

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION AES CEDAR BAY, INC./SEMINOLE KRAFT CORP. CEDAR BAY COGENERATION PROJECT PA 88-24A

## CONDITIONS OF CERTIFICATION

When a condition is intended to refer to both AES-Cedar Bay,-Inc.-or-Cedar Bay Cogeneration, Inc. and Seminole Kraft Corp.7: the term "Cedar-Bay-Cogeneration-Project"-or-the abbreviation-"CBCP"-or-the-term "CDC/SK" or "permittees" will be used. When a condition is intended to refer to the "Cedar Bay Cogeneration Project" the terms "Cedar Bay Cogeneration Project", "CBCP", or "Project" will be used.

Where a condition applies only to AES Cedar Bay <u>Cogeneration</u>, Inc. or-the term "AES Cedar Bay <u>Cogeneration</u>, Inc."(<u>CDC</u>) or the abbreviation "AESCB" "" "CBCP" or the term "permittee," where it is clear that AESCB "CBCP" is the intended responsible party, will be used. Similarly, where a condition applies only to Seminole Kraft Corp., the term "Seminole Kraft Corp." or the abbreviation "SK" or the term "permittee," where it is clear that SK is the intended responsible party, will be used. The Department of Environmental Regulation may be referred to as DER or the Department. BESD RESD represents the City of Jacksonville, Bio-Environmental Regulatory and Environmental Services Bivision Department. SJRWMD represents the St. Johns River Water Management District.

## I. GENERAL

The construction and operation of CBCP shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters  $\frac{1}{27}$ ,  $\frac{17-210}{27}$ ,  $\frac{17-297}{27}$ ,  $\frac{17-302}{27}$ ,  $\frac{17-4}{27}$ ,  $\frac{17-5276}{27}$ ,  $\frac{17-601}{27-610}$ ,  $\frac{17-60}{27-601}$ ,  $\frac{17-660}{27-610}$ , and  $\frac{17-772}{27-772}$ , Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

#### II. AIR

The construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-210 through 17-297, F.A.C. In addition to the foregoing, AESCB CBCP shall comply with the following conditions of certification as indicated.

- A. Emission Limitations for AES CBCP Boilers
  - 1. Fluidized Bed Coal Fired Boilers (CFB)
    - a. The maximum coal charging rate of each CFB



shall neither exceed 104,000 lbs/hr., 39,000 tons per month (30 consecutive days), nor 390,000 tons per year (TPY). This reflects a combined total of 312,000 lbs/hr., 117,000 tons per month, and 1,170,000 TPY for all three CFBs.

- b. The-maximum-wood-waste-(primarily-bark) charging-rate-to-the-No:-1-and-No:-2-CFBs-each-shall-neither exceed-157653-lbs/hr:7-nor-63760-TPY:--This-reflects-a combined-total-of-317306-lbs/hr:7-and-1277521-TPY-for-the-No:-1 and-No:-2-CFBs:--The-No:-3-CFB-will-not-utilize-woodwaste;-nor will-it-be-equipped-with-wood-waste-handling-and-firing equipment: The maximum charging rate to each of two CFBs of short-fiber recycle rejects from the SK recycling process shall not exceed 210 yd3/day wet, 69,588 yd3/yr wet;-150-dry-TPB; 54,750-dry-TPY. This reflects a combined total of 420 yd3/day wet and 139,176 yd3/yr wet;-300-dry-TPB;-and-100;500-dry-TPY for the two CFBs that fire recycle rejects. The third CFB will not utilize recycle rejects, nor will it be equipped with handling and firing equipment for recycle rejects.
- c. The maximum heat input to each CFB shall not exceed 1063 MMBtu/hr. This reflects a combined total of 3189 MMBtu/hr. for all three units.
- d. The sulfur content of the coal shall not exceed 1.7% 1.2% by weight on an annual basis. The sulfur content shall not exceed 3.3% 1.7% by weight on a shipment (train load) basis.
- e. Auxiliary fuel burners shall be fueled only with natural-gas-or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight. The fuel oil or-natural-gas shall normally only be used only for startups. During the first-year-of commercial operation the maximum annual oil usage shall not exceed 350,000 1,900,000 gals./year, the-maximum annual-oil-usage-shall-not-exceed-160,000-gals/year,-nor-shall the-maximum-annual-natural-gas-usage-exceed-22:4-MMCF-per-year. The maximum heat input from the fuel oil or-gas shall not exceed 1120 380 MMBtu/hr. for each the CFBs.
- f. The CFBs shall be fueled only with the fuels permitted in Conditions 1a, 1b, and 1e above. Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of DER pursuant to condition XXI, Modification of Conditions.
- g. The CFBs may operate continuously, i.e., 8760 hrs/yr, but shall not exceed 25.98 x 106 MMBtu/yr total annual heat input.
- h. To the extent that it is consistent with Condition II.A.1.b. and the following, CBCP shall burn all of the short fiber rejects generated by Seminole Kraft in processing recycled paper. No less than ninety (90) days prior

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to completion of construction, shall submit a plan to DER for conducting a 30-day test burn within one year after initial compliance testing. That test burn shall be designed to ascertain whether the CFBs can burn the rejects as as supplemental fuel without exceeding any of the limitations on emissions and fuel usage contained in Condition II.A. and without causing any operational problems which would affect the reliable operation (with customary maintenance) of the CFBs and without violating any other environmental requirements. CBCP shall notify DER and the Regulatory and Environmental Services Department (RESD) at least thirty (30) days prior to initiation of the test burn. The results of the test burn and CBCP's analysis shall be reported to DER and to the RESD within forty-five (45) days of completion of the test burn. DER shall notify CBCP within thirty (30) days thereafter of its approval or disapproval of any conclusion by CBCP that the test burn demonstrated that the rejects can be burned in compliance with this Condition of Certification.

