Title V Air Operation Permit Renewal
Permit No. 0310337-017-AV

APPLICANT

The applicant for this project is Cedar Bay Generating Company, L.P. The applicant's responsible official and mailing address are: Mr. Tracy Patterson, General Manager, Cedar Bay Generating Plant, Post Office Box 26324, Jacksonville, Florida 32226

FACILITY DESCRIPTION

The applicant operates the Cedar Bay Generating Plant, which is located in Duval County at 9640 Eastport Road, Jacksonville, Florida.

This facility consists of three circulating fluidized bed steam generators (boilers) designated as Boilers A (001), B (002) and C (003), a coal handling area, a limestone handling area, and an ash handling area. Crushed coal is the primary fuel for Boilers A, B and C with approval for limited co-firing of petroleum coke and tire-derived fuel. The fuel for Boilers B and C can also be supplemented with short fiber recycle rejects received from RockTenn. No. 2 fuel oil is used as supplemental fuel in all three boilers normally only for start-ups. Also included in this permit are miscellaneous insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility. A concurrent air construction permit revision is also issued as part of this permitting action.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal was received January 8, 2014. Deemed complete.

Draft/Proposed Title V Permit package issued March 26, 2014.

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

CAM: Units 001, 002 and 003 are subject to compliance assurance monitoring (CAM).

CAIR: The facility is subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

PROJECT REVIEW

Some changes were made to the facility's current Title V air operation permit. These included permit conditions related to fuel sampling, ammonia and metals testing and the material handling systems at the facility. In addition, clarifications and corrections to a few specific conditions were made at the request of the applicant and are noted below. The coal crusher building and coal silo conveyor are sources subject to emission limitations of 0.003 gr/dscf and were allowed a one-time verification test to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf (RACT). Cedar Bay requested that the Department delete **Specific Condition C.14.** as it is contradictory to the original condition in the facility's PSD permit and Title V air operation permit **Specific Condition C.16.** Cedar Bay has rescinded the previously submitted Acid Rain Opt-In application. While following Part 75 Acid Rain monitoring provisions as a function of CAIR, Cedar Bay is not in the Acid Rain

program. Therefore the reference for Title IV as a primary regulatory requirement was deleted. A feedwater pump and emergency fire pump engine were added to the list of regulated emissions units. These changes are noted in the draft/proposed permit by strikethrough (deletions) and double underline (additions) notation.

Changes to specific conditions of the current Title V air operation permit are listed below. The rational for the each change is also given.

- **Specific Conditions A.5 and A.31**: Cedar Bay requested that the Department eliminate the facility's Beryllium limit as designated in **Specific Condition A.5.** of the Title V air operation permit and beryllium test method listed in **A.31.** as beryllium is no longer a PSD Pollutant. In addition, Cedar Bay requested that the mercury emission limit from NESHAP Subpart UUUUU be added to the condition. The Department agrees with these revision requests and these conditions will be revised as follows:

A.5. Emission Limits. The maximum emission limits from each CFB boiler are:

Pollutant Name	Pollutant Acronym	lbs/MMBtu	lbs/hr	TPY
Carbon Monoxide	CO [5]	0.175 [1]	186[1]	758 [4]
Nitrogen Oxides	NO_X	0.17 [2]	180.7[2]	736.1
Sulfur Dioxide	SO_2	0.30 [3]	318.9 [3]	--
	SO_2	0.20 [4]	--	866
Volatile Organic Compound	VOC	0.015	16.0	65
Particulate Matter	PM	0.018 [6]	19.1	78
Particulate Matter less than 10 microns	PM_{10}	0.018	19.1	78
Sulfuric Acid Mist	H_2SO_4 mist	4.66×10^{-4}	0.50	2.0
Fluorides	Fl	7.44×10^{-4}	0.79	3.2
Lead	Pb	6.03×10^{-5}	0.06	0.26
Mercury	Hg	2.89×10^{-5}	0.03	0.13
		1.2 [7]		
~~Beryllium~~	~~Be~~	~~8.70×10^{-6}~~	~~0.01~~	~~0.04~~

[Note: TPY represents a 93% capacity factor.]

