21 West Church Street
Jacksonville, Florida 32202-3139

November 12, 2008

Via Overnight Mail

RECEIVED

NOV 13 2008

JE1.

Jonathan K. Holtom Acting Program Administrator, Title V Section Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION

Re:

Draft Permit No. 0310045-020-AV Title V Air Operation Permit Renewal JEA Northside Generating Station, St. Johns River Power Park, and Separation Technologies LLC's Separation Technologies, Inc.

W A T E D

ELECTRIC

Dear Mr. Holtom:

SEWĖR

On October 13, 2008, JEA received the draft permit package for renewal of the Title V Air Operation Permit for the Northside Generation Station, St. Johns River Power Park, and Separation Technologies LLC's Separation Technologies, Inc. (NGS/SJRPP/ST) including the statement of basis, draft permit, written notice of intent to issue, and public notice of intent to issue. In this letter, we provide our comments on and propose suggested changes to the draft permit.

- 1. **CAIR** In the statement of basis, under "Primary Regulatory Requirements," the reference to CAIR applicability at the bottom of the page should include the same caveat that the Department included under Condition FW10: "On July 11, 2008, the U.S. Court of Appeals for the District of Columbia recommended vacature of the Clean Air Interstate Rule. Because of this decision, the applicable CAIR requirements that were identified in the renewal application are not being included in the permit at this time." Similar caveats should be included elsewhere in the permit. (See, e.g., Subsections B. and C., and in the general Title V conditions as well.)
- 2. Applicable Requirements The Title V permit should clarify that all portions of the attached appendices and all portions of 40 CFR 60, Subparts A, Da, 000, and Y do not necessarily apply. For example, on page 5 under Subsection C, a clarification should be added that "[a] summary of the generally applicable regulations is shown in the following table." Similarly, page 81 of the proposed permit lists the various appendices that are attached and should include the following at the end of the heading: "The Following Appendices are Enforceable Parts of This Permit to the Extent Applicable." Each reference to the appendices, and the appendices themselves, should clarify that only the applicable provisions of those appendices apply. Specifically, Conditions C.66

- and C.67 on page 36, Conditions D. 16 and D.17 on page 41, Conditions G.49 and G.50 on page 55, and Conditions H.25, H.26, and H.27 on page 63 should include language indicating that the emissions units must comply only with the *applicable* provisions or sections of the rules identified. Otherwise it is not clear that there are provisions being included in the attachments simply because they are part of a rule being quoted and that are not necessarily applicable or applicable in their entirety.
- 3. Clarification In Condition FW5 on page 7, the phrase "as needed" should be added to the end of the last sentence for clarification regarding application of wetting agents.
- 4. **Annual Operating Report** Condition FW6 on page 7 and Condition RR1 of Appendix RR should be corrected to reflect the appropriate deadline for submittal of the annual operating report which is May 1, 2009, for calendar year 2008. This requested change is based on a recent change to Rule 62-210.370, F.A.C.
- 5. **Stack at Northside** On page 9 in the first paragraph describing Northside Boiler No. 3, the second to last sentence should refer to *one* 300-foot stack, rather than two stacks.
- 6. **Reference to FGD** The second sentence under Condition A.17.a on page 13 regarding the use of a continuous emissions monitor for sulfur dioxide emissions should be deleted—it is unclear why this condition references the absence of a flue gas desulfurization device.
- 7. Nitrogen Oxides (NO<sub>x</sub>) Monitor Conditions A.18.a and A.18.b on page 13 should be revised to omit references to 40 CFR Parts 60 and 51 because the NO<sub>x</sub> monitors on this unit are subject only to the acid rain rules, 40 CFR Part 75.
- 8. **Testing Prior to Renewal** Condition A.21 on page 14 should be deleted because other conditions directly address the annual testing and compliance requirements. For example, Conditions A.20, A.29, and A.30 address particulate matter (PM) and visible emissions testing requirements. In addition, continuous emissions monitors (CEMs) are required for demonstrating compliance with the sulfur dioxide and nitrogen oxides emission limits under Conditions A.17 and A.18.
- 9. **Annual RATA** Conditions A.17.b on page 13, Condition A.26.c on page 15, Conditions C.39 and C.48 on pages 31 and 33, and Condition G. 26 on page 51 should be revised to eliminate any requirement for "annual" RATAs and simply require compliance with 40 CFR Part 75 RATA requirements. The acid rain rules require the routine performance of the RATAs, although there is no requirement that the RATAs be preformed "annually."