## 2. Coal Fired Boiler Controls

The emissions from each CFB shall be controlled using the following systems:

- a. Limestone injection and fuel sulfur limitations, for control of sulfur dioxide and acid gases.
  - b. Baghouse, for control of particulate matter.
- CBCP shall conduct a test to determine whether substantial additional removal of mercury can be obtained through a carbon injection system for mercury removal, as described in Exhibit 74 of the administrative record for the Lee County Resource Recovery Facility, which feeds carbon reagent into the CFB exhaust stream prior to the baghouse. Within one hundred eighty (180) days after initial compliance testing, CBCP shall conduct a test on one CFB to compare mercury emissions to the atmosphere with and without carbon injection. The test program will include the testing of carbon injection between the boiler and the fabric filter. Carbon forms to be tested may include activated carbon with or without additives and pulverized coal with or without additives. After consultation with the DER, RESD, and EPRI, CDC shall submit a mercury control test protocol to DER for approval by December 1, 1993. Results of the test shall be submitted to the DER within 90 days of completion.
- d. <u>Selective Non-catalytic Reduction (SNCR)</u> for control of NOx
- e. Good combustion characteristics, which are an inherent part of the CFB technology, for control of carbon monoxide and volatile organic compounds.

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3. Flue gas emissions from each CFB shall not exceed the following:

<u>Pollutant</u>	lbs/MMBtu	Emission lbs/hr-	Limitations TPY	TPY for 3 CFBs
€Ð	0-19	202	823	2468
	0 <del>11</del> 9	308-3	<del>1256</del>	376 <del>7</del>
ИӨЖ				
se <sub>z</sub>	0-60 <del>(3-hr</del> -avg-)	· <del>63</del> 7-8		
_	<del>0.31</del>	<del>329</del> -5	<del>1338</del>	4015
¥0€	0-0 <del>1</del> 5	<del>16.</del> 0	<del>65</del>	<del>1</del> 95
PM	0-020	21-3	<del>87</del>	· 260
PMIO	0-020	21-3	86	257
HzŠŎ <sub>4</sub> -mist	0-024	25-5	<del>103</del>	308
Fluorides	<del>0+086</del>	91-4	<del>374</del>	<del>1122</del>
<b>Lead</b>	0-007	7-4	<del>30</del>	<del>91</del>
Mercury	0-00026	0-276	-1-13	3-4
<u>Beryllium</u>	0-00011	0-117	<u>θ-5</u>	<u>1-5</u>

Note:--TPY-represents-a-93%-capacity-factor:--MRA-refers to-a-twelve-month-rolling-average:

<u>Pollutant</u>	lbs/MMBtu	Emission Limitatio lbs/hr. TPY	ns TPY for 3 CFBs
<u>co</u>	$\frac{0.1751}{0.172}$	1861 1881 1881 1881	2273
NOX SO <sub>2</sub>	$\frac{0.17^2}{0.34^3}$	$\frac{180.72}{355.13}$ $\frac{736.1}{3}$	<u>2208</u>
<u>502</u>	$\frac{0.24^3}{0.30^4}$	<u>255.13</u>	2508
1700	0.204	866 16.0	<u>2598</u> <u>195</u>
VOC PM	0.015	<u>16.0</u> <u>65</u>	
<u>PM</u>	<u>0.018</u>	<u>19.1</u> <u>78</u>	<u>234</u>
PM <sub>10</sub>	<u>0.018</u>	<u>19.1</u> <u>78</u>	<u>234</u>
H2S04 mist	4.66e-04	0.50 2.0	<u>6.1</u>
<u>Fluorides</u>	<u>7.44e-04</u>	<u>0.79</u> <u>3.2</u>	<u>9.7</u>
Lead	<u>6.03e-05</u>	<u>0.06</u>	<u>6 0.78</u>
Mercury	2.89e-05	<u>0.03</u> <u>0.1</u>	<u>0.38</u>
Beryllium	8.70e-06	0,027 0.4	0.11

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

- 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.
- Twelve-Month rolling average (MRA).

4. Ammonia (NH) slip from exhaust gases shall not exceed 10 ppmvd when burning coal at 100% capacity and 30 ppmvd when burning oil.

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- 4. 5. Visible emissions (VE) shall not exceed 20% opacity (6 min. average), except for one 6 minute period per hour when VE shall not exceed 27% opacity <u>pursuant to 40 CFR 60.42a.</u>
- 5. 6. Compliance with the emission limits shall be determined by EPA reference method tests included in the July 1, 1991 version of 40 CFR Parts 60 and 61, Rule 17-297, F.A.C., and listed in Condition No. 7 of this permit or by equivalent methods after prior written DER approval.
- 6. 7. The CFBs are subject to 40 CFR Part 60, Subparts A and Da; except that where requirements within this certification are more restrictive, the requirements of this certification shall apply.
  - 7. 8. Compliance Tests for each CFB
- a. Initial <u>and subsequent</u> compliance tests for PM/PM<sub>10</sub>, SO<sub>2</sub>, NOx, CO, VOC, lead, fluorides, <u>ammonia</u>, mercury, beryllium and  $H_2SO_4$  mist shall be conducted in accordance with 40 CFR 60.8 (a), (b), (c), (d), (e), and (f).
- b. Annual compliance tests shall be performed for PM,  $\underline{\text{CO}}$ ,  $\text{SO}_2$  and NOx, commencing no later than 12 months from the initial test.
- c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).
- d. The compliance tests shall be conducted between 90-100% of the maximum licensed capacity and firing rate of for each permitted fuel.
- e. The following test methods and procedures of Rule 17-297, F.A.C., and 40 CFR Parts 60 and 61 or other DER approved methods with prior DER approval, in writing, shall be used for compliance testing:
- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent  $O_2$  and  $CO_2$ .
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 6, 6C, or 8 for SO<sub>2</sub>.