Additional Notes:

1. Eight-hour rolling average, except for initial and annual compliance tests and the CEM certification, when the 1-hour standard applies.
2. Thirty-day rolling average.
3. Three-hour rolling average.
4. Twelve-month rolling average. Emission limit for SO_2 lbs/mmBtu as surrogate for HCl, Table 2 to Subpart UUUUU of Part 63.
5. See Specific Condition **A.15.** for alternative carbon monoxide (CO) emission limits during specific operating modes.
6. Meeting this PM emission limit for as surrogate for Non-HAP Metals will ensure compliance with the limit of 0.03 lb/mmBtu from Table 2 of Subpart UUUUU of Part 63 which comes into effect on April 16, 2015.
7. This mercury emission limit in units of pounds per terra Btu (lb/TBtu) from Table 2 of Subpart UUUUU of Part 63 comes into effect on April 16, 2015.

[PSD-FL-137(A & D), Specific Condition A.3.; 0310337-018-AC, Specific Condition 4.; 40 CFR 63, Subpart UUUUU.]

A.31. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
3, 3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources
4	Determining stack gas moisture content to convert the flow rate from actual standard cubic feet (ascf) to dry standard cubic feet (dscf)
5, 17	Method for Determining Particulate Matter Emissions A minimum of 1dscm per run.
6, 6B, 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
7, 7A, 7C, 7D, 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
8	Method for Determining Sulfuric Acid Mist Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Method for Determining Carbon Monoxide Emissions
12	Inorganic Lead Emissions Determination
13A, 13B	Total Fluoride Emissions Determination
18, 25	Determination of Volatile Organic Compounds Emissions.
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
27	Ammonia Emissions Determination
29	Metals Emissions from Stationary Sources Determination
30B	Determination of Mercury Emissions LEE testing for 30 days with 10 days maximum per Method 30B run or Hg CEMS or sorbent trap monitoring system only..
101A	Determination of Mercury Emissions.
~~104~~	~~Beryllium Emissions Determination~~
201, 201A	Method for Determining PM_{10} Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [40 CFR 60 and 61, Appendix A; Rules 62-297.400 and 62-297.620; and PSD-FL-137(A & D), Specific Condition A.8.; 0310337-018-AC, Specific Condition 4.; 40 CFR 63 Subpart UUUUU.]

- **Specific Conditions A.7 and A.38**: This condition stipulates that the fuel input to the CFB units shall not exceed 3.2 pounds per million British thermal units (lb/MMBtu) equivalent sulfur dioxide (SO_2) content and that compliance shall be determined on a monthly basis via a composite of daily fuel samples. Cedar Bay requested the removal of language for the requirement of daily fuel samples and instead allow the percent sulfur analyses provided by the coal supplier to be used instead.

  Cedar Bay's boilers are subject to 40 CFR Part 60, Subpart Da-Standards of Performance for Electrical

Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978. The boilers are circulating fluidized bed boilers where acid gas scrubbing takes place within the combustor itself. 40 CFR Part 60, Subpart Da, 60.43(a) (2) stipulates a minimum of seventy percent reduction of potential sulfur dioxide emissions when SO_2 emissions are less than 0.60 pounds per million British thermal units (lbs/MMBtu). Due to the configuration of a circulating fluidized boiler Cedar Bay is obligated to demonstrate compliance with the SO_2 percent reduction requirements through the use of outlet SO_2 continuous emissions monitoring system (CEMS) and calculated inlet concentrations of SO_2 based on the percent sulfur in the coal in accordance with 40 CFR Part 60, Appendix A-7, Method 19, Equation 19-25. The facility CEMS provides the SO_2 reduction on an hourly, daily basis and 30-day rolling average basis.

Cedar Bay's existing SO_2 lbs/MMBtu limit is 0.3 lbs/MMBtu (3-hour rolling average) and 0.2 lbs/MMBtu (12-month rolling average.). These limits are more restrictive than the SO_2 limits allowed in 40 CFR Part 60, Subpart Da.

The coal quality parameters/limits in the commercial agreement with the facility's coal supplier reflects the maximum sulfur requirements of purchased coal to ensure permit compliance. Specifically, there is a monthly performance suspension limit (on a weighted average basis for deliveries in each month) of > 1.2% sulfur and a per shipment rejection limit if the sulfur is greater than 1.35%. As the typical BTU value of delivered coal has little deviation from 12,000 Btu per pound, the fuel input is not process capable of exceeding the 3.2% lb/MMBtu equivalent SO_2 content.

Due to the commercial agreement the coal supplier is obligated to supply percent sulfur and Btu value for each shipment of coal. The coal supplier follows ASTM standards for obtaining a coal sample and the supplier's fuel laboratory analyzes for sulfur content in accordance with the ASTM procedures specified in 40 CFR Part 60, Appendix 40 A-7, Method 19. Cedar Bay believes that daily as-fired sampling and subsequent analyses provides data that is already available as well as being an unnecessary administrative burden.