- 10. **Permitted Capacity** JEA requests that permitting notes be included in Conditions B.1 and C.1, on pages 18 and 22, to clarify the purpose of referencing the heat input rates (for determining capacity during compliance tests) and to confirm that the rates identified are not intended as not-to-exceed limits. These notes have been included in prior permits.
- 11. **Over-Fire Air** In the first paragraph of Subsection C on page 22, in the sixth line, the term "low excess-air firing" for control of NO<sub>x</sub> emissions should be changed to "**over-fire air**" to more accurately reflect the controls being used on SJRPP Boiler Nos. 1 and 2.
- 12. **Ambient Air Quality Standards** Condition C.3.g on page 23 should be deleted. It is unclear why this condition has been included in the proposed permit. The State has an obligation to ensure that ambient air quality standards are being met, and this burden should not be shifted to a permittee without cause. Operation of the referenced JEA units at their permitted capacities is not known to cause or contribute to a violation of an ambient air quality standard.
- 13. Excess Emissions Allowed SJRPP's startup and shutdown procedures have been approved and provided as Appendix Q. These procedures are referenced in Condition C.18 on page 27, and SJRPP has established a practice of providing the Jacksonville Environmental Quality Division (EQD) with a summary of each unit startup and shutdown event for SJRPP Boiler Nos. 1 and 2. The second paragraph of Condition C.18 should therefore be deleted and replaced with language reflecting this practice: "Consistent with the Protocol for Startup and Shutdown included in Appendix Q SJRPP, excess emissions during a period longer than two hours due to a startup and/or shutdown event on SJRPP Boiler Nos. 1 and 2 are authorized provided that JEA submits to EQD a summary report of the unit startup and shutdown event, including duration and extent."
- 14. **Correction of Typographical Error** Condition C.37.a on page 30 needs a punctuation clarification—the addition of a semicolon. The last sentence should read: "If Method 6A or 6B is used under 40 CFR 60.47a(i), the conditions under 40 CFR 60.46(d)(1) apply: these conditions do not apply under 40 CFR 60.47a(h)."
- 15. **SJRPP Annual Testing** Condition C.39 on page 31 provides that the NO<sub>x</sub> and SO<sub>2</sub> RATA test data may be used to demonstrate compliance with the annual test requirement provided that the provisions of Chapter 62-297, F.A.C., are met. This condition and Condition C.48 on page 33, if not deleted, should be revised to clarify that there is no requirement to perform the RATAs at 90 to 100 percent of the permitted capacity. Also, the use of CEMS should be sufficient for compliance without need for annual stack tests.

- 16. **SJRPP Renewal Testing** Condition C.40 on page 31 requiring testing at least once prior to renewal should be deleted because there are annual testing requirements of these pollutants.
- 17. **NSPS Reports** The tables in Condition C.49 on page 33 and in Condition G.42 on page 54, as well as the corresponding Conditions C.58 on page 35 and G.42 on page 54, indicate that the New Source Performance Standard (NSPS) reports are due every three months. Because 40 CFR 60 Subpart A requires only semi-annual reporting, these conditions should be revised to indicate that reports are required on a semi-annual basis rather than a quarterly basis.
- 18. Excess Emissions Reports Condition C.57 on page 35 should be revised to clarify that the NSPS excess report is required *only* for the reporting of exceedances of the NSPS limits, not the permit limits. Similarly, Condition G.35 on page on 53 should be revised to state: "These excess emissions shall be reported as required in 40 CFR 60.7 if the NSPS limit has been exceeded." In addition, Condition H.22 on page 62 should be revised to state: "... the owner or operator shall notify ERMD-EQD within one (1) working day, excluding weekends and holidays, of: the nature, extent..."
- 19. **SJRPP Fuel and Limestone Handling** The table on page 38 should be revised to delete the reference to "Unloader and Transfer Points" for emissions unit 23a because the "unit" is the entire building and is not limited to these points. Also, the first emissions unit identified as 23g, "Petroleum Coke Reclaimer System (PC-1)," should be deleted because this unit no longer exists.
- 20. **Reporting Schedule** Conditions D.13 and H.20 on pages 40 and 62 for materials handling operations should be revised to omit the requirements for quarterly reporting because the rule referenced applies when there are continuous monitors, and there are no continuous monitors associated with these materials handling units. See 40 CFR Part 60.7(c).
- 21. Emissions Unit Operating Rate Limitation After Testing Conditions D.2 and E.2 on pages 39 and 43 appear to require a determination of the operating rate of materials handling equipment during visible emissions Method 9 testing, and a subsequent limit of 110% of the rate experienced during that testing. The conditions cite to Rule 62-297.310(2). Rule 62-297.310(4)(a)2, F.A.C., however, applies to compliance testing for visible emissions testing and simply requires that the opacity test observation period include the period during which "the highest opacity emissions can reasonably be expected to occur." JEA suggests that these proposed requirements be deleted or that Rule 62-297.310(4)(a)2. be quoted instead.

- 22. **Annual Compliance Tests** Annual compliance tests are proposed for all of the identified emission units under Condition D.9 on page 40 and Condition E.9 on page 43, and these are more stringent than the original construction permit and prior Title V permit requirements for certain units. The testing frequency for each of the units is identified in Revised Table 6 Part B, which is being included as part of the permit. Annual testing should not be required if this table indicates otherwise. Similarly, Conditions D.10 and E.10 would require at least one test prior to renewal, which is also inconsistent with Revised Table 6 Part B, and should therefore be deleted. The table should control the testing frequency for these units, as set forth in Conditions D.12 and E.12.
- 23. Cooling Tower Condition F.5 on page 45 should be deleted because there are no testing requirements associated with the cooling towers.
- 24. **Northside CFBs** The references to "new" units in the description on page 46 under Subsection G should be deleted because these units have been in place for a number of years. This paragraph could also be revised to omit the references to the retired units. The third paragraph should be deleted it is unclear why this information is being included and is unnecessary. The last sentence of that paragraph regarding commencement of operation could be retained. Likewise, Subsection I's description of Emissions Unit 44 through 50 should be revised to indicate that the fly ash processing system is no longer "new."
- 25. **Northside Methods of Operation** The following permitting note should include as part of Condition G.3 on page 47 for clarification regarding the use of fuel additives:

