

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF:

RockTenn CP, LLC
North 8th Street
Fernandina Beach, Florida 32034

Administrative Order No. AO-DARM-14-01

Fernandina Beach Mill
DEP Permit No: 0890003-038-AV

ADMINISTRATIVE ORDER

I. STATUTORY AUTHORITY

The Department of Environmental Protection (Department) is the administrative agency of the State of Florida having the power and duty to protect Florida's air resources and administer and enforce the provisions of Chapter 403, Florida Statutes (F.S.), and the rules promulgated thereunder.

The Department administers the Clean Air Act (CAA) in the state of Florida pursuant to Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297, Florida Administrative Code (F.A.C.).

The Department has jurisdiction over the matters addressed in this Administrative Order (Order).

The Department issues this Order under the authority of Sections 403.061 and 403.151, F.S.

The Secretary of the Department has delegated this authority to the Director of the Division of Air Resource Management, who issues this Order and makes the following findings of fact.

II. FINDINGS OF FACT

1. RockTenn CP, LLC (RockTenn) owns and operates the Fernandina Beach Mill (the Mill), which is a Kraft pulp and paper mill (Standard Industrial Classification No. 2611).
2. The Mill is located in Nassau County at North 8th Street, Fernandina Beach, Florida.
3. RockTenn currently operates the Mill pursuant to DEP Permit No. 0890003-038-AV.
4. The Mill is a fully integrated Kraft linerboard mill that produces linerboard from wood pulp and pulp derived from recycled corrugated containers.
5. The Mill consists of the following major plant areas: wood yard, pulp mill, recycle plant, chemical recovery, power house, and paper mill.
6. A container plant also operates onsite, converting linerboard into corrugated containers.
7. The Mill includes two power boilers and two recovery boilers. The two power boilers are used to produce steam to generate electricity.

8. The No. 5 Power Boiler has a maximum heat input rate of 805 million British thermal units per hour (MMBtu/hour) and fires wood, bark, ash, and fuel oil.
9. The No. 7 Power Boiler has a maximum heat input rate of 1,021 MMBtu/hour and fires coal, ash, fuel oil, and natural gas.
10. Each power boiler is equipped with an electrostatic precipitator (ESP) to control emissions of particulate matter. The No. 5 Power Boiler is equipped with an SO₂ continuous emission monitoring system (CEMS) and the No. 7 Power Boiler monitors SO₂ emissions by fuel sampling.
11. The Nos. 4 and 5 Recovery Boilers each fire black liquor solids as the primary fuel to facilitate the recovery of the cooking liquor.
12. Each recovery boiler is equipped with an ESP to control emissions of particulate matter; a continuous opacity monitor; and a total reduced sulfur CEMS.

Revision of the SO₂ NAAQS.

13. On June 3, 2010, the United States Environmental Protection Agency (EPA) revised the health-based National Ambient Air Quality Standard (NAAQS) for SO₂ by establishing a new 1-hour standard at a level of 75 parts per billion (ppb) (published in the Federal Register on June 22, 2010, 75 FR 35520).
14. An area meets this new standard when the design value, the 3-year average of the 99th percentile of 1-hour daily maximum concentrations, does not exceed 75 ppb.
15. Once EPA revises a NAAQS, CAA section 107(d)(1), requires that states submit proposals for area attainment designations throughout each state as meeting or not meeting the revised standard.

Designation of SO₂ Nonattainment Area.

16. On November 28, 2011, the Department proposed to EPA that a portion of Nassau County, Florida should be designated as nonattainment due to air quality data from 2008-2010 at the Department's Fernandina Beach SO₂ monitor, which indicated that the design value was 129 ppb, exceeding the 75 ppb standard. Generally, the smallest area EPA will use for designation purposes is a county boundary, however, states may provide justification for a smaller or larger area.
17. In this case, the Department justified limiting the nonattainment designation to a small area around the Fernandina Beach SO₂ monitor because data indicated that the violations were source-specific and with limited areas of actual violation.
18. As a result, the Department's proposed nonattainment area did not include the location of RockTenn's emission units. A nonattainment area is not required to include all sources that influence the area, even though such sources ultimately are required to reduce their impact to the area. By limiting the designated area, the Department is able to achieve attainment of the standard while providing RockTenn business flexibility under the Prevention of Significant Deterioration Program.
19. EPA accepted the Department's proposal and on August 5, 2013, published a final rule entitled: Air Quality Designations for the 2010 Sulfur Dioxide (SO₂) Primary National Ambient Air

Quality Standard (78 FR 47191). This rule formally designated the following portion of Nassau County, Florida as nonattainment: a circular boundary with the center being UTM Easting 455530 meters, UTM Northing 3391737 meters, UTM Zone 17, using the NAD83 datum (the location of the violating monitor) and the radius being 2.4 kilometers. The effective date of the nonattainment designation was October 4, 2013.