Cedar Bay proposes that the percent sulfur determination provided by the coal supplier's fuel laboratory be utilized in the facility's CEM system as a rolling average in lieu of daily as-fired sampling. The Department agrees with this revision request and **Specific Conditions A.7.a.** and **A.38.** of the Title V air operation permit will be revised as follows:

A.7. Sulfur Dioxide - Sulfur Content.

a. *Fuel*. The fuel input to the CFB units shall not exceed 3.2 lb/MMBtu equivalent SO_2 content. Compliance shall be determined ~~on a monthly basis via a composite of daily fuel samples~~ from the ASTM results provided for each coal train as a rolling average.

b. *No. 2 Fuel Oil*. The No. 2 fuel oil sulfur content shall not exceed 0.05 percent, by weight, as measured by applicable test methods.
[PSD-FL-137(A), Specific Condition A.1.; 0310337-005-AC, Specific Condition A1.; 0310337-018-AC, Specific Condition 2.]

A.38. Fuel - Sulfur Content.

a. *Coal*. The facility coal supplier will obtain a representative sample of coal per shipment and ~~as-fired~~ fuel sulfur content, percent by weight, for coal shall be determined using ASTM D2013-72 and either ASTM D3177-75, ASTM D4239-85, ASTM D3176-74, or the latest edition, to analyze a representative sample of the blended ~~as-fired~~ crushed coal.

b. *No 2. Fuel Oil*. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. If the No. 2 fuel oil being delivered has a sulfur content of 0.05% or less, by weight, and the heating value of the delivered No. 2 fuel oil is provided, then the vendor's analysis is acceptable and no further analysis is required. However, if the No. 2 fuel oil being delivered has a sulfur content greater than 0.05%, by weight, the permittee shall have an as-fired sample analyzed.

[Rules 62-213.440 and 62-297.440, F.A.C.; 40 CFR 60.17; and PSD-FL-137(A); 0310337-018-AC, Specific

Condition 2.]

- **Specific Condition A.8**: The facility utilizes low sulfur #2 fuel oil for start-up of the boilers. On extremely rare occasions, it may be also be used for short durations to sustain operations when there are temporary interruptions of coal feed due to malfunctions of the coal feed system. However, fuel oil cannot be used for sustained operations of the boilers. Each combustor is equipped with six start-up oil burners that collectively can supply a maximum of 68 MMBtu/hr (6% of maximum continuous rating). The boiler's distributed control system (DCS) has a temperature permissive that will not allow the non-selective catalytic system to operate until a specific temperature is reached. This particular temperature cannot be achieved until coal is combusted. The reason for this control logic is that there is no need to operate the non-selective catalytic reduction system for NO_X as the generation of NO_X is very small while firing fuel oil. As such, Cedar Bay requests that the reference for testing ammonia (NH_3) slip limits from exhaust gases when burning fuel oil be modified. The Department agrees with this revision request and **Section III, Specific Condition A.8.** of the Title V air operation permit will be revised as follows:

A.8. Ammonia. Ammonia (NH_3) slip from exhaust gases shall not exceed 10 ppmvd when co-firing petcoke or burning coal at 100% capacity as measured by applicable test methods and 30 ppmvd when burning No. 2 fuel oil, as demonstrated by operating records (fuel flow, ammonia flow) ~~measured by applicable test methods~~. [PSD-FL-137(A), Specific Condition A.4.; 0310337-018-AC, Specific Condition 2.]

- **Specific Conditions A.33 and A.35**: **Specific Condition A.33.** of the facility's Title V air operation permit stipulates that Cedar Bay is required to perform annual compliance tests for PM, PM_{10}, CO, SO_2, NO_X and visible emissions. **Specific Condition A.35.** stipulates a testing frequency (every 5 years) for mercury (Hg), beryllium (Be), and lead (Pb) during the first, fifth and tenth years of operation and once every 5 years following successful testing from the three prior tests. The results from stack testing since the facility began operation has provided results of these parameters well below permit limits.

  Cedar Bay is a facility impacted by 40 CFR 63 Subpart UUUUU (the Mercury and Air Toxics Rule). As such, the facility will have a new regime of compliance testing effective April 16, 2015. Filterable PM will be the facility's surrogate for non-mercury HAP metals. The PM limit in Subpart UUUUU is 0.03 lb/MMBtu compared to Cedar Bay's BACT PM limit of 0.018 lb/MMBtu. Additionally, the facility will be obligated to demonstrate that each of the three combustors is a low-mercury emitter. Cedar Bay will be obligated to have mercury testing (Method 30B for 30 operating days per boiler) for three successive years and once every three years following the annual requirement.