{Permitting note: Fuel additives, such as naturally occurring clays containing kaolinite or montmorillonite, along with olivine, bauxite or granite in the form of a raw material and/or as a component of coal bottom ash may be used to prevent agglomeration of the bed material in the boilers. The Department and the Compliance Authority shall be notified in writing if a new source or type of fuel additive is desired to be evaluated for approval.}

- 26. **Effective Date of Limit** The last sentences of Conditions G.10, G.11, and G.12 on pages 48-49 should be deleted since the annual limits have been in place for a number of years.
- 27. **Authorized Emissions** Condition G.22 on page 50 should be revised to state: "... (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours in any **thirty (30) consecutive days** per emissions unit...." This

revision will reflect the language in the current Title V permit. See current Title V Condition H.21(2).

- 28. Part 75 CEM Requirements References to Part 60 in Condition G.24 on page 50 should be limited to the CO monitors because compliance with applicable provisions of 40 CFR Part 75 should be adequate for the opacity, SO<sub>2</sub>, and NO<sub>x</sub> CEM certification requirements. Only Part 75 is referenced in Conditions G.30, G.31 and G.32 on page 52.
- 29. **Northside Testing** Condition G.26 on page 51 should be revised to require annual testing for PM only, since CEMS and RATA test data is used for the other parameters. Also, if this language is retained, the condition should be revised to clarify that annual RATA tests may be conducted as appropriate for the RATA and it is not necessary to conduct the tests at 90 to 100 percent of the permitted capacity. Condition G.27 on page 51 regarding "renewal" testing should be limited to VOC emissions since CEMS and annual tests/RATAs are required for all of the other parameters.
- 30. **Performance Tests** JEA requests that Condition G.29 on page 51 be revised to remove the requirement to conduct all annual compliance tests once every "federal fiscal year." This requirement to test on a fiscal year basis is inconsistent with the RATA rules, and because RATA can be used in lieu of annual testing, it would be helpful to eliminate this reference. The Department's rules allow permit conditions to vary this otherwise applicable requirement.
- 31. **Initial Testing** Condition G.33.a on page 52 should be deleted because the initial testing has all been completed. The first sentence in Condition G.33.b should be revised to delete the following: "and an additional initial test shall be performed on CFB Boiler No. 2 while firing coal," because it has already been performed. Additionally, the reference to "initial" testing under Condition G.36 on page 53 should be deleted as well.
- 32. **Valid Data** Condition G.35 on page 53 should be revised to clarify that excess emissions reports being provided pursuant to 40 CFR 60.7 are required only if the NSPS limits are not met.
- 33. Volatile Organic Compounds The second sentence of G.36 on page 53 condition should be revised to state: "... within every five (5) years thereafter while firing petroleum coke or coal."
- 34. Excess Emissions Reports for NSPS The last sentence in Condition G.44 on page 54 should be revised to state: "... excess emissions of NSPS limits

shall also be reported in accordance with 40 CFR 60.7, Subpart A," to clarify that these reports are not tied to the lower permit limits.

- 35. **NSPS Reporting** Condition G.42 on page 54 should be revised to require NSPS reporting semi-annually consistent with 40 CFR 60 Subpart A.
- 36. **Testing for Northside Materials Handling** Condition H.12 on page 60 would require annual testing. Annual testing should not be required unless annual testing was established in the construction permit. Most of the units require only renewal testing under the construction permit. Condition H.13 on page 60 would require renewal testing for all units including those subject to annual testing requirements. These two conditions should be deleted and the table included as Condition H.19 on page 61 (from the construction permit) used instead. This table clarifies which units must undergo annual testing and which ones must undergo renewal testing.
- 37. **ST Operations** On page 64, second paragraph, the last sentence should be revised to clarify that the fly ash is either returned to the fly ash storage silos for eventual disposal at the onsite landfill "or transported offsite." Also, on page 64, the last sentence of the third paragraph and the last sentence under Condition I.4.a. on page 65 should be revised to clarify that the recovered ammonia is subsequently returned to SJRPP for recycle "or to vent."
- 38. **Fly Ash Processing System** The reference to "new" units on page 64 under Subsection I. should be deleted, as the fly ash processing system is no longer "new."
- 39. **Compliance Tests at ST** Conditions I.10 and I.11 on page 66 require annual and renewal testing for visible emissions. Condition I.11 requires renewal testing which should be sufficient based on the low levels of emissions from these units. Condition I.10 can therefore be deleted.
- 40. **Acid Rain Permit** On page 68, Condition A.2 should be revised to simply state that the sulfur dioxide allowances are allocated for the units by EPA and that information is available on the EPA website. The allowance allocations provided in this condition in the proposed permit are incorrect.
- 41. Attachment Q Procedures for Startup and Shutdown In the second paragraph, the last sentence of Attachment Q, applicable to the SJRPP Boiler Nos. 1 and 2, should be revised to clarify that additional precipitator fields "may be" energized, not that they are always energized: "After the precipitator has thermally soaked for two hours in excess of 200F, additional precipitator fields may be energized to further reduce opacity and particulate burden to the scrubber."