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- (7) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (8) Method 8 for sulfuric acid mist.
- (9) Method 9 for visible emissions, in accordance with 40 CFR 60.11 and Appendix A.
- (10) Method 10 for CO.
- (11) Method 12 for lead.
- (12) Method 13A or 13B for fluorides.
- (13) Method 19 for sulphur dioxide removal efficiency pursuant to 40 CFR 60.48a.
- (13) (14) Method 18 or 25% for VOCs.
- (14) (15) Method 101A or EPA Method 29 for mercury.
- (15) (16) Method 104 for beryllium.
- (17) Method 201 or 201A for PM10 emissions.
- (18) Method for NH3. \*\*\*\*
  - 8. 9. Continuous Emission Monitoring for each CFB

AESCB CBCP shall use-Continuous-Emission-Monitoring-Systems-(CEMS) to-determine-compliance --- CEMS install, certify, calibrate, operate, and maintain continuous emission monitoring systems for opacity, SO2, NOX, CO, and O2 or CO2, shall-be-installed, calibrated,-maintained-and-operated-for-each-unit,-in-accordance with-40-CFR-60-47a-pursuant to all applicable requirements of Rule 17-296.800, F.A.C., Chapter 17-297, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart Da, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F. The permittee may elect to install, certify, calibrate, operate, and maintain multiple span continuous emission monitoring systems for sulfur dioxide and nitrogen oxides providing certification tests and calibrations are performed for each span. Each of the continuous emission monitoring systems for sulfur dioxide and nitrogen oxides shall continuously record data on a span that satisfies the requirements of 40 CFR 60.47a. Any exception to the above must be specifically authorized by DER in writing and in accordance with state and federal regulations.

a---Each-continuous-emission-monitoring-system (CEMS)-shall-meet-performance-specifications-of-40-CFR-60,-Appendix B-

ba. CEMS data shall be recorded and reported in accordance with Chapter 17-297, F.A.C., and 40 CFR 60.49a and

<u>60.7.</u> A record shall be kept for periods of startup, shutdown and malfunction.

eb. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

 $\underline{dc}$ . The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

ed. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

fe. For purposes of reports required under this certification, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 10 11 herein, which exceeds the applicable emission limit in Condition No. 3.

<u>f.</u> The permittee is subject to all applicable provisions of Rule 17-4.130, Plant Operation-Problems.

9. 10. Operations Monitoring for each CFB

a. Devices shall be installed to continuously monitor and record steam production, and flue gas temperature at the exit of the control equipment.

b---The-furnace-heat-load-shall-be-maintained between-70%-and-100%-of-the-design-rated-capacity-during-normal operations-

<u>b.e.</u> The coal, rejects,-bark,-natural-gas and No. 2 fuel oil usage shall be recorded on a 24-hr (daily) basis for each CFB. Recycle rejects usage on a volumetric basis shall be estimated and recorded for each 24-hour period in which rejects are burned.

±θ- 11. Reporting for each CFB

a. A minimum of thirty (30) days prior written notification of compliance testing shall be given to DER's N.E. District office and to the BRESD (Bio-Environmental-Services Division) office, in accordance with 40 CFR 60.8.

b. In accordance with Rule 17-297.570, F.A.C., the results of compliance test shall be submitted to the BRESD office within 45 days after completion of the <u>last</u> test <u>run</u>.

- c. The owner or operator shall submit excess emission reports to BRESD, in accordance with Rule 17-210.700, F.A.C., and 40 CFR 60.7(c) and (d). The reports shall include the following:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions ( $\underline{40}$  CFR  $\underline{60.7}$ (c)(1)).
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measured adopted (40 CFR 60.7(c)(2)).
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).
- (4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).
- (5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(d) (e)).
- d. Annual and quarterly reports shall be submitted to BRESD as per F+A+C+ Rule 17-2+700(7) 297.500, F-A+C+
- 11. Any change in the method of operation, fuels utilized, equipment, or operating hours or any other changes pursuant to F-A-C- Rule 17-212.200, F.A.C., defining modification, shall be submitted for approval to DER's Bureau of Air Regulation.
- 13. All records of documentation shall be kept on file for a minimum of 3 years pursuant to Rule 17-4.160(4), F.A.C.
- 14. The permittee is subject to all applicable provisions of Rule 17-210.700, F.A.C., Excess Emissions.
- 15. The permittee is subject to all applicable provisions of Rule 17-210.650, F.A.C., Circumvention.
- 16. The permittee is subject to all applicable provisions of Rule 17-4.160, F.A.C., Permit Conditions.

- B. AES CBCP Material Handling and Treatment
- 1. The material handling and treatment operations including coal and limestone unloading buildings, coal and limestone reclaim hoppers, coal crusher house, limestone dryer, fly and bed ash silos, ash pelletizer, pellet curing silo, coal and limestone day silos, conveyors, storage areas and related equipment, may be operated continuously, i.e. 8760 hrs/yr, except that the limestone crushers/dryers may be operated for a maximum of 14 hours per day (maximum of 2920 hrs/yr) at maximum capacity.
- 2. The material handling/usage rates <u>for coal</u>, <u>limestone</u>, <u>fly ash</u>, <u>and bed ash</u> shall not exceed the following:

	Handling/Usage Rate		
<u>Material</u>	TPM	TPY	
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Coal	117,000	1,170,000	
Limestone	27,000	320,000	
Fly Ash	28,000	336,000	
Bed Ash	8,000	88,000	

Note: TPM is tons per month based on 30 consecutive days, TPY is tons per year.

3. The VOC emissions from the maximum No. 2 fuel oil utilization rate of 240 gals/hr., 2,100,000 and 700,800 gals/year for the limestone dryers; and 8000 gals/hr., 160,000 and 1,900,000 gals/year for the three boilers are not expected to be significant.

4---The-maximum-emissions-from-the-material-handling-and treatment-area; --where-baghouses-are-used-as-controls-for-specific sources; --shall-not-exceed-those-listed-below-(based-on-AP-42 factors):

	lbs/hr	
Coal-Rail-Unloading	neg	neg
Coal-Belt-Feeder	neg	neg
Coal-Crusher	0-41	1:78
Coal-Belt-Transfer	neg	neg
	neg	neg
bimestone-Crusher		0+20
bimestone-Hopper		
Fly-Ash-Bin	0-02	***
Bed-Ash-Hopper		
,		
	0-03	
<u>Ash-Unloader</u>	<del>0:01</del>	<u>0+06</u>

4. <u>Material handling sources shall be regulated as</u> follows:

<u>a.</u> The material handling and treatment area sources with either fabric filter or baghouse controls are as follows:

Coal Crusher Building
Coal Silo Conveyor
Limestone Pulverizer/Conveyor
Limestone Storage Bin
Bed Ash Hopper
Bed Ash Silo
Fly Ash Silo
Bed Ash Bin
Fly Ash Bin
Pellet Vibratory Screen
Pelletizing Ash Recycle Tank
Pelletizing Recycle Hopper
Cured Pellet Recycle Conveyor
Pellet Recycle Conveyor