20. This area will remain designated in nonattainment of the 2010 SO₂ NAAQS until it is redesignated in accordance with CAA Section 107(d)(3).

Statutory Requirements Resulting from Nonattainment Area Designation.

21. Pursuant to CAA section 191, each state with a designated nonattainment area is required to submit a State Implementation Plan (SIP) to EPA within 18 months of the effective date of the nonattainment designation. This plan—known as a nonattainment area SIP (NAA SIP)—must provide for the attainment of the NAAQS as *expeditiously as practicable*, but no later than five years after designation. CAA section 172(c)(1); CAA section 192(a).
22. One of the requirements of a NAA SIP is that it must include enforceable emission limitations, as well as timetables for compliance, that will provide for attainment of the NAAQS. *See* CAA section 107(d)(3)(E); CAA section 172(c)(6).
23. The Department demonstrates the appropriateness of the enforceable emission limitations through air quality modeling, which must show compliance with the NAAQS for the entire nonattainment area. *See* 40 CFR 51, Appendix W (requiring use of maximum allowable emission rates); EPA Guidance for 1-Hour Nonattainment Area SIP Submissions, April 2014 (stating that “for attainment demonstrations for the 2010 SO₂ NAAQS, the air agency should demonstrate future attainment and maintenance of the NAAQS in the entire area designated as nonattainment (*i.e.*, not just the violating monitor) by using air quality dispersion modeling”).

Air Modeling Analysis Conducted by the Department.

24. In order to understand the root cause of the monitored NAAQS violations in Fernandina Beach, the Department performed a modeling analysis using the EPA-approved American Meteorological Society/EPA Regulatory Model (AERMOD) modeling system.
25. AERMOD is a steady-state plume dispersion model which calculates ambient SO₂ concentrations based on a variety of factors, which include: source emissions data, source characteristics (stack height, stack diameter, etc.), meteorological data, and terrain data.
26. To conduct its air quality analysis, the Department first inventoried all emission sources of SO₂ in or near the nonattainment area, as required by CAA section 172(c)(3).
27. Based on this evaluation, the Department determined that two facilities were the primary contributors to the observed SO₂ concentrations at the Department’s Fernandina Beach SO₂ monitor: Rayonier Performance Fibers (Rayonier) and the RockTenn Fernandina Beach Mill.
28. Rayonier’s SO₂ emissions derive from three emission units: the No. 6 Power Boiler, the vent gas scrubber, and the recovery boiler.
29. RockTenn’s SO₂ emissions derive from seven emission units: the Nos. 5 and 7 Power Boilers, the Nos. 4 and 5 Recovery Boilers, the Nos. 4 and 5 Smelt Dissolving Tanks, and the No. 4 Lime Kiln.

30. Other than Rayonier and RockTenn, there are no other significant sources of SO₂ in or in close proximity to the nonattainment area.
31. More distant sources of SO₂ were included in the model as background. The level of this background was determined by using ambient air quality data from the Department's Fernandina Beach SO₂ monitor, as recommended by 40 CFR 51, Appendix W, Section 8.2.1.b (stating that "air quality data should be used to establish background concentrations").
32. The next step in the modeling analysis required the Department to enter each of Rayonier's and RockTenn's emission unit's maximum allowable SO₂ emission rate (and other unit-specific factors such as stack height and stack diameter) into AERMOD. *Id.* at Table 8-1 (requiring the use of maximum allowable emission rates).
33. For units with no permitted SO₂ emission limits, the Department determined those units' maximum allowable emission rate using the potential to emit. *Id.* at Section 8.2.3.c (recommending use of an emission unit's maximum physical capacity to emit for units that have no maximum allowable emissions rate). The potential to emit for each unit was calculated using throughput, fuels used, emission factors, and other data as available, and converted into maximum allowable emission rates.
34. The Department modeled violations of the SO₂ NAAQS in the nonattainment area if RockTenn and Rayonier operated at their maximum allowable emission rates.
35. A further analysis of each facility's emissions indicated that RockTenn, without any contribution from Rayonier, caused modeled violations of the SO₂ standard within the nonattainment area. Likewise, that same analysis indicated that Rayonier, without any contribution from RockTenn, caused modeled violations of the SO₂ standard within the nonattainment area.
36. Because Rayonier and RockTenn's current maximum allowable emission rates cause modeled violations of the SO₂ NAAQS in the nonattainment area (without any contribution from each other), the attainment modeling demonstration requires that both facilities modify their emission limitations to eliminate these problems before the area can be designated as attainment.
37. On April 12, 2012, Rayonier received a construction permit (DEP Permit No. 0890004-036-AC) from the Department which revised the maximum allowable emission rates for the No. 6 Power Boiler, the vent gas scrubber, and the recovery boiler to levels more representative of actual emissions for each unit. The construction permit also authorized Rayonier to extend the stack height for the vent gas scrubber, which it extended to 180 feet.
38. On January 31, 2014, the Department received a Title V permit application from Rayonier to incorporate the changes to the facility authorized by the April 12, 2012 construction permit into its operating permit. Specifically, this Title V permit application incorporated the revised maximum allowable emission rates and the raised stack height for the vent gas scrubber that had recently been completed.
39. The reductions made to Rayonier's maximum allowable emission rates and the increased stack height for the vent gas scrubber are sufficient to demonstrate that the facility will no longer cause a modeled violation of the SO₂ NAAQS within the nonattainment area.
40. RockTenn has not applied for a construction permit that would remedy the modeled SO₂ violations in the Nassau County nonattainment area, a requirement for the area to be redesignated