- 42. SJRPP Table 6 (Revised) Part B Included as Attachment A please find the correct Table 6, Part B, which is referenced in Conditions D.4 and D.5 on page 39 and Conditions E.4 and E.5 on page 43 (Attachment A). SJRPP requests that the attached table be included in the TV permit rather than the older version included in the draft permit package. The one included in the draft permit package was copied from PSD-FL-010(C) and does not reflect the most current version of that table, which was adopted as part of PSD-FL-010G in 2006. The revised table submitted as Attachment A herein includes an additional change from the 2006 version it strikes through unit 023g, PC-1, a unit that no longer exists. Therefore, SJRPP requests that the attached table be included in the final Title V permit rather than the older version included in the draft permit package.
- 43. **Reports of Problems** In Appendix RR, Condition RR2 should be revised to indicate that notification is required within *one working day*, excluding weekends and holidays, rather than the "same" day. There should be no requirement to report when the agency's offices are not open, and this definition of "immediately" is inconsistent with prior interpretations by the Department. Consistently throughout the permit, "immediate" should refer to reporting within one working day and not the "same" day.
- 44. **Emission Computations** Condition TV 30 in the general conditions should be revised to include Rule 62-210.370, F.A.C., in its *entirety* if it is to be included at all. The applicability section of the rule, paragraph(1), explains the purpose of the rule and how it is to be used: "This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increases . . ., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions to be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit." This introductory language is critical and must be added. Without this explanation in the conditions, the purpose of Condition TV 30 is unclear and could be misinterpreted to add new compliance requirements.
- 45. **List of Insignificant Activities** A large number of activities and units listed as "insignificant activities" or "trivial activities" by JEA in the application and by the Department in prior Title V permits have been omitted from the proposed permit under Appendix I. Please confirm for JEA that each of the activities listed in Attachment B, attached hereto (Attachment D of the Application), falls under general category XV on page I-3 of 3, "other"

insignificant activities that meet the listed criteria. In addition, please add the following insignificant activities:

Receiving, Storage and Reclamation of Fuel Additives. The facility is allowed to receive, store and reclaim fuel additives for usage in the CFB Boilers Nos. 1 and 2 to prevent agglomeration of the bed material in the boilers. The fuel additives, such as naturally occurring clays containing kaolinite or montmorillonite, along with olivine, bauxite or granite in the form of a raw material and/or as a component of coal bottom ash, will be delivered by conveyor belts to the fuel bunkers for storage prior to being fed into the boilers, where the projected usage is less than 100 tons per day per boiler.

Two Quonset huts (huts; one for each dome with dimensions of 35 feet wide, 50 feet long and 21 feet high) will be installed for storage purposes, with access only from one end to avoid wind erosion issues. They will be located near an entrance into each dome to minimize travel distance to the fuel conveyor system located inside each dome. The fuel additives will be brought in by covered trucks, at about 25 tons per load, and dumped into the Quonset hut opening prior to being moved further back into the storage hut using a front-end loader. After storage, the fuel additives will be reclaimed by a front-end loader and taken inside the dome for loading onto the fuels's conveyor belt. A front-end loader or similar equipment will be used to keep the roadway surfaces clean of any spilled materials. A water truck or vacuum street sweeper will be used to clean the roadways daily or as needed to suppress unconfined PM emissions from any spilled materials that were not removed by the front-end loader.

- 46. **CAM Plan** On page CAM 5 of 5, which applies to SJRPP Boiler Nos. 1 and 2, please revise the first description cell to refer to Table 3, which applies to SJRPP (rather than to Table 1, which applies to Northside). Also, in the first and third description cells, please replace the term "Leader" with "Manager" to more accurately reflect the titles used by SJRPP.
- 47. **References to ST** There are several references throughout the proposed permit to "STI" as an abbreviation for Separation Technology, LLC, and each of these references should be changed to "ST." (See, e.g., cover page, index, pages 1, 2, 3, 64, footer etc.)
- 48. **References to JEA's SJRPP** Because Florida Power & Light Company is a co-owner of SJRPP, the references throughout the proposed permit to "JEA's SJRPP" should be changed to omit the singular reference to JEA's ownership interest.

- 49. **Incorrect Citation** On page 6, the next to last rule citation should be 62-29<u>6</u>.711 rather than 62-29<u>7</u>.711.
- 50. **Incorrect Statement** The fourth line of Condition FW3 on page 7 regarding general volatile organic compound (VOC) emissions should say "necessary" rather than "<u>un</u>necessary." This appears to be a typographical error.
- 51. **Heckscher Drive** Throughout the document, the address for the facility has been mis-spelled. The correct address is 4377 Heck**scher** Drive, Jacksonville, Florida (rather than Heck**shire**).

