB	Emission Guidelines and Compliance Times for Small Municipal Waste Constructed on or Before August 30, 1999	N	B	
40 CFR 60 subpart CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced on or After June 1, 2001	N	B	
40 CFR 60 subpart DDDD	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999	N	B	
40 CFR 60 subpart EEEE	Subpart EEEE—Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	N	B	
40 CFR 60 subpart FFFF	Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction on or Before December 9, 2004	N	B	
40 CFR 60 subpart HHHH	Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units	N	B	
40 CFR 60 subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	N	C	
40 CFR 60 subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	N	B	
40 CFR 60 subpart KKKK	Standards of Performance for Stationary Combustion Turbines	N	A	

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40 CFR 61 subpart A	General Provisions	N	A	
40 CFR 61 subpart B	Radon Emissions from Underground Uranium Mines	N	A	
40 CFR 61 subpart C	Beryllium	N	A	
40 CFR 61 subpart D	Beryllium Rocket Motor Firing	N	A	
40 CFR 61 subpart E	Mercury	N	A	
40 CFR 61 subpart F	Vinyl chloride	N	A	
40 CFR 61 subpart H	Radionuclides Other Than Radon From Department of Energy Facilities	N	A	
40 CFR 61 subpart I	Radionuclide Emissions From Facilities Licensed by the Nuclear Regulatory Commission and Federal Facilities Not covered by Subpart H	N	A	
40 CFR 61 subpart J	Equipment Leaks (Fugitive Emission Source) of Benzene	N	A	
40 CFR 61 subpart K		N	A	
40 CFR 61 subpart L	Benzene Emissions From Coke By-Product Recovery Plants	N	A	
40 CFR 61 subpart M	Asbestos	N	A	
40 CFR 61 subpart N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	N	A	
40 CFR 61 subpart O	Inorganic Arsenic Emissions From Primary Copper Smelters	N	A	
40 CFR 61 subpart P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	N	A	
40 CFR 61 subpart Q	Radon Emissions From Department of Energy Facilities	N	A	
40 CFR 61 subpart R	Radon Emissions From Phosphogypsum Stacks	N	A	
40 CFR 61 subpart T	Radon Emissions From the Disposal of Uranium Mill Tailings	N	A	
40 CFR 61 subpart V	Equipment Leaks (Fugitive Emission Sources)	N	A	
40 CFR 61 subpart W	Radon Emissions From Operating Mill Tailings	N	A	
40 CFR 61 subpart Y	Benzene Emissions From Benzene Storage Vessels	N	A	
40 CFR 61 subpart BB	Benzene Emissions From Benzene Transfer Operations	N	A	

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40 CFR 61 subpart FF	Benzene Waste Operations	N	A	
40 CFR 63 subpart A	General Provisions	Y	D	
40 CFR 63 subpart B	Requirements for Control Technology Determinations for Major Sources	N	A	
40 CFR 63 subpart C	De-Listings	N	A	
40 CFR 63 subpart D	Compliance Extensions for Early Reduction Sources	N	A	
40 CFR 63 subpart E	Approval of State Programs and Delegation of Authority	N	A	
40 CFR 63 subpart F	Synthetic Organic Chemical Manufacturing Industry, HON	N	A	
40 CFR 63 subpart F	Tetrahydrobenzaldehyde Manufacture (Formerly Butadiene Dimers Production)	N	A	
40 CFR 63 subpart G	Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, HON	N	A	
40 CFR 63 subpart H	Synthetic Organic Chemical Manufacturing Industry for Equipment Leaks, HON	N	A	
40 CFR 63 subpart I	Synthetic Organic Chemical Manufacturing Industry for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks, HON	N	A	
40 CFR 63 subpart J	Polyvinyl Chloride and Copolymers Production	N	A	
40 CFR 63 subpart L	Coke Ovens	N	B	
40 CFR 63 subpart M	Dry Cleaning	N	A	
40 CFR 63 subpart N	Chrome Electroplating	N	A	
40 CFR 63 subpart O	Ethylene Oxide Commercial Sterilization Facilities	N	A	
40 CFR 63 subpart Q	Industrial Process Cooling Towers	N	A	
40 CFR 63 subpart R	Gasoline Distribution (Bulk Gasoline Terminals and Pipeline Breakout Stations), Stage I	N	A	
40 CFR 63 subpart S	Pulp and Paper Cluster Rule	N	A	
40 CFR 63 subpart T	Degreasing Organic Cleaners (Halogenated Solvent Cleaning)	N	A	
40 CFR 63 subpart U	Polymers and Resins Group I	N	A	