  In consideration of the testing requirements identified in the Mercury and Air Toxics Rule and the use of PM as a surrogate for non-mercury HAP metals compliance, Cedar Bay requests that **Specific Conditions A.33.** and **A.35.** of the Title V air operation permit be revised. The Department agrees with these revision requests and these conditions will be revised as follows:

A.33. Annual Compliance Tests Required. Annual compliance tests shall be performed for ~~PM,~~ PM_{10}, CO, SO_2, NO_X and visible emissions.

A.35. Additional Compliance Tests. ~~Compliance tests shall be performed for Hg, Be and Pb until three consecutive tests (including, if successful, the initial compliance test) are within the annual emission limits specified in Specific Condition **A.5.** Such tests shall occur, as necessary, in the first, fifth, and tenth years and additional successive five year intervals following commercial operation. Mercury testing shall not be routinely required. However, should the Department have reason to believe that a change in mercury emissions has occurred (e.g. via a change in fuel quality, particulate removal equipment, etc.) mercury testing shall be required.~~ Annual compliance testing for PM shall be performed until April 16, 2015, when testing requirements for the Mercury and Air Toxic Rule become effective. [PA 88-24(A); and PSD-FL-137(D); 0310337-018-AC, Specific Condition 5.]

~~*{Permitting Note: In this condition, "routinely" refers to annually and/or the need to continue testing different control devices in order to reduce mercury emissions below those obtainable through the use of a S*~~

- A new specific condition was added to document the work practice standards of 40 CFR 63, Subpart UUUUU:
  - **A.62**.Work Practice Standards The permittee shall comply with the Work Standard Practices in Table 3 to Subpart UUUUU of Part 63
  - a. The facility must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, as specified in §63.1002(e).
  - b. The facility will operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup the facility must use clean fuels, (distillate oil) for ignition. The facility must comply with all applicable emissions limits at all times except for periods that meet the definitions of startup and shutdown in this subpart. Records must be kept during periods of startup. The facility will provide reports concerning activities and periods of startup, as specified in §63.10011(g) and §63.10021(h) and (i).
  - c. All CMS must operate during shutdown. Shutdown means the cessation of operation of a boiler for any purpose. Shutdown begins either when none of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use) or at the point of no fuel being fired in the boiler. Shutdown ends when there is both no electricity being generated and no fuel being fired in the boiler. During shutdown, all applicable control technologies while firing coal or residual oil must operate. The facility will comply with applicable emission limits at all times except for periods that meet the definition of startup and shutdown in this subpart. Records must be kept for periods of startup/shutdown. Reports are to be provided concerning activities and periods of startup/shutdown, as specified in §63.10011(g) and §63.10021(h) and (i).
  - [40 CFR 63, Subpart UUUUU]

- **Specific Conditions B.1.a and B.1.d**: Cedar Bay receives limestone via dump trucks. Average tonnage of the limestone per truckload is 19 tons. The trucks normally will run in tandem. The process of loading at the Dames Point terminal, transport to the facility, unloading the limestone at the designated storage area, return for re-loading and return to the facility typically takes more than an hour. However, there is always the potential for periodic disruptions in delivery that could potentially require Cedar Bay to require more than several trucks to deliver the limestone so that there is adequate inventory of limestone for acid gas control. To provide operational flexibility and to ensure adequate limestone inventory Cedar Bay requests the deletion for the requirement for the maximum limestone delivery of 44 tons/hour. The maximum permitted capacity of limestone specified in **Specific Condition B.1.(a).** would remain the same (385,400 tons).

  ADS Train #3 was originally permitted via PSD permit No. 0310337-011-AC. The particulate matter testing (Method 5) was conducted on August 24, 2007. The testing on ADS Train #3 demonstrated that emissions were well below the 0.003 gr/dscfm level. In addition, opacity has been much less than 5%. A review of the compliance testing operational parameters indicates that the volumetric flow is greater than 17,500 and typically runs at 22,800 dscfm with a recorded maximum of 23,396 dscfm. Based on calculations with the actual volumetric flow, the equivalent emissions increased from 0.45 to 0.56 lbs/hr and from 1.97 to 2.5 tons per year (TPY), a net change of 0.5 tons. To accurately reflect the correct volumetric flow, Cedar Bay requests that the **Section III, Specific Condition B.1.d.** of the Title V air operation permit be revised.