We appreciate your attention to these matters and stand ready to discuss any of our comments detailed above. Please contact Mr. Bert Gianazza at 904.665.6247 with any questions you may have regarding these comments.

Sincerely,

James Chansler

Enclosure

cc: Bert Gianazza, JEA

Jay Worley, JEA

Scott Sheplak, P.E., FDEP

# **Attachment D**

List of Insignificant and Unregulated Activities

# List of Insignificant Emissions Units and/or Activities

**JEA** 

NGS/SJRPP/STI

**Facility ID. No.:** 0310045

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

### Brief Description of Emissions Units and/or Activities:

I. Northside Generating Station (NGS).

A.	Storage Tanks.		
1.	JEA Tank	Magnesium Oxide	9,600 gallons
2.	JEA Tank	Petrolite	6,500 gallons
3.	JEA Tank	Lube Oil - Unit 1	10,000 gallons
4.	JEA Tank	Lube Oil - Unit 2	10,000 gallons
5.	JEA Tank	Mineral Acid	11,500 gallons
6.	JEA Tank	Mineral Acid	11,500 gallons
7.	JEA Tank	Caustic - East	10,000 gallons
8.	JEA Tank	Caustic - West	10,000 gallons
9.	JEA Tank	Hypochlorite	12,000 gallons
10.	JEA Tank	Hypochlorite	12,000 gallons
11.	JEA Tank	Lube Oil	18,000 gallons
12.	JEA Tank	Lube Oil	7,000 gallons

#### II. St. Johns River Power Park (SJRPP).

#### A Power Block Emergency Generator.

1. The emergency generator has historically fired less than 10,000 gallons per year of diesel fuel. The emergency generator draws its fuel from a single diesel fuel oil storage tank (the fuel oil has a maximum fuel sulfur content limit of 0.76%, by weight).

#### B Storage Tanks.

z zieluge kumw.		
1. JEA Tank	Lube Oil	10,000 gallons
2. JEA Tank	Lube Oil	18,000 gallons
3. JEA Tank	Sulfuric Acid	6,000 gallons
4. JEA Tank	Sulfuric Acid	10,000 gallons
5. JEA Tank	Sulfuric Acid	6,000 gallons
6. JEA Tank	Sulfuric Acid	6,000 gallons
7. JEA Tank	Caustic	10,000 gallons
8. JEA Tank	Caustic	6,000 gallons
9. JEA Tank	Hydrazine	6,000 gallons
10. JEA Tank	Hypochlorite	6,000 gallons
11. JEA Tank	Anhydrous Ammonia	79,390 gallons
12. JEA Tank	Anhydrous Ammonia	79,390 gallons
13. JEA Tank	Hypochlorite	5,000 gallons
14. JEA Tank	Hypochlorite	5,000 gallons
15. JEA Tank	Hypochlorite	3,000 gallons

# III. NGS Boiler No. 1, NGS CFB Boilers Nos. 1 and 2, and SJRPP Boilers Nos. 1 and 2.

1. Evaporation of on-site generated boiler non-hazardous cleaning chemicals (cirtosolv and ammonia). This activity occurs once every three to five years or longer.

#### IV. Solid Fuel Handling Facilities at the NGS and SJRPP.

1. Solid fuel handling alternate operating scenario with capability to transport, using trucks, solid fuels (coal and petroleum coke) between the respective solid fuel handling facilities at NGS and SJRPP in the event of equipment failure, fuel delivery disruption or disproportionate fuel inventory.

#### V. SJRPP Removal of Landfilled Ash.

1. Future anticipated activities at SJRPP include the removal of landfilled ash for use off-site. A front-end loader will be used to dig the ash up and load the material directly on licensed dump trucks, which will haul the ash off-site. The stockpiled ash is expected to be moist and dust free.

#### VI. NGS Limestone Feed System Fabric Filter Vents (6).

1. System is designed to collect limestone dust and return it to the limestone feed system. There are six emission points (baghouses). The process equipment is located between the limestone silos and the injection of limestone into the CFBs.

#### VII. SJRPP Emergency Diesel Fire Pump.

1. This equipment falls under the category of fire and safety equipment pursuant to Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions.

#### VIII. NGS By-Product Reclamation.

1. By-product reclamation at the by-product storage area (BSA). Fugitive particulate emissions will be minimized by using storage enclosures and dust suppression sprays/wetting agents.

#### IX. NGS Emergency Generator.

1. This emergency generator will be limited to 500 hours per year operation per the definition of "emergency generator" at Rule 62-210.200, F.A.C.; in addition, the generator can be operated <u>only</u> when the primary power source for that facility has been rendered inoperable by an emergency situation.

#### X. NGS Black-Start Emergency Generators (2).

1. These black-start emergency generators will be limited to 500 hours per year operation per the definition of "emergency generator" at Rule 62-210.200, F.A.C.; in addition, the generators can be operated <u>only</u> when the primary power source for that facility has been rendered inoperable by an emergency situation.