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40 CFR 63 subpart W	Polymers and Resins Group II, Epoxy Resins Production and Non-Nylon Polyamides Production	N	A	
40 CFR 63 subpart X	Secondary Lead Smelting	N	A	
40 CFR 63 subpart Y	Marine Vessel Unloading Operations	N	A	
40 CFR 63 subpart AA	Phosphoric Acid Manufacturing Plants	N	A	
40 CFR 63 subpart BB	Phosphate Fertilizers	N	A	
40 CFR 63 subpart CC	Petroleum Refineries	N	A	
40 CFR 63 subpart DD	Off-Site Waste and Recovery Operations	N	A	
40 CFR 63 subpart EE	Magnetic Tape Manufacturing	N	A	
40 CFR 63 subpart FF	Benzene Waste Operations	N	A	
40 CFR 63 subpart GG	Aerospace Manufacturing and Rework Facilities	N	A	
40 CFR 63 subpart HH	Oil and Gas Production Facilities	N	A	
40 CFR 63 subpart II	Shipbuilding and Ship repair Facilities (Coating Operations)	N	A	
40 CFR 63 subpart JJ	Wood Furniture Manufacturing Operations	N	A	
40 CFR 63 subpart KK	Printing and Publishing	N	A	
40 CFR 63 subpart LL	Primary Aluminum Reduction Plants	N	A	
40 CFR 63 subpart MM	Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills	N	A	
40 CFR 63 subpart OO	Tanks- Level 1	N	B	
40 CFR 63 subpart WW	Tanks - Level 2	N	B	
40 CFR 63 subpart PP	Containers	N	B	
40 CFR 63 subpart QQ	Surface Impoundments QQ	N	A	
40 CFR 63 subpart RR	Individual Drain Systems	N	B	
40 CFR 63 subpart SS	Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or Process	N	A	
40 CFR 63 subpart TT	Equipment Leaks-Control Level 1	N	B	
40 CFR 63 subpart UU	Equipment Leaks-Control Level 2	N	B	

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40 CFR 63 subpart VV	Oil-Water Separators and Organic-Water Separators	N	A	
40 CFR 63 subpart YY	Generic Maximum Achievable Control Technology (MACT) Standards	N	A	
40 CFR 63 subpart CCC	Steel Pickling Facilities	N	A	
40 CFR 63 subpart DDD	Mineral Wool Production	N	A	
40 CFR 63 subpart EEE	Hazardous Waste Combustors	N	A	
40 CFR 63 subpart GGG	Pharmaceuticals Production	N	A	
40 CFR 63 subpart HHH	Natural Gas Transmission and Storage Facilities	N	A	
40 CFR 63 subpart III	Flexible Polyurethane Foam Production	N	A	
40 CFR 63 subpart JJJ	Polymers and Resins Group IV	N	A	
40 CFR 63 subpart LLL	Portland Cement Manufacturing	N	A	
40 CFR 63 subpart MMM	Pesticide Active Ingredients Production	N	A	
40 CFR 63 subpart NNN	Wool Fiberglass Production	N	A	
40 CFR 63 subpart OOO	Manufacture of Amino/Phenolic Resins	N	A	
40 CFR 63 subpart PPP	Polyether Polyols Production	N	A	
40 CFR 63 subpart QQQ	Primary Copper	N	A	
40 CFR 63 subpart RRR	Secondary Aluminum Production	N	A	
40 CFR 63 subpart TTT	Primary Lead Smelting	N	A	
40 CFR 63 subpart UUU	Petroleum Refineries (catalytic cracking, catalytic reforming and sulfur plant units)	N	A	
40 CFR 63 subpart VVV	Publicly Owned Treatment Works	N	A	
40 CFR 63 subpart XXX	Ferroalloy Production	N	A	
40 CFR 63 subpart AAAA	Municipal Solid Waste (MSW) Landfills	N	A	
40 CFR 63 subpart CCCC	Manufacturing of Nutritional Yeast	N	A	
40 CFR 63 subpart DDDD	Plywood and Composite Wood Products	N	A	
40 CFR 63 subpart EEEE	Organic Liquids Distribution (non-gasoline)	N	A	
40 CFR 63 subpart FFFF	Misc. Organic Chemical Manufacturing (MON)	N	A	
40 CFR 63 subpart GGGG	Solvent Extraction for Vegetable Oil Production	N	A	

