



W. Marshall Taylor Jr., Acting Director

*Promoting and protecting the health of the public and the environment*

February 19, 2015

Company Name  
Address  
City, State, Zip

**Re: NOx SIP Call Transition for Large Non-EGUs due to Cross State Air Pollution Rule (CSAPR)**

To the Attention of:

The Cross-State Air Pollution Rule (CSAPR)<sup>1</sup> requires 28 states, including South Carolina, to significantly improve air quality by reducing power plant emissions that cross state lines and contribute to ozone and fine particle pollution in other states. To speed implementation, EPA is adopting Federal Implementation Plans, or FIPs, for each of the states covered by this rule. South Carolina is a NOx SIP Call<sup>2</sup> state, and had included large non-EGU boilers and combustion turbines into the Clean Air Interstate Rule (CAIR)<sup>3</sup> NOx Ozone Season Trading Program. CAIR is now replaced by CSAPR, however these units cannot be brought into the CSAPR trading program, as CSAPR applies only to EGUs. The EPA has offered several options<sup>4</sup> for states to show continued compliance with the NOx SIP Call requirements.

South Carolina Department of Health and Environmental Control (SC DHEC) has evaluated these options, and based on the emissions data of our large non-EGU sources, we are selecting the Streamlined demonstration option (Option 1), which demonstrates that the total ozone-season NOx emissions from these large non-EGUs could not exceed the large non-EGU budget imposed by the NOx SIP Call, even if these units were to operate every hour of the ozone season. South Carolina can demonstrate that the NOx SIP Call requirements are met using the Option 1 demonstration. Please see attached document.

Large non-EGU boilers will have a period of 30 days to review this demonstration and provide feedback to SC DHEC, or until March 9, 2015.<sup>5</sup> Provided the applicable large non-EGU boilers do not disagree with this demonstration, SC DHEC plans to provide this demonstration to the EPA. Should you have any questions concerning this request, please contact Marie Brown of my staff at (803) 898-1796 or [brownmf@dhec.sc.gov](mailto:brownmf@dhec.sc.gov).

Sincerely,

Maeve Mason, Manager  
Regulation and SIP Management Section  
Bureau of Air Quality

Enclosure

cc: Permit File: TV ##### -#####

cc: Lynn Barnes, Section Manager, Emissions Inventory, BAQ, SC DHEC

Christopher Hardee, Section Manager, Sandhills & Pulp & Paper Permitting, BAQ, SC DHEC

<sup>1</sup> 76 FR 48208, August 8, 2011

<sup>2</sup> 63 FR 57356, October 27, 1998

<sup>3</sup> 70 FR 25162, May 12, 2005

<sup>4</sup> For more information see: <http://www.epa.gov/crossstaterule/faqs.html>

<sup>5</sup> For more information see: <http://www.scdhec.gov/HomeAndEnvironment/Air/MostCommonPollutants/CrossStateRulings/>

## **NO<sub>x</sub> SIP Call, Large Non-EGU Compliance Demonstration**

### **Background**

South Carolina's large, Non-Electric Generating Units (Non-EGUs) are subject to the Environmental Protection Agency's (EPA) Nitrogen Oxides State Implementation Plan Call (NO<sub>x</sub> SIP Call). South Carolina brought large, non-EGUs into the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season trading program. A court decision in December 2008 ordered that CAIR remain in place only until EPA implemented a new rule to replace it. The Cross-State Air Pollution Rule (CSAPR) went into effect January 1, 2015, replacing CAIR. Large non-EGUs cannot be brought into the CSAPR trading program, as CSAPR applies only to EGUs. EPA has offered several options for states to show continued compliance with the NO<sub>x</sub> SIP Call requirements.

Under the NO<sub>x</sub> SIP Call, South Carolina has a Large Non-EGU "Budget" of 3,479 tons of NO<sub>x</sub> emissions per ozone season.<sup>1</sup>

### **Compliance Demonstrations Options**

EPA has outlined three options that states may use to demonstrate Large Non-EGU compliance with the NO<sub>x</sub> SIP Call.<sup>2</sup> South Carolina will demonstrate compliance using Option 1 – Streamlined Demonstration:

Demonstrate that total ozone-season NO<sub>x</sub> emissions from large non-EGU boilers and combustion turbines in the State that were included in the NO<sub>x</sub> Budget Trading Program but will not be included in the TR ozone-season trading program could not exceed the large non-EGU budget imposed by the NO<sub>x</sub> SIP Call even if these units were to operate every hour of the ozone season. This demonstration should include a determination -- for each of these large non-EGUs -- of the average actual hourly ozone season NO<sub>x</sub> emission rate (i.e., total actual NO<sub>x</sub> emissions divided by actual operating hours) for the most recent ozone season of representative operation of the large non-EGU sector in the State, multiplied by the total number of hours in the ozone season (3,672). If the sum of the resulting NO<sub>x</sub> mass emissions for all of these large non-EGUs is less than the large non-EGU portion of the NO<sub>x</sub> SIP Call budget, then the NO<sub>x</sub> SIP Call requirements are satisfied for these sources.

See 2015 Demonstration on Page 2

---

<sup>1</sup> 70 FR 25162, May 12, 2005

<sup>2</sup> <http://www.epa.gov/crossstaterule/faqs.html>

## NO<sub>x</sub> SIP Call, Large Non-EGU Compliance Demonstration

### 2015 Streamlined Large Non-EGU Compliance Demonstration

South Carolina currently has 11 Large Non-EGU Units. For each unit and ozone-season, the average actual hourly ozone-season NO<sub>x</sub> emission rate was calculated by dividing ozone-season NO<sub>x</sub> emissions (tons) by the unit operating hours. Conservatively the highest average actual hourly ozone-season NO<sub>x</sub> emission rate (2008-2014) was chosen as the representative rate. The representative rates were totaled and multiplied by the number of ozone-season hours (3,672) to get the total ozone-season NO<sub>x</sub> emissions. This total was compared to South Carolina's Large Non-EGU NO<sub>x</sub> SIP Call Budget (3,479 tons). The calculations are summarized below.

Data Used: EPA's Air Markets Program Data,<sup>3</sup> Clean Air Interstate Rule Ozone Season (CAIROS), 2008 – 2014

<b>Table 1 – 2015 Streamlined Large Non-EGU NO<sub>x</sub> SIP Call Compliance Demonstration</b>			
<b>Facility (AMPD Name)</b>	<b>Unit ID</b>	<b>Highest Year</b>	<b>Highest Avg. Actual Hourly Rate (lb/hr)</b>
AbiBow US Inc. - Catawba Operations (now Resolute)	1	2009	0.1257
BP Amoco Chemical Company CR Plant	A	2010	0.0032
	B	2009	0.0040
International Paper-Eastover Mill	1	2013	0.0650
INVISTA S.a r.l. Camden Plant	3	2008	0.0418
KapStone Charleston Kraft, LLC	B001	2008	0.2060
	B002	2008	0.0153
	B003	2011	0.0118
	B004	2014	0.0129
Marlboro Paper Mill (now Domtar)	15	2008	0.0148
RockTenn CP, LLC Florence Mill	16	2012	0.1527
Total Avg. Actual Hourly Rate (ton/hr):			0.6532
Ozone-Season (hrs):			x 3,672
Total Ozone-Season Emissions (tons):			2,399
Below 3,479 tons?:			Yes

<sup>3</sup> <http://ampd.epa.gov/ampd/>