  The Department agrees with these revision requests and **Specific Conditions B.1.a.** and **B.1.d.** of the Title V air operation permit will be revised as follows:.

B.1. Permitted Capacity.

a. The Department authorizes up to 25 tons of filter-cake material/day from the lime softening unit portion of the plant's wastewater treatment system to be transferred to the lime storage pile. The maximum

material handling/usage rates for all limestone/aragonite unloading and storage shall not exceed ~~44 tons per hour and~~ 385,400 tons during any consecutive 12 months.

b. For limestone/aragonite, fly ash and bed ash handling sources, the handling usage rates shall not exceed the following:

Material Handled	Tons/Month [1]	TPY [3]
Limestone (ADS Trains 1 and 2)	27,000	275,000
Limestone (ADS Train 3)	---	385,400
Fly Ash	28,000	336,000
Bed Ash	8,000 [2]	88,000 [2]

[1] Based on 30 consecutive days.

[2] The Department will require a monitoring system to accurately measure Bed Ash throughput. The applicant will propose (to the Department's satisfaction) the system it recommends to utilize, prior to the initial receipt of petcoke. Actual in-service testing (while combusting coal) will be completed prior to the initial firing of petcoke, demonstrating its adequacy to the Department's satisfaction.

[3] ADS Units 1 and 2 serve as backup to ADS Unit 3. The total combined limestone processing from all units shall not exceed 385,400 tons per consecutive 12 months.

c. The maximum material feed rate to ADS Trains 1 and 2 shall not exceed 42.6 tons per hour and the volumetric flow rate shall not exceed 42,100 dry standard cubic feet per minute per ADS train.

d. The maximum material feed rate to ADS Train 3 shall not exceed ~~44.0 tons per hour~~ 385,400 tons during any 12 consecutive months of limestone and aragonite and the volumetric flow rate shall not exceed ~~17,500~~ 24,000 dry standard cubic feet per minute.

[PSD-FL-137(A & C), Specific Condition B.2., 0310337-005-AC, and 0310337-011-AC, Specific Condition 4.; 0310337-018-AC, Specific Condition 3.]

- **Specific Condition B.3.**: This condition was changed to remove obsolete language as follows:

B.3. Methods of Operation.

a. *Fuel*.

(1) Each limestone dryer (ADS Units 1 and 2) shall fire only No. 2 fuel oil with a maximum sulfur content of 0.05% sulfur by weight. The maximum oil firing rate is 120 gal/hour/unit. The two units combined shall not fire more than ~~996,000 gallons during any consecutive 12 months. Upon establishing commercial operation of the new dryer system train (ADS Unit 3) permitted by air construction permit 0310337-011-AC, combined oil firing from ADS Units 1 and 2 shall not exceed~~ 700,800 gallons during any consecutive 12 months. ~~The first month of the consecutive 12-month period for this limit shall begin the first month after commercial operation is established for the new dryer system train.~~

- **Specific Conditions B.13**: **Specific Condition B.13.** in the Title V air operation permit stipulates annual visible emission compliance tests for all emission units in this section. Emission Unit #31 is comprised of (6) pulverized limestone feeders. Each feeder is equipped with a small baghouse and outlet fan less than 4 inches in diameter. The feeders are located inside the confines of the power block. Equivalent emission for each feeder is 0.001 TPY. Due to the size of the individual feeders that comprise the Emission Unit and due to the interior location of the feeders, Cedar Bay requests that visible emissions testing for EU #31 be reduced to once every five years. Cedar Bay requests that **Specific Conditions B.13.** of the Title V air operation permit be revised. The Department agrees with this revision request and **Specific Condition B.13.** of the Title V air operation permit will be revised as follows:

B.13. Annual Tests Required. Annual visible emissions compliance tests shall be performed for all emissions units in this subsection with the exception of the pulverized limestone feeders. Due to the size of the individual feeders that comprise the emission unit and due to the interior location of the feeders, visible

emissions testing shall be conducted once every five years. [Rule 62-297.310(7), F.A.C.; and, PSD FL-137(A & E), Specific Condition B.9.; 0310337-018-AC, Specific Condition 4.]

- **Specific Conditions C.14**: Cedar Bay requests that **Specific Condition C.14.** of the Title V air operation permit be deleted because it is in conflict with **Specific Condition C.16**. The Department agrees with this revision request and **Specific Condition C.14.** of the Title V air operation permit will be deleted.