#### XI. NGS Emergency Storage of Solid Fuel outside the Coal Domes.

1. During emergency situations and unscheduled outages, JEA will store up to 20,000 tons of solid fuel in a bermed location (100 x 200ft) adjacent to the existing fuel storage dome for up to 3 weeks. Any runoff from this area will be collected within the berm and pumped by vacuum truck and placed in the on-site presedimentation basin thence to wastewater treatment facility. Water shall be applied, as necessary, to this area to control fugitive emissions. This temporary outside storage of solid fuel meets the reasonable precaution requirements for unconfined emissions of particulate matter and general visible emission requirements in accordance with Florida Administrative Code Rules 62-296.320(4)(c) and 62-296.320(4)(b) respectively.

### XII. Two cooling towers for providing cooling for the air quality control systems at NGS.

1. The cooling towers are generically exempted in accordance with Rule 62-210.300(3)(b)(1), F.A.C.

#### XIII. SJRPP SCR Limestone System

1. The limestone system consists of limestone handling, conveying and storage and will be used for increasing the calcium content for some fuels to 5 percent in the ash and hence mitigate the potential contamination of arsenic.

# List of Unregulated Emissions Units and/or Activities.

**JEA** 

NGS/SJRPP/STI

Facility ID No.: 0310045

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissionslimited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unitspecific emissions or work practice standards.

## Brief Description of Emissions Units and/or Activities:

# I. Northside Generating Station.

-aaa Storage Tanks.		
1. JEA Tank	Bunker C Storage	4,578,000 gallons
2. JEA Tank #12	Diesel Storage	4,200,000 gallons
3. JEA Tank #13	Diesel Storage	4,200,000 gallons
4. JEA Tank #14	Diesel Storage	4,200,000 gallons
5. JEA Tank	Waste Oil Storage - Unit 1	750 gallons
6. JEA Tank	Waste Oil Storage - Unit 2	1,000 gallons
7. JEA Tank	Waste Oil Storage - Unit 3	575 gallons
8. JEA Tank	Bunker C Storage	4,578,000 gallons
9. JEA Tank	Bunker C Storage	4,578,000 gallons
10. JEA Tank	Bunker C Storage	11,256,000 gallons
11. JEA Tank	Bunker C Storage	11,256,000 gallons
12. JEA Tank	Bunker C Storage	11,256,000 gallons
13. JEA Tank	Bunker C Storage	4,578,000 gallons
14. JEA Tank #11	Diesel Storage	4,200,000 gallons
II. St. Johns River Power Park.		

-bbb Storage Tanks.		
1. JEA Tank: Emergency	Diesel Fuel Storage	1,123 gallons
Diesel Fire Pump		·
2 JEA Tank	Diesel Fuel Storage	636,106 gallons
3 JEA Tank: Coal/Limestone	Diesel Fuel Storage	10,069 gallons
Fuel Storage		
4 JEA Tank: Ash Landfill	Diesel Fuel Storage	10,069 gallons
Fuel Storage		
5 JEA Tank: Power Block	Diesel Fuel Storage	4,015 gallons
Emergency Generator Fuel Storage		
6 JEA Tank	Gasoline Storage	10,069 gallons

## **List of Trivial Activities**

Indoor sand blasting and abrasive grit blasting where temporary enclosures are used to contain particulates

Coal pile runoff ponds

Open stockpiling of material

Plant grounds maintenance

Routine maintenance/repair activities such as cleaning, welding, non-asbestos insulation removal, hand held tools/equip., meter repair/maintenance, on-line/off-line cleaning of equip.

Main steam pressure/relief valves; steam from boiler operations

Indoor fugitives such as vacuum cleaning, solvent storage, office supplies/equipment

Testing equipment such as CEMs, stack sampling calibration gases, oxygen detector

Internal combustion engines which drive compressors, generators, water pumps, or other auxiliary equipment

HVAC (heating, ventilation, and air conditioning systems)

Vent/exhaust systems for:

Print room storage cabinets Transformer vaults/bldg. Maint./welding bldgs. Operating equipment vents Degasifier/dearators/decarbonators

Air blowers/evacuators/air locks

Feedwater heater vents

Transformers, switches, and switchgear processing (including cleaning and changing)

Use of nitrogen cap during boiler shut-down

Generator venting

Vent/exhaust from kitchen and breakrooms

Vents/stacks for sewer lines or enclosed areas req. for safety or by code

Electrically heated equipment used for heat treating, tracing, drying, soaking, case hardening or surface conditioning

Sewage treatment fac./equip. ranging in size from porta-john to sewage treatment plants

Steam releases

Storage and use of chemicals solely for water/waste water treatment

Neutralization basins/ponds, ash pits/ponds, TETF/ENU, percolation, equalization

Transfer sumps

Firefighting training facilities Turbine vapor extractor

Lawn maintenance equipment/activities

Application of fungicide, herbicide, pesticide

Air compressors and centrifuges used for compressing air

Handling and removal of clinkers, slag and bottom ash

Recovered materials recycling systems including: bulb crushers, aerosol can puncturing

Waste accumulation/consolidation

Compressed air system

Storage tanks less than 550 gallons

Storage of products in sealed containers

Nuclear gauges used for the purpose of process monitoring

Hydrogen and acid venting from battery rooms vacuum vents for gypsum dewatering bldg.

