

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**2010 SULFUR DIOXIDE NAAQS
DATA REQUIREMENTS RULE
ANNUAL REPORT**



**DRAFT
ANNUAL REVIEW OF FACILITY EMISSIONS**

May 1, 2025

Table of Contents

1. Background..... 3
2. Annual SO₂ Emissions Review..... 3

1. Background

On August 21, 2015, the U.S. Environmental Protection Agency (EPA) promulgated the “Data Requirements Rule” (DRR) (80 Fed. Reg. 51052; codified at 40 C.F.R. Part 51, Subpart BB), which requires states to evaluate compliance with the 2010 one-hour sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS) in areas surrounding certain large SO₂ sources. Pursuant to the DRR, states could choose to perform area characterizations around specified sources using either air quality monitoring or air dispersion modeling. The Florida Department of Environmental Protection (Department) opted to use air dispersion modeling to characterize all areas of Florida subject to evaluation under the DRR.

Pursuant to the ongoing requirements of the DRR, as detailed at 40 C.F.R. 51.1205, the Department must submit an annual report to EPA documenting the SO₂ emissions of sources in areas that EPA designated unclassifiable/attainment based on the modeling of actual SO₂ emissions, which resulted in maximum modeled concentrations below the one-hour SO₂ NAAQS.

In Florida, two facilities remain subject to these requirements:

- Jacksonville Electric Authority’s (JEA) Northside Generating Station (NGS); and
- WestRock CP, LLC’s Fernandina Beach Mill (WestRock).

Section 2 of this report documents SO₂ emissions decreases at JEA and WestRock and confirms that the areas around these facilities remain in attainment for the 2010 one-hour SO₂ NAAQS.

2. Annual SO₂ Emissions Review

The DRR modeling demonstrations for JEA and WestRock, which the Department submitted to EPA on January 13, 2017, used actual SO₂ emissions from 2012 to 2014. Emissions from each of these facilities have substantially decreased over the period of 2022 to 2024 as compared to the period of 2012 to 2014 (**Table 1**).¹

In 2014, the Department permitted JEA to reintroduce fly ash into Boilers 1 and 2 at NGS. Fly ash acts as an additional SO₂ control, thus reducing emissions. In 2016, the Department incorporated EPA’s Mercury and Air Toxics Standards (MATS) provisions into the facility’s Title V permit.

Decreases in SO₂ emissions at WestRock are due primarily to the implementation of controls and emissions limits to comply with the Nassau County Nonattainment Area State Implementation Plan (NAA SIP). In 2015, as part of the NAA SIP, the Department issued an air construction permit to WestRock to implement a variety of controls, including improvements to the recovery boilers, installation and operation of a piping system to transport non-condensable gases for

¹ All emissions data are from each facility’s CEMS. Hourly CEMS data for 2012 to 2014 were reported directly to the Department for DRR modeling purposes. Data for 2022 to 2024 are from each facility’s Annual Operating Report (AOR) submissions to the Department. Rule 62-210.370, F.A.C., requires that facilities report their annual emissions using CEMS if available.

combustion in the No. 7 Power Boiler, and a scrubber system to remove total reduced sulfur from the non-condensable gas stream prior to combustion, each of which resulted in SO₂ emissions decreases.

Table 1 provides emissions at the unit level for emissions units that were modeled using actual emissions. Emissions units not listed were modeled using allowable emission rates.

The decreases in SO₂ emissions at JEA and WestRock are due largely to implementation of controls and lower permitted SO₂ emission limits. The Department does not, therefore, expect that SO₂ emissions would return to the levels that occurred during the period of 2012 to 2014.

As such, the Department finds the DRR modeling that the Department submitted to EPA on January 13, 2017, to be conservative, and the Department has determined that no additional modeling is needed to characterize the air quality in this area.

The Department recommends that the areas around JEA and WestRock retain their unclassifiable/attainment designations. These areas will continue to be subject to ongoing data reviews under the DRR.

Table 1. Comparison of 2012-2014 and 2022-2024 SO₂ emissions (in tons per year) for DRR facilities requiring annual review

County	Facility	2012	2013	2014	2012-2014 Average	2022	2023	2024	2022-2024 Average	Percent Change
Duval	JEA	13,835	16,459	20,978	17,091	1,667	1,506	995	1,389	-91.9%
Nassau	WestRock (Total)	3,573	3,671	3,797	3,680	510	494	377	460	-87.5%
Nassau	WestRock #4 Recovery Boiler ^a	101	98	103	101	5	11	8	8	-92.1%
Nassau	WestRock #5 Power Boiler ^a	82	68	73	74	9	9	12	10	-86.5%
Nassau	WestRock #5 Recovery Boiler ^a	76	103	113	97	27	31	22	27	-72.2%
Nassau	WestRock #7 Power Boiler ^a	3,314	3,402	3,507	3,408	464	438	330	411	-87.9%

^a In the Department's DRR modeling for WestRock, only these four units were modeled using actual emissions; all other units were modeled using maximum allowable emission rates.