The emissions from the above listed sources are subject to the particulate emission limitation requirement of 0.003 gr/dscf (applicant requested limitation which is more stringent than what is allowed by Rule 17.296.711, F.A.C.). Since these sources are RACT standard type, then a one-time verification test on each source shall be required for PM mass emissions to demonstrate that the baghouse control systems can achieve the 0.003 gr/dscf. The performance tests shall be conducted using EPA Method 5 pursuant to Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

<u>b.</u> The PM emissions from the following process, equipment, and/or facility in the material handling and treatment area sources shall be controlled using wet suppression/removal techniques as follows:

Coal Car Unloading
Ash Pellet Hydrator
Ash Pellet Curing Silo
Ash Pelletizing Pan

The-emissions-from-the-above-listed-sources-and-the limestone-dryers-are-subject-to-the-particulate-emission-limitation requirement-of-0.03-gr/dscf.--However,-neither-DER-nor-BRESD-will require-particulate-tests-in-accordance-with-EPA-Method-5-unless the-VE-limit-of-5%-opacity-is-exceeded-for-a-given-source,-or unless-DER-or-BRESD,-based-on-other-information,-has-reason-to believe-the-particulate-emission-limits-are-being-violated.

The above listed sources are subject to a visible emission (VE) and a particulate matter (PM) emission limitation requirement of 5% opacity and 0.02 gr/dscf (applicant requested limitation, which is more stringent than what is allowed by rule), respectively, in accordance with Rule 17-296.711, F.A.C. Initial and subsequent compliance tests shall be conducted for VE and PM using EPA 9 and 5, respectively, in accordance with Rule 17-297, F.A.C., and 40 CFR 60, Appendix A (July, 1991 version).

5. Visible Emissions (VE) shall not exceed 5% opacity from any source in the material handling and treatment area <u>listed</u> in Condition II. B.4.a., in accordance with <u>Rule</u> 17-296.711(2)(a),

- F.A.C. After the one-time PM mass verification tests have been performed, neither DER nor RESD will require particulate matter mass tests in accordance with EPA Method 5 unless the VE limit of 5% opacity is exceeded for a given source, or unless DER or RESD, based on other information, has reason to believe the particulate emission limits are being violated in accordance with Rule 17-297.620(4), F.A.C.
- 6. All sources subject to visible emissions and particulate matter mass emissions performance tests shall conduct them concurrently, except where inclement weather interferes.
- 6.7. The maximum emissions from each of the limestone dryers while using oil shall not exceed the following (based on AP-42 factors, Table 1, 3-1, Industrial Distillate, 10/86):

	<u>Est:</u>	<u>imated Limitat</u>	tions	
Pollutant	lbs/hr.	TPY TPY	for 2 dr	yers
PM/PM <sub>10</sub>	$\frac{9-25}{2}$ 0.24	1-1 0.32	<del>2-2</del> 0.	64
SO <sub>2</sub>	<u>5-00</u> 0.85	<del>21-9</del> 1.15	43-8 2.	3
CO	<u>0.60</u>	<del>2-6</del> 0.81	<u>5.2</u> 1.	<u>62</u>
NOx	2.40	<del>10-5</del> 3.25	<del>21-0</del> 6.	<u>5</u>
<u>VOC</u>	0.05	$\theta + 2 0.06$	$\theta = 4 0$ .	<u>12</u>

Visible emissions from the dryers shall not exceed 5% opacity. If-natural-gas-is-used,-emissions-limits-shall-be determined-by-factors-contained-in-AP-42-Table-1:-4-1,-Industrial 10/86.

- 7.8. The maximum No. 2 fuel oil with maximum sulfur content of .05% by weight firing rate for each limestone dryer shall not exceed 120 gals/hr., or 1.050.000 350,400 gals/year.

  This reflects a combined total fuel oil firing rate of 240 gals/hr., and 2.100.000 700,800 gals/year, for the two dryers.

  The maximum natural gas firing rate for each limestone dryer shall not exceed 16.000 CF-per hour, or 147-MMCF-per year.
- 8.9. Initial and annual PM and Visible Emission compliance tests for all the emission points in the material handling and treatment area, including but not limited to the sources specified in this permit, shall be conducted in accordance with the July 1, 1991 version of 40 CFR 60, Appendix A, using EPA Methods 5 and 9, respectively.
- 9.10. Compliance test reports shall be submitted to BRESD within 45 days of test completion in accordance with Rule 17-2-700(7) 297.570 of the F.A.C.
- ±0.11. Any changes in the method of operation, raw materials processed, equipment, or operating hours or any other changes pursuant to F.A.C. Rule 17-212.200, defining modification, shall be submitted for approval to DER's Bureau of Air Regulation (BAR).

## C. Requirements For the Permittees

1. Beginning one month after certification, AESCB CBCP shall submit to BRESD and DER's BAR, a quarterly status report briefly outlining progress made on engineering design and purchase

- of major equipment, including copies of technical data pertaining to the selected emission control devices. These data should include, but not be limited to, quaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device. Such disapproval shall be issued within 30 days of receipt of the technical data.
- 2. The permittees shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the BRESD office.
- 3. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittees. The permittee is subject to all applicable provisions of Rule 17-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter.
- 4. Fuel shall not be burned in any unit unless the control devices are operating properly, pursuant to 40 CFR Part 60 Subpart Da.
- 5. The maximum sulfur content of the No. 2 fuel oil utilized in the CFBs and the two unit limestone dryers shall not exceed 0.3 percent by weight. Samples shall be taken of each fuel oil shipment received and shall be analyzed for sulfur content and heating value. Records of the analyses shall be kept a minimum of three years to be available for DER and BRESD inspection.
- 6. Coal fired in the CFBs shall have a sulfur content not to exceed 3.3 1.7 percent by weight on a shipment (train load) basis. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.
- 7. AESCB CDC shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content and heating values.
- 8. The permittees shall provide stack sampling facilities as required by Rule 17-2-700(4) 297.345 F.A.C.
- 9. Prior to commercial operation of each source CFB, the permittees shall each submit to the BAR a standardized plan or procedure that will allow that permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.
- 10. All records of documentation shall be kept on file for a minimum of three years pursuant to Rule 17-4.160(14), F.A.C.