Flue gas desulfurization system absorber feed tank mist eliminator/spray header vent

Renovation/demolition of asbestos

Fires

Chemical spills, leaks & transfers

Oil spills, leaks & change out

Insulating activities

Asphalt or concrete sealing

High pressure water blasting

Excavation for construction activities

Chemical cleaning

Boiler

Turbine

Heat exchanger

Misc. plant machinery

Solvent cleaning (parts & circuit boards)

Cleaning furnace bottoms or slag removal

Welding all types

Cutting all types

Milling & machining

Sanding or grinding – all types

Emissions from portable equipment

Welding machines (diesel or gas)

Pumps (diesel or gas)

Sweeping

Pipe line repairs

Fly ash

Bottom ash

Slurry or sludge transfer

Fuel line

Process water (cooling water, ash water or condensate)

Refuse transport line

Miscellaneous other process lines

Bag house repairs

Filter change out (oil & air)

Air conditioner repairs

Battery maintenance

Coal feeder maintenance

Refuse feeder maintenance

Other miscellaneous maintenance

Bottom ash removal (from boilers)

Fuel oil storage tank cleaning

Small parts washing using parts washer

A/C servicing by licensed contractor

Searching for condenser leaks using helium

Stack washing (water, soot)

Cleaning and dewatering of ash basins (heavy equipment/pumps)

Engine rebuilding

Lube oil changes

Receiving fuel oil (trucks & pipeline)

Aerosol can use (cleaners, etc.)

Boiler chemical cleaning (cirtosolv & ammonia)

Sootblowing

Liming the boilers (CaOH)

Turbine washing

Boiler gun cleaning (guns dipped into vats of solvent)

Vehicle servicing (oil changes, antifreeze changes, etc.)

Soldering of electrical components (silver, tine solder)

Portable equipment and tools, including electric and gasoline powered

Electro plating

Welding, grinding and cutting activities (metal fumes)

Machining metal parts (cutting oil, metal fumes)

Cleaning condensers (water vapor, "snoop")

Oil spills (#6, #2, turbine lube oil)

Oil-filled electrical equipment vents

Storage and use of boiler chemicals (phosphates, ammonia, hydrazine, magnesium oxide, sodium tripolyphosphate, soda ash, di- and tri-sodium phosphate)

Fume hood in laboratory

Laboratory equipment

Space heaters

Fire and safety equipment

Emergency generators

Mercury containing equipment such as manometers

Non-chlorinated solvent degreasing equipment

Vacuum pumps in laboratory operations

Equipment use for steam cleaning

Lime storage silo

Revised Table 6 - Part B. SJRPP: Materials Handling and Storage Operations

Emission Unit No.	Material Handling and Storage Emission Unit	Type Source	Opacity Limit (%)	AQCS	VE Testing Frequency	Rationale
022: SJRI	PP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations		·			
022a	Gypsum Dewatering Building	Fugitive	5	ı	Upon Request	Wet byproduct w/insignificant emissions
022a	Gypsum Storage Enclosure	Fugitive	5	1	Upon Request	Wet byproduct w/insignificant emissions
022j	Gypsum Truck Loadout	Fugitive	5	1	Upon Request	Wet byproduct w/insignificant emissions
022j	Fly Ash Loadout for Silo 1A (metal structure)	Fugitive	10	1 & 3	Upon Request	Emissions vented back to Saleable Ash Silo
022j	Fly Ash Loadout for Silo 1B (metal structure)	Fugitive	10	1 & 3	Upon Request	Emissions vented back to Saleable Ash Silo
022j	Fly Ash Loadout for Silo 2A (metal structure)	Fugitive	10	1&3	Upon Request	Emissions vented back to Saleable Ash Silo
022j	Fly Ash Loadout for Silo 2B (metal structure)	Fugitive	10	1 & 3	Upon Request	Emissions vented back to Saleable Ash Silo
022k	Solid Waste Disposal Area	Fugitive	10	1 & 2	Upon Request	Wet byproduct w/insignificant emissions
0221	Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)	Point-Vent	5	4 & 5	Annually	Vent with minor emissions
0221	Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)	Point-Vent	5	4 & 5	Annually	Vent with minor emissions
0221	Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)	Point-Vent	5	4 & 5	Annually	Vent with minor emissions
0221	Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)	Point-Vent	5	4 & 5	Annually	Vent with minor emissions
0221	Non-Saleable Fly Ash Silo Unit 1-A with Fabric Filter (concrete structure)	Point-Vent	5	4 & 5	Annually	Vent with minor emissions
0221	Non-Saleable Fly Ash Silo Unit 2-A with Fabric Filter (concrete structure)	Point-Vent	5	4 & 5	Annually	Vent with minor emissions
022m	Wet Fly Ash Load out 1A/1B	Fugitive	10	1,4&6	Upon Request	Wet byproduct w/insignificant emissions
022m	Bottom Ash Loadouts 1A/1B	Fugitive	10	1	Upon Request	Wet byproduct w/insignificant emissions
022m	Wet Fly Ash Load out 2A/2B	Fugitive	10	1,4 & 6	Upon Request	Wet byproduct w/insignificant emissions
022m	Bottom Ash Loadouts 2A/2B	Fugitive	10	1	Upon Request	Wet byproduct w/insignificant emissions
022n	Unpaved Road, By-Product Transport	Fugitive	10	1 & 2	Upon Request	No emission vent, reasonable Precautions conducted (watering)