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40 CFR 63 subpart HHHH	Wetted Formed Fiberglass Mat Production	N	A	
40 CFR 63 subpart IIII	Automobile and Light Duty Trucks (surface coating)	N	A	
40 CFR 63 subpart JJJJ	Paper & Other Web Coatings (paper, plastic, film, foil, etc.)	N	A	
40 CFR 63 subpart KKKK	Metal Cans (Surface Coating)	N	A	
40 CFR 63 subpart MMMM	Misc. Metal Parts and Products (Surface Coating)	N	A	
40 CFR 63 subpart NNNN	Large Appliance (surface coating)	N	A	
40 CFR 63 subpart OOOO	Fabric Printing, Coating and Dyeing	N	A	
40 CFR 63 subpart PPPP	Plastic Parts and Products (Surface Coating)	N	A	
40 CFR 63 subpart QQQQ	Wood Building Products (surface coating)	N	A	
40 CFR 63 subpart RRRR	Metal Furniture (surface coating)	N	A	
40 CFR 63 subpart SSSS	Metal Coil (surface coating)	N	A	
40 CFR 63 subpart TTTT	Leather Finishing Operations	N	A	
40 CFR 63 subpart UUUU	Cellulose Production Manufacturing	N	A	
40 CFR 63 subpart VVVV	Boat Manufacturing	N	A	
40 CFR 63 subpart WWWW	Reinforced Plastics Composites Production	N	A	
40 CFR 63 subpart XXXX	Tire Manufacturing	N	A	
40 CFR 63 subpart YYYY	Combustion Turbines	N	A	
40 CFR 63 subpart ZZZZ	Reciprocating Internal Combustion Engines (RICE)	Y	I	Future compliance date
40 CFR 63 subpart AAAAA	Lime Manufacturing	N	A	
40 CFR 63 subpart BBBBB	Semiconductor Manufacturing	N	A	
40 CFR 63 subpart CCCCC	Coke Ovens: Pushing, Quenching and Battery Stacks	N	A	
40 CFR 63 subpart DDDDD	Industrial, Commercial, and Institutional Boilers and Process Heaters	N	A	
40 CFR 63 subpart EEEEE	Iron and Steel Foundries	N	A	