## D. Contemporaneous Emission Reductions

This certification and any individual air permits issued subsequent to the final order of the Board certifying the power plant site under 403.509, F.S., shall require, that the following Seminole Kraft Corporation sources be permanently shut down and made incapable of operation, and shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the AESCB CBCP boilers: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB. BRESD shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.

## E. SK Steam Boiler Emissions

This certification and any individual air permits issued by the Department subsequent to the final order of the Board certifying the power plant site under Section 403.509, Florida Statutes, shall incorporate the following limitations on the total tonnage of the specified criteria pollutants allowed to be emitted annually by any natural gas-fired boiler or combination of boilers constructed and operated by SK to provide up to 375,000 lbs/hr of steam for use in its recycled paper process:

## Tons Per Year

 $\frac{CO}{NO_{X}} = \frac{553}{5} = \frac{52.6}{2}$   $\frac{310}{7} = \frac{3}{2}$   $\frac{3}{2} = \frac{3}{2}$ 

This emissions ceiling shall operate as a joint and individual requirement to assure common control for the purpose of ensuring that all commitments relied on are in fact fulfilled.

## III. WATER DISCHARGES

Any discharges into any waters of the State during construction and operation of AESCB shall be in accordance with all applicable provisions of Chapters 17-301, 17-302 and 17-660, F.A.C., and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, AESCB CBCP shall comply with the following conditions of certification:

A. Plant Effluents and Receiving Body of Water

For discharges made from the AESCB CBCP power plant site the following conditions shall apply:

- 1. CBCP shall not discharge any cooling system, demineralizer regeneration, floor drainage or other process wastewaters from the operation of the CBCP facility into any waters of the State. CBCP shall install a closed-loop cooling water system in accordance with technical specifications set forth in the Zero Discharge System Plan submitted by CBCP to the Department.
- 2. Pursuant to the Zero Discharge Plan, CBCP shall make available to Seminole Kraft up to 500 gpm of reclaimed water that has been treated to a quality satisfactory for use in Seminole Kraft's cooling tower.
- ‡3. Receiving Body of Water (RBW) The receiving bodyies of water for storm water discharges has have been determined by the Department to be those waters of the St. John's River (during construction only) or the Broward River and any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes (F.S.).
- 4. Point of Discharge (POD) The point of discharge has been determined by the Department to be where the storm water effluent physically enters the waters of the State in the St. John's River (during construction) via Outfall OSN 001 and Broward River (during construction and operation) via Outfall OSN 003 and OSN 008. via-the-SKE-discharge-outfall-001,-which-is-the-existing main-outfall-from-the-paper-mill-emergency-overflow-to-the-Broward River-via-outfall-003.
- 3:--Thermal-Mixing-Zones---The-instantaneous-zone-of thermal-mixing-for-the-AESCB-cooling-system-shall-not-exceed-an area-of-0:25-acres:--The-temperature-at-the-point-of-discharge-into-the-St:-John's-River-shall-not-be-greater-than-95-degrees-F: The-temperature-of-the-water-at-the-edge-of-the-mixing-zone-shall not-exceed-the-limitations-of-Section-17-3:05(1)(d);-F:A:C:: Cooling-tower-blowdown-shall-not-exceed-950-F-as-a-24-hour-average; nor-960-F-as-an-instantaneous-maximum:
- 4.5- Chemical Wastes from AESCB CBCP All discharges of low volume wastes (demineralizer regeneration, floor drainage,

labs drains, and similar wastes) and chemical metal cleaning wastes shall be collected and treated in the the zero discharge treatment system. comply-with-Chapter-17-67-F-A-C--at-05N-006-and-007 respectively---If-violations-of-Chapter-17-6-F-A-C--occur, corrective-action-shall-be-taken-by-AESCB---These-wastewaters-shall be-directed-to-an-adequately-sized-and-constructed-treatment facility-

- 5- pH---The-pH-of-the-combined-discharges-shall-be-such that-the-pH-will-fall-within-the-range-of-6-0-to-9-0-at-the-POD-to the-St--Johns-River-and-shall-not-exceed-6-5-to-8-5-at-the-boundary of-a-0-25-acre-mixing-zone-
- 6- Polychlorinated-Biphenyl-Compounds---There-shall-be no-discharge-of-Polychlorinated-biphenyl-compounds-
- 7. Cooling-Tower-Blowdown---AESCB's-discharge-from Outfall-Serial-Number-002---Cooling-Tower-Blowdown-shall-be-limited and-monitored-as-specified-below:

Parameter	Discharge-Limit	Monitoring	Requirement
		Frequency	<u> Туре</u>
Discharge-Flow-(mgd)	Report	1/day	<b>Totalizer</b>
Discharge-Temp:-(OF)	Instantaneous Maximum	Continuous	Recorder
Total-Residual -Oxidants	Instantaneous Maximum05-mg/l	Continuous	Recorder
Time-of-Total Residual-Oxidant Discharge-(TRO)	120-minutes per-day	Continuous	Recorder
fron	Instantaneous Maximum-0-5-mg/l	1/week	grab
Нф	69	<del>1/</del> week	-grab

b--There-shall-be-no-detectable-discharge-of the-125-priority-pollutants-contained-in-chemicals-added-for cooling-tower-maintenance--Notice-of-any-proposed-use-of compounds-containing-priority-pollutants-shall-be-made-to-the BER-Northeast-District-Office-not-later-than-180-days-prior-to proposed-use---

c:--Samples-taken-in-compliance-with-the monitoring-requirements-specified-above-shall-be-taken-at-0SN 002-prior-to-mixing-with-any-other-waste-stream.

## 6. Seminole Kraft Corporation (SKC) shall shut down the mill's once through cooling system within 10 days after written notification by DER of the successful completion of the initial compliance tests on the AESCB CBCP boilers conducted pursuant to Condition II.A.7. SKC shall inform the DER Northeast District Office of the shutdown and surrender all applicable operating permits for that facility within 21 days of such notification.