023: SJR	PP: Materials Handling and Storage Operations					
023a	Rail Rotary Dumper - Building Emissions	Point-Fugitive	10	1,2,4,&6	Upon Request	No emissions vent, minor emissions
023Ь	Conveyor C-3 Tunnel Ventilation - 6,400 cfm; No control	Point-Vent	5	1, 4, & 5	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023b	Conveyor C-3 Tunnel Ventilation - 6,400 cfm; No control	Point-Vent	5	1, 4, & 5	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023b	Conveyor C-3 Tunnel Ventilation - 21,600 cfin; No control	Point-Vent	5	1, 4, & 5	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023c	Shiphold	Fugitive	10	1,4 & 6	Upon Request	No emissions vent, minor emissions
023d	Unloader Hopper and Spillage Collector Transfers	Fugitive	10	1, 3, 4 & 6	Upon Request	No emissions vent, minor emissions
023d	Ship Unloader Hopper to Transfer CT-1, Spillage Conveyor	Fugitive	01	1, 3, 4 & 6	Upon Request	Enclosed conveyor, no emissions vent
023e	Fuel Transfer Building (DC-2)	Fugitive	10	1,3 & 4	Upon Request	No emissions vent, minor emissions, enclosed source
023e	Transfer Station No. 1	Fugitive	5	1,2 & 4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 2	Fugitive	5	1,2 & 4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 3	Fugitive	5	1,2 & 4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 4	Fugitive	5	1 & 4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 5	Fugitive	5	1 & 4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 6	Fugitive	5	1 & 4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 7	Fugitive	5	1&4	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Point 9GC-04 to 9GC-05	Fugitive	5	1	Upon Request	No emissions vent, minor emissions (gypsum)
023f	Stacker/Reclaimer (Stacker Mode)	Fugitive	10	1&3	Upon Request	No emissions vent, minor emissions
023f	Stacker	Fugitive	10	1 & 3	Upon Request	No emissions vent, minor emissions
023f	Reclaimer	Fugitive	10	1 & 3	Upon Request	No emissions vent, minor emissions
023g	Petroleum Coke Reclaimer System (PC-1)	Fugitive	10	+	Upon Request	No emissions vent, minor emissions Source Eliminated
023g	Emergency Reclaim Hoppers - Loadout	Fugitive	10	1	Upon Request	Same as other reclaim systems; not typically used
023	Limestone Truck Loadout & Transfer	Fugitive	01	l	Upon Request	No emissions vent, minor emissions
023k	Limestone Storage Pile #1 - Existing	Fugitive	10	1	Upon Request	No emissions location, minor emissions
023k	Limestone Storage Pile #2 - Fuel yard	Fugitive	10	1,2 & 3	Upon Request	No emissions location, minor emissions, not currently used.
023k	Limestone Reclaim Loadout - Grizzley	Fugitive	10	1 & 3	Upon Request	Minor emissions
023k	Coal Pile	Fugitive	10	1,2 & 3	Upon Request	No emissions location, minor emissions
023k	Petroleum Coke Pile	Fugitive	10	1,2 & 3	Upon Request	No emissions location, minor emissions
0231	Limestone Reclaim Hopper with Fabric Filter (3DC-01)	Point-Vent	5	1,4 & 5	Annually	Vent with minor emissions
0231	Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)	Point-Vent	5	1,4 & 5	Annually	Minor emissions
0231	Quick Lime Silo with Filter Vent (used for water treatment)	Point-Vent	5	4 & 5	Upon Renewal of Title V	Minor emission source, low volume material handling; 15 min VE suggested
0231	Fuel Handling Building with Fabric Filter (DC-3)	Point-Vent	5	1,4 & 5	Annually	Vent with minor emissions
0231	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)	Point-Vent	5	1,4 & 5	Annually	Vent with minor emissions
0231	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)	Point-Vent	5	1,4 & 5	Annually	Vent with minor emissions

#### NOTE:

- a. "Italics" indicates that the emission point was not included in Revised Table 6 of PSD-FL-010(C), but is associated with the material handling and storage operations at SJRPP.
- b. The VE limit (% opacity) shall be used for compliance purposes and demonstrated using EPA Reference Method 9, pursuant to 40 CFR Part 60, Appendix A, and Chapter 62-297, F.A.C.
- c. Air Quality Control Systems (AQCS)
- 1. Conditioned Materials
- 2. Wet Suppression
- 3. Water Sprays
- 4. Enclosures (Total, Partial, Covers, & Wind Screens)
- 5. Dust Control Systems
- 6. Best Operating Practices