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40 CFR 63 subpart FFFFF	Integrated Iron and Steel	N	A	
40 CFR 63 subpart GGGGG	Site Remediation	N	A	
40 CFR 63 subpart HHHHH	Misc. Coating Manufacturing	N	A	
40 CFR 63 subpart IIIII	Mercury Cell Chlor-Alkali Plants	N	A	
40 CFR 63 subpart JJJJJ	Brick and Structural Clay Products Manufacturing	N	A	
40 CFR 63 subpart KKKKK	Clay Ceramic Manufacturing	N	A	
40 CFR 63 subpart LLLLL	Asphalt Roofing and Asphalt Processing	N	A	
40 CFR 63 subpart MMMMM	Flexible Polyurethane Foam Fabrication Operation	N	A	
40 CFR 63 subpart NNNNN	Hydrochloric Acid Production and Fumed Silica Production	N	A	
40 CFR 63 subpart PTTTT	Engine Test Cells/Stands	N	A	
40 CFR 63 subpart QQQQQ	Friction Materials Manufacturing	N	A	
40 CFR 63 subpart RRRRR	Taconite Iron Ore Processing	N	A	
40 CFR 63 subpart SSSSS	Refractory Products Manufacturing	N	A	
40 CFR 63 subpart TTTTT	Primary Magnesium Refining	N	A	
40 CFR 63 subpart WTTTT	Hospital Ethylene Oxide Sterilizers	N	A	
40 CFR 63 subpart YTTTT	Area Sources: Electric Arc Furnace Steelmaking Facilities	N	A	
40 CFR 63 subpart ZTTTT	Iron and Steel Foundries Area Sources	N	A	
40 CFR 63 subpart BBBBB	Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	N	A	
40 CFR 63 subpart CCCCC	Source Category: Gasoline Dispensing Facilities	N	A	
40 CFR 63 subpart DDDDD	Polyvinyl Chloride and Copolymers Production Area Sources	N	A	
40 CFR 63 subpart EEEEE	Primary Copper Smelting Area Sources	N	A	
40 CFR 63 subpart FFFFF	Secondary Copper Smelting Area Sources	N	A	

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40 CFR 63 subpart GGGGGG	Primary Nonferrous Metals Area Sources, Zinc, Cadmium, and Beryllium	N	A	
40 CFR 63 subpart HHHHHH	Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources	N	A	
40 CFR 63 subpart LLLLLL	Acrylic Acid and Modacrylic Fibers Production Area Sources	N	A	
40 CFR 63 subpart MMMMMM	Carbon Black Production Area Sources	N	A	
40 CFR 63 subpart NNNNNN	Chemical Manufacturing Area Sources: Chromium Compounds	N	A	
40 CFR 63 subpart OOOOOO	Flexible Polyurethane Foam Production and Fabrication Area Sources	N	A	
40 CFR 63 subpart PPPPPP	Lead Acid Battery Manufacturing Area Sources	N	A	
40 CFR 63 subpart QQQQQQ	Wood Preserving Area Sources	N	A	
40 CFR 63 subpart RRRRRR	Clay Ceramics Manufacturing Area Sources	N	A	
40 CFR 63 subpart SSSSSS	Glass Manufacturing Area Sources	N	B	
40 CFR 63 subpart TTTTTT	Secondary Nonferrous Metals Processing Area Sources	N	A	
40 CFR 63 subpart VVVVVV	Chemical Manufacturing Area Sources	N	A	
40 CFR 63 subpart WWWWWW	Area Source Standards for Plating and Polishing Operations	N	A	
40 CFR 63 subpart XXXXXX	Area Source Standards for Nine Metal Fabrication and Finishing Source Categories	N	A	
40 CFR 63 subpart YYYYYY	Ferrous Production Facilities	N	A	
40 CFR 63 subpart ZZZZZZ	Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries	N	A	
40 CFR 63 subpart AAAAAA	Asphalt Processing and Asphalt Roofing Manufacturing	N	A	
40 CFR 63 subpart BBBBBB	Chemical Preparations Industry	N	A	
40 CFR 63 subpart CCCCCC	Paints and Allied Products Manufacturing	N	A	
40 CFR 63 subpart DDDDDD	Prepared Feeds Manufacturing	N	A	
40 CFR 63 subpart EEEEEEE	Gold Mine Ore Processing and Production Area Source Category	N	A	
40 CFR 64	Compliance Assurance Monitoring	Y	I	

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40 CFR 68	Risk Management Programs Under Section 112(r)	N	A	
40 CFR 82	Protection of Stratospheric Ozone	N	A	