8----Combined-Low-Volume-Wastes-shall-be-monitored-at-05N 006-with-weekly-grab-samples---Bischarge-limitations-are-as follows:

· · · · · · · · · · · · · · · · · · ·	Daily-Max	Baily-Avg
0il-and-Grease	<del>20-0</del> -mq/1-	<del>1</del> 5-0
Copper-dissolved-	-1-0-mg/1*	N/A
Fron-dissolved	-1-0-mg/1*	N/A
Flow	Report	N/A
Heavy-Metals	Report-(See-Be	<del>low)</del>

a---The-pH-of-the-discharge-shall-not-be-less than-7-0\*-standard-units-and-shall-be-monitored-once-per-shift; unless-more-frequent-monitoring-is-necessary-to-quantify-types of-nonchemical-metal-cleaning-waste-discharged:

b.--Serial-number-assigned-for-identification and-monitoring-purposes.--Heavy-metal-analyses-shall-include total-copper,-iron,-nickel,-selenium,-and-zinc---\*Limits applicable-only-to-periods-in-which-nonchemical-metal-cleaning waste-is-being-discharged-via-this-OSN---Length-of-composite samples-shall-be-during-the-periods-(s)-of-nonchemical-metal cleaning-waste-generation-and-discharge-and-shall-be-adequate to-quantify-differences-in-sources-of-waste-generated-(air preheater-vs.-boiler-fireside,-etc.).

9----Chemical-Metal-Cleaning

AESCB's-discharge-from-outfall-serial-number-007-metal-cleaning-wastes-discharged-to-the-Seminole-Kraft
treatment-system:--Such-discharges-shall-be-limited-and
monitored-by-the-permittee-as-specified-below:

a٠

Effluent Characteristic	Discharge-Limits		nitoring quirements
	Instantaneous Max	Measurement Frequency	Sample Type
Flowm <sup>3</sup> /day-(MGB)	-	1/batch	Pump-log

Copper,-Total $1 \cdot \theta$ -mg/l $1 \not$ grabIron,-Total $1 \cdot \theta$ -mg/l $1 \not$ grabBatchesReport $1 \not$ batchlogs

b---Chemical-metal-cleaning-wastes-shall-mean process-equipment-cleaning-including-but-not-limited-to-boiler-tube-cleaning-

c---Waste-treated-and-discharged-via-this-05N shall-not-include-any-stream-for-which-an-effluent-guideline has-not-been-established-(40-CFR-Part-423)-for-total-copper-and total-iron-at-the-above-levels-

d---Samples-taken-in-compliance-with-the monitoring-requirements-specified-above-shall-be-taken-at-the discharge-from-the-metal-eleaning-waste-treatment-facility(s) prior-to-mixing-with-any-other-waste-stream-

the 7.a. Storm Water Runoff - During construction and-operation there shall be no discharges from the stormwater basins for storms less than the ten-year, twenty four-hour storm event. Any discharge from the storm water runoff collection system from a storm event less than the once in ten year, twenty-four hour storm shall meet the following limits and shall be monitored at OSN 003 by a grab sample once per discharge, but not more often than once per week:

Discharge Limits
Effluent Characteristic Instantaneous Maximum
Flow (MGD) Report
TSS (mg/l) 50
pH 6.0-9.0

All applicable discharge limitations, described in Part I of the NPDES permit (FL0041173) for stormwater discharges during the period of construction from this facility, shall apply under this permit and be reported to the Department as part of the Monthly Operation Report.

b. Any-underdrains-must-be-checked-annually-and measures-must-be-taken-to-insure-that-the-underdrain-operates as-designed:--Permittees-will-have-to-modify-the-underdrain system-should-maintenance-measures-be-insufficient-to-achieve operation-of-the-underdrains-as-designed:--AES-Cedar-Bay-must back-flush-the-exfiltration/underdrain-system-at-least-once during-the-first-six-months-of-calendar-each-year:--These backflushings-must-occur-no-closer-than-four-calendar-months from-each-other:--In-advance-of-backflushing-the exfiltration/underdrain-systems;-the-permittees-must-notify BRESD-and-SJRWMD-of-the-date-and-time-of-the-backflushing:

- a. b.1. Yard Area Runoff During normal plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the suspended solids to 50 mg/l or less at OSN 003 during rainfall periods less greater than the 1025-year, 24-hour rainfall. During periods of operation when the CBCP is off-line, these necessary measures, as specified above, shall be used during rainfall periods greater than a 10-year, 24-hour storm. [The discharge shall comply with all the monitoring requirements for Yard Area Runoff specified in Part I of the NPDES permit for this facility.]
- b.2. Storage Area Runoff [The discharge shall comply with all the monitoring requirements for the Coal, Limestone, and Ash Storage Area specified in Part I of the NPDES permit for this facility.]
- c. Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt, and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 in the discharge to the St. Johns River and 6.5 to 8.5 in the Broward River.
- d. Special consideration must be given to the control of sediment laden runoff resulting from storm events during the construction phase. Best management practices erosion controls should be installed early during the construction period so as to prevent the transport of sediment into surface waters which could result in water quality violations and Departmental enforcement action. Revegetation and stabilization of disturbed areas should be accomplished as soon as possible to reduce the potential for further soil erosion. Should construction phase runoff pose a threat to the water quality of state waters, additional measures such as treatment of impounded runoff of or by the use of turbidity curtains (screens) in on-site impoundments shall be immediately implemented with any releases to state waters to be controlled.
- e. It is necessary that there be an entity responsible for maintenance of the system pursuant to Section 17-25.027, F.A.C.
- f. Correctional action or modification of the system will be necessary should mosquito problems occur.
- g. AES-Cedar-Bay CBCP shall submit to DER with copy to BRESD and the SJRWMD, erosion control plans for the entire construction project (or discrete phrases of the project) detailing measures to be taken to prevent the offsite discharge of turbid waters during construction. These plans must also be provided to the construction contractor prior to the initiation of construction.

h. All swale and retention basin side slopes shall be seeded and mulched or sodded within thirty days following their completion and a substantial vegetative cover must be established within ninety days of seeding.

#### 11- Boiler-Blowdown-

Discharge-from-boiler-blowdown-to-the-cooling-tower from-outfall-serial-Number-004-shall-be-limited-and-monitored as-specified-below:

Effluent Characteristic	Discharge	Monitoring Requirements		
TSS <del>0il-and-Grease</del>	Daily Maximum 30-0 15-0	Sample Type grab grab	Measurement Frequency 1/Quarter 1/Quarter	
Flow	-	<u> Calculation</u>	1/Month	

## 12. Construction-Dewatering-

a---Discharge-of-construction-dewatering-to-the-SKC once-through-cooling-system-from-outfall-serial-number-005 shall-be-limited-and-monitored-as-specified-below:

Effluent	Discharge :	Monitoring	
<u>Characteristic</u>	<u> </u>	Requirements	
	Instantaneous Maximum	Measurement Frequency	Sample -Type
Flow{MGD}	<del>-288</del>	daily Tot	alizer
Turbidity-{NTU}	<del>2</del> 9	1/week-compos	ite/grab
Aluminum-mg/b	<del>1</del> -5	1/week-compos	ite/grab
Copper-mg/h	0-015	t/week-compos	
Fron-mq/b	<del>0+3</del>	1/week-compos	
bead-mg/b	0 <del>-</del> 05	1/week-compos	ite/grab
Mercury-ug/1	0-1	1/week-compos	
Phenol-ug/1	<b>1</b> -0	1/week-compos	ite/grab
TSS-mg/l	50∓0	1/week-compos	
рН	<del>6-0-9-0</del>	1/week-compos	

Report-N-D--if-below-detection-limit,-giving-method-used-and detection-limit---If-the-discharge-limit-is-below-the-detection limit,-then-N-D--signifies-compliance-

AES/CB-shall-take-composite-samples-of-dewatering-effluent-once a-week-for-one-month-following-the-start-of-dewatering;-then-if no-violations-are-found;-grab-samples-may-be-taken-for-the remainder-of-dewatering;

AES-Cedar-Bay-shall-treat-the-construction-dewatering-discharge so-as-not-to-exceed-the-above-effluent-limits---AES/CB-shall

utilize-the-advanced-treatment-systems-consisting-of-sand filter,-earbon-filter,-and-selectiveion-exchange,-as-shown-in their-letter-of-October-26,-1990,-to-Hamilton-5:-Oven,-unless testing-demonstrates-that-the-above-limits-can-be-met-without such-treatment,--Prior-to-discontenting-such-treatment,-AES/CB shall-notify-both-DER-and-BESD,-and-provide-them-with-an opportunity-for-consultation:

AES-Cedar-Bay-shall-do-sufficient-bench-testing-to-demonstrate that-it-can-meet-the-above-limit-for-copper--AES-Cedar-Bay shall-notify-BER-and-BESD-of-the-bench-testing,-and-allow-BER and-BESD-to-be-present-if-they-so-desire-to-observe-the-bench testing.

In-addition; -AES-Cedar-Bay-shall-determine-the-amount-of treatment-and-removal-provided-for-iron; -aluminum-and-lead-by the-method-of-treatment-selected-for-copper.

A-report-shall-be-submitted-to-DER-and-BESD-summarising-the results-of-the-bench-testing-of-the-proposed-treatment technique.

b--Project-discharge-descriptions-
Bewatering-water; -outfall-005; -includes-all-surficial

groundwater-extracted-during-all-excavation-construction-on

site-for-the-purpose-of-installing-structures; -equipment; -etcdischarges-to-the-SKC-once-through-cooling-water-system-at-a
location-to-be-depicted-on-an-appropriate-engineering-drawing
to-be-submitted-to-DER-and-BESD:--Final-discharge-after
treatment-is-to-the-St:-Johns-River:--The-permittee-shall
report-to-BESD-the-date-that-construction-dewatering-is
expected-to-begin-at-least-one-week-prior-to-the-commencement
of-dewatering:

13.---Mixing-Bones---The-discharge-of-the following-pollutants-shall-not-violate-the-Water-Quality Standards-of-Chapter-17-3,-F.A.C.,-beyond-the-edge-of-the designated-instantaneous-mixing-zones-as-described-herein-Such-mixing-zones-shall-apply-when-the-St.-Johns-River-is-in compliance-with-the-applicable-water-quality-standard-The-permittee-shall-report-the-date-construction-dewatering commences-to-the-BESD:

a---Buring-operation-of-CBCP-for-the-life of-the-facility:

Fron-----125,600-m²-(31-acre)-mixing-zone
Chlorine--0---not-measurable-in-river
Temp-----1,013-m²-(0.25-acre)
pH-----1,013-m²-(0.25-acre)

14---Variance-to-Water-Quality-Standards
--In-accordance-with-the-provisions-of-Sections-403-201-and
403-511(2),-F-S-,-permittees-are-hereby-granted-a-variance-to

the-water-Quality-Standard-of-Chapter-17-3-1217-F-A-C--for-iron during-operation-

Such-variance-shall-apply-only-as-the-natural-background-level of-the-St--John's-River-approach-or-exceed-the-standards:--In any-event;-the-discharge-from-the-CBCP-shall-comply-with-the effluent-limitations-set-forth-in-Paragraph-III-A:12:--At-least 90-days-prior-to-start-of-construction;-AES-shall-submit-a bioassay-program-to-assess-the-toxicity-of-construction dewatering-effluent-to-the-DER-for-approval:--Such-program shall-be-approved-prior-to-start-of-construction-dewatering.

±5.8. Sanitary wastes from AESCB CBCP shall be collected and discharged routed for treatment to the SKC domestic wastewater treatment plant.