attainment. Therefore, the Department proceeded with an analysis to determine what level of maximum allowable emission rates would demonstrate compliance with the SO₂ NAAQS in the nonattainment area.

41. 40 CFR 51, Appendix W, requires maximum allowable emission rates as modeling inputs for the CAA required attainment demonstration. To allow the Department to model maximum allowable emission rates that are more representative of the Mill's actual emissions instead of the current—but never achieved—maximum allowable emission rates, the Department would need to reduce RockTenn's maximum allowable emission rates to levels that are comparable to the Mill's highest level of actual emissions.
42. To establish appropriate rates, the Department reviewed the actual emissions rates measured or calculated from each of RockTenn's seven emission units over the last five years. The Department used these data to determine whether the reduced maximum allowable emission rates (specified below) would be reasonable and achievable given each unit's past performance.
43. In its analysis, the Department only adjusted the maximum allowable emission rates for RockTenn's emission units; all other modeling inputs (e.g., stack height, stack diameter) remained constant.
44. Using these data, the Department determined a reasonable combination of reduced maximum allowable emission rates, representative of the Mill's actual emissions over the last five years, which will demonstrate compliance with the SO₂ NAAQS.

Unit	Current SO ₂ Limit	New SO ₂ Limit
No. 5 Power Boiler	550 lb/hour, 24-hour average	300 lb/hour, 3-hour average
No. 7 Power Boiler	1.2 lb/MMBtu	1000 lb/hour, 3-hour average
No. 4 Recovery Boiler	Based on fuel sulfur content	70 lb/hour, 3-hour average
No. 5 Recovery Boiler	Based on fuel sulfur content	70 lb/hour, 3-hour average

The Department determined that the Nos. 4 and 5 Smelt Dissolving Tanks and the No. 4 Lime Kiln did not require reduced maximum allowable emission rates to demonstrate attainment because they do not significantly contribute to the modeled ambient air concentrations.

45. The Department also determined that Nos. 4 and 5 Recovery Boilers and the No. 7 Power Boiler must be equipped with SO₂ CEMS in order to provide the Department reasonable assurance that these units will be in compliance with the maximum allowable emission rates specified in Section II. Paragraph 44 of this Order. *See* 62-4.070(1), F.A.C. This is consistent with EPA guidance, which states that "EPA expects that compliance for the largest and most important sources will be assessed using CEMS[.]" EPA Guidance for 1-Hour Nonattainment Area SIP Submissions, April 2014.

Prerequisites for Redesignation of Nonattainment Area

46. For the Nassau County nonattainment area to be redesignated as attaining the SO₂ NAAQS, the CAA requires, among other things, that the Department submit to EPA ambient air monitoring data that meets the NAAQS and an approvable NAA SIP. *See* CAA section 107(d)(3)(E).

47. The first requirement, ambient air monitoring data from the Department's Fernandina Beach monitor that meets the NAAQS, already has been achieved due to reductions in actual emission from Rayonier's facility. The SO₂ design value at this monitor has been reduced from 129 ppb in 2008-2010 to 70 ppb in 2011-2013, which is below the 75 ppb SO₂ NAAQS.
48. The second requirement, an approved NAA SIP, requires the Department to submit a plan that complies with CAA section 172(c)(1). Specifically, this requires a modeling demonstration showing attainment of the SO₂ NAAQS in the entire nonattainment area as expeditiously as practicable. Because the limits in Section II. Paragraph 44 of this Order are representative of RockTenn's highest actual emissions observed over the last five years, compliance with the limits can be achieved expeditiously.
49. In order for the Department to successfully demonstrate attainment throughout the Nassau County nonattainment area, the Mill is required to reduce its maximum allowable emission rates for the Nos. 5 and 7 Power Boilers, and the Nos. 4 and 5 Recovery Boilers. The maximum allowable emission rates for these four units shall be set at the levels and averaging time provided in Section II. Paragraph 44 of this Order.