~~**C.14.** Compliance Tests Prior To Renewal. Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE and PM. [Rule 62-297.310(7)(a)3., F.A.C.]~~

- **Section III, Material Handling Emission Units Descriptions**: Cedar bay indicated that the actual volumetric flow rates for some of these units are incorrect. Cedar Bay has asked that the correct flow rate be inserted in to the Title V air operation permit. The Department agrees with this revision request and the emission units flow rates will be corrected as follows:

E.U. ID No.	***Brief Description: Material Handling Systems and Treatment Operations***	***Stack Height (ft)***	***Exit Diameter (ft)***	***Exit Temp. (°F)***	***Actual Volumetric Flow Rate (acfm)***
004	*Absorber Dryer System Train – 1*	*63*	*4.17*	*195*	*~~49,000~~ 40,000*
005	*Absorber Dryer System Train – 2*	*63*	*4.17*	*195*	*~~49,000~~ 40,000*
009	*ADS Storage Bin – 1*	*90*	*2 x 2*	*102*	*6,840*
025	*ADS Storage Bin – 2*	*89*	*2 x 2*	*102*	*6,993*
031	*Pulverized Limestone Feeders (6)*	*50*	*0.3*	*77*	*~~365~~ 88 (each)*
010	*Bed Ash Hopper*	*25*	*0.625*	*96*	*670*
011	*Bed Ash Separator/Collector*	*38*	*1*	*223*	*5,345*
012	*Fly Ash Separator/Collector – 1*	*38*	*1*	*197*	*5,974*
026	*Fly Ash Separator/Collector – 2*	*38*	*1*	*197*	*5,974*
030	*Dry Ash Rail Car*	*14*	*1.9 x 2.8*	*120*	*6,000*
032	*Bed Ash Silo Vent*	*~~404~~ 204*	*1.3 x 1*	*80*	*~~1,800~~ 800*
033	*Fly Ash Silo Vent*	*~~438~~ 238*	*1 x 1.5*	*127*	*915*
034	*Absorber Dryer System Train – 3*	*63*	*4.2*	*180*	*~~20,500~~ 32,270*

- **Administrative Corrections**: The following minor administrative corrections were made to the Title V air operation permit:
  - The Facility Description references Stone Container Corporation (SCC). There has been an ownership change of the facility's steam host from Smurfit-Stone Container Enterprises, Inc. to RockTenn. The permit was modified to reflect this change.
  - On July 1, 2013 the Department's Northeast District became the facility's primary air permitting and compliance monitoring authority. The permit was modified to reflect this change.
  - While following Part 75 Acid Rain monitoring provisions Cedar Bay is not in the Acid Rain program. The permit was changed to reflect this.
  - Regulation 40 CFR 60, Subpart A, NSPS General Provisions should include all emission units at the facility. The permit was modified to reflect this.
  - NSPS-40 CFR 60, Subpart 000, Standards of Performance for Nonmetallic Mineral Processing Plants lists Emission Unit (EU) 31 as the only EU regulated by this rule. The facility EU's affected by the rule should also include EU 004 (Absorber Dryer System -Train 1), EU 005 (Absorber Dryer System - Train 2), EU 009 (Absorber Dryer System Storage Bin #1), EU 025 (Absorber Dryer System Storage Bin #2), and EU 034 (Absorber Dryer System Train - 3). The permit was modified to reflect this.
  - While following Part 75 Acid Rain monitoring provisions Cedar Bay is not in the Acid Rain program and requests that the following regulation be deleted from the list of Applicable Regulations. The permit was modified to reflect this.

- The Department recently became the Title V compliance authority in Duval County. Cedar Bay requests that the recipients of reports be changed from the City of Jacksonville Environmental Quality Division (EQD) to the FDEP, Northeast District. The permit was changed to reflect this.
- **Specific Condition FW5.(b)** was changed to reflect that a street sweeper is used to collect coal, limestone and ash on roadways.
- For accuracy the change the stack height of the Coal Silo Conveyor Baghouse was changed to 242 feet.
- The moisture content of coal unloaded at the facility typically has a high moisture content. Cedar Bay requested that "when needed" be added to **Specific Condition C.7.b**. The permit was changed accordingly.
- Insignificant Units # 34 and 35, Tower loop - Soda Ash and Lime Storage are duplicated as Insignificant Units # 53 and 54, Lime and Soda Ash Storage Silos. This duplication was removed from the permit..

CONCLUSION

This project renews Title V air operation permit No. 0310337-016-AV, which was effective on January 1, 2010. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, 62-213 and 62-214, F.A.C. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.