- B. Water Monitoring Programs
- 1. Necessity and extent of continuation, of monitoring programs and may be modified in accordance with Condition No. XXI, Modification of Conditions.
- 2. Chemical Stormwater Monitoring The parameters described in Condition III.A. shall be monitored during discharge as described in condition III A. commencing with the start of construction or operation of the CFBs and reported quarterly to the Northeast District Office:
- 3. Coal, Ash, and Limestone Storage Areas Runoff from the coal pile, ash and lime stone storage areas shall be retained on-site during normal operations up to the 25-year, 24-hour storm event. directed-to-the-SK-waste-water treatment-facility-for-discharge-under-its-existing-waste-water permit. Monitoring of metals, such as iron, copper, zinc, mercury silver, and aluminum, shall be done once a month during any month when a discharge occurs at OSN 008-or-once-per-month from-the-collection-pond.
- 4. The ground water levels shall be monitored continuously at selected wells as approved by the SJRWMD. Chemical analyses shall be made on samples from all monitored wells identified in Condition IV.F. and IV.G. below. The location, frequency and selected chemical analyses shall be as given in Condition IV.F and IV.G. The ground water monitoring program shall be implemented at least one year prior to commercial operation of the CFBs. The chemical analyses shall be in accord with the latest edition of Standard Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days of collection/analysis to the SJRWMD.
- 5. The reclaimed water transferred to Seminole Kraft for cooling tower make-up water shall be

# monitored for the following parameters:

Flow (gallons per minute)	Continuous/Flow Meter
pH (standard units)	Weekly/Meter or Grab
Iron (mg/L)	Monthly/Grab
Total Copper (ug/L)	Monthly/Grab
Zinc (mg/L)	Monthly/Grab
Mercury (ug/L)	Monthly/Grab
Silver (ug/L)	Monthly/Grab
Aluminum (mg/L)	Monthly/Grab
Cadmium (ug/L)	Monthly/Grab
Arsenic (ug/L)	Monthly/Grab
Antimony (mg/L)	Monthly/Grab

## IV. GROUND WATER

## A. Water Well Construction Permit

Prior to the construction, modification, or abandonment of a production well for the SK paper mill, Seminole Kraft must obtain a Water Well Construction Permit from the SJRWMD pursuant to Chapter 40C-3, F.A.C. Construction, modification, or abandonment of a production well will require modification of the SK consumptive use permit when such construction, modification or abandonment is other than that specified and described on SK's consumptive use permit application form. The construction, modification, or abandonment of a monitor well specified in Condition IV.H. will require the prior approval of the Department. All monitor wells intended for use over thirty days must be noticed to RESD prior to construction or change of status from temporary to permanent.

B. Well Criteria, Tagging and Wellfield Operating Plan

Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational put-the-system back-in-an-operative-condition-acceptable-to-the-SJRWMB. Failure to make such repairs will be cause for deeming the well abandoned in accordance with Chapter 17.21.02(5), F.A.C., Chapter 373.309, Florida Statutes and Chapter 366.301 (b), and .307 (a), Jacksonville ordinance Code. Wells deemed abandoned will require plugging according to state and local regulations.

A SJRWMD-issued identification tag must be prominently displayed at each  $\underline{SK}$  withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. The  $\underline{SK}$  must notify the SJRWMD in the event that a replacement tag is needed.

Wellfield Operating Program within six (6) months after of certification construction of wells or start-up of the CBCP. This program must describe which wells are primary, secondary, and standby (reserve); the order of preference for using the wells; criteria for shutting down and restarting wells; describe CBCP and SKC responsibilities in the operation of the well field, and any other aspects of well field management operation, such as who the well field operator is and any other aspects of wellfield management operation. This program must be submitted to the SJRWMD and a copy to BRESD within six (6) months of certification and receive Bistrict SJRWMD approval before the wells may be used to supply water for the AES-Cedar Bay CBCP Cogeneration plant.

## C. Maximum Annual Withdrawals

CBCP's maximum annual use from the Floridan aquifer may not exceed 530.7 million gallons. Maximum daily use from the Floridan aquifer may not exceed 1.45 million gallons. The use of potable water from the Floridan aquifer for cooling purposes is prohibited. The use of potable water from the Floridan aquifer for control of fugitive dust emissions is prohibited when alternative water sources are available, such as treated wastewater, shallow aquifer wells or stormwater. The use of Floridan aquifer potable water for the sole purpose of waste stream dilution is prohibited.

## D. Water Use Transfer

The SJRWMD must be notified, in writing, within 90 days of the transfer of this certification. All transfers are subject to the provisions of Section 40C-2.351, F.A.C., which state that all terms and conditions of the permit shall be binding of the transferee.

## E. Emergency Shortages

Nothing in this certification is to be construed to limit the authority of the SJRWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event of a water shortage, as is declared by the District Governing Board, the AESCB CBCP shall adhere to reductions-in-water-withdrawals-as-specified-by-the-SJRWMD. water shortage restrictions, as specified by SJRWMD to the extent the restrictions apply to all other similar users.

## F. Monitoring and Reporting

- 1. a. The permittee shall maintain records of total daily use by the AESCB CBCP on a monthly basis for each year ending on December 31st. These records shall be submitted to the SJRWMD on Form EN-3 by January 31st of each year.
- b. Prior to beginning water usage, all points where water is delivered from the SKC water supply or wastewater system for use at AESCB CBCP must be equipped with totalizing flow meters. Such meters must maintain a 95% accuracy, be verifiable and be installed according to the manufacturer's specifications.
- c. AESCB CBCP must maintain the required flow meter(s). In case of failure or breakdown of any meter or other flow measuring device, the SJRWMD must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.

- d. Total withdrawals from each monitored source must be recorded continuously, totalled monthly, and reported to the SJRWMD at least every six months from the initiation of the monitoring using SJRWMD Form No. EN-50.
- e. AESCB CBCP must have all flow meters checked for accuracy once every 3 years within 30 days of the anniversary date of commencement of operation of the CBCP, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. SJRWMD Form No. EN-51 must be submitted to the SJRWMD within 10 days of meter inspection and calibration.
- 2. Water quality samples shall be taken in May and October of each year from each SK production well. The samples shall be analyzed by an HRS DER certified laboratory for the following parameters:

Magnesium Sulfate
Sodium Carbonate
Potassium Bi-Carbonate (or alkalinity if pH is 6.9 or lower)
Chloride Calcium

All major ion analyses shall be checked for anion/cation balance and must balance within 5 percent prior to submission. It is recommended that duplicates be taken to allow for laboratory problems or loss. The sample analyses shall be submitted to the SJRWMD by May 30 and October 30 of each year.

3---AESCB--shall-mitigate-any