III. ORDER

Based on the foregoing findings of fact, IT IS ORDERED:

1. RockTenn shall meet the following emission limits no later than December 31, 2014.
 - (a) The No. 5 Power Boiler shall not exceed an emission rate of 300 pounds of SO₂ per hour based on a 3-hour average as determined by the existing SO₂ CEMS.
 - (b) The No. 7 Power Boiler shall not exceed an emission rate of 1,000 pounds of SO₂ per hour based on a 3-hour average.
 - (c) The No. 4 Recovery Boiler shall not exceed an emission rate of 70 pounds of SO₂ per hour based on a 3-hour average.
 - (d) The No. 5 Recovery Boiler shall not exceed an emission rate of 70 pounds of SO₂ per hour based on a 3-hour average.
2. RockTenn shall install and operate the following monitoring devices no later than December 31, 2014.
 - (a) RockTenn shall install, certify, calibrate, operate, and maintain an SO₂ CEMS on the No. 7 Power Boiler pursuant to 40 CFR 60, Appendix B, to continuously measure and record SO₂ emissions to demonstrate compliance with the standards specified in this Order.
 - (b) RockTenn shall install, certify, calibrate, operate, and maintain an SO₂ CEMS on the No. 4 Recovery Boiler pursuant to 40 CFR 60, Appendix B, to continuously measure and record SO₂ emissions to demonstrate compliance with the standards specified in this Order.
 - (c) RockTenn shall install, certify, calibrate, operate, and maintain an SO₂ CEMS on the No. 5 Recovery Boiler pursuant to 40 CFR 60, Appendix B, to continuously measure and

record SO₂ emissions to demonstrate compliance with the standards specified in this Order.

3. Within 90 days of achieving the emission limits specified in Section III.1 of this Order, RockTenn must submit to the Department an application for an air construction permit to incorporate the emission standards in Section II. Paragraph 44.
4. This Order shall be closed upon either of the two following events:
 - (a) RockTenn's receipt of an air construction permit from the Department incorporating the emission limiting standards identified in Section II. Paragraph 44; or
 - (b) RockTenn's receipt of an air construction permit from the Department authorizing process modifications or installation of air pollution control equipment that will limit SO₂ emissions in such a way so as to demonstrate compliance with the SO₂ NAAQS. The application for this air construction permit shall identify any process modifications or air pollution control equipment that will reduce ambient air impacts. The application also may request different emissions limiting standards and compliance timeframes for the four units identified in Section II. Paragraph 44 of this Order. Process modifications or emissions limiting standards must be supported by a modeling analysis that demonstrates compliance with the SO₂ NAAQS.
5. The application for any such air construction permit shall be sent to the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection. The mailing address for the Office of Permitting and Compliance is 2600 Blirstone Road, Mail Station 5505, Tallahassee, Florida 32399-2400.
6. RockTenn shall maintain and operate its facilities in compliance with all other conditions of DEP Permit No. 0890003-038-AV.
7. Failure to comply with the requirements of this Order shall constitute a violation of this Order and may subject RockTenn to penalties as provided in Section 403.161, F.S.

IV. NOTICE OF RIGHTS

A person whose substantial interests are affected by the proposed agency action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000.

Petitions filed by person receiving actual written notice must be filed within 21 days of receipt of this Order. Petitions filed by other persons other than those entitled to written notice must be filed within 21 days of publication of the public notice or within 21 days of receipt of this notice, whichever occurs first. However, any person who asked the Department for notice of agency action may file a petition within 21 days of receipt of that notice, regardless of the date of publication. A petitioner shall also mail a copy of the petition to RockTenn at North 8th Street, Post Office Box 2000, Fernandina Beach, Florida at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. Any subsequent intervention (in a proceeding initiated by another

party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of the Department, and the Department's file or identification number, if known.

(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding;

(c) A statement of when and how petitioner received notice of the agency action or proposed action;

(d) An explanation of how the petitioner's substantial interests will be affected by the agency action;

(e) A statement of all disputed issues of material facts. If there are none, the petition must so indicate;

(f) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's action;

(g) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(h) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's action.

A petition that does not dispute material facts on which the Department's action is based shall state that no such facts are in dispute and shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

Any party to this order has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied

by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

DONE AND ORDERED on this 5th day of May in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



BRIAN ACCARDO, Director
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FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52, F.S., with the designated deputy clerk, receipt of which is hereby acknowledged.

Clerk

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this ORDER was provided to Nina-Mary Butler at nbutler2@rocktenn.com before the close of business on this 5th day of May, 2014.



Name

5/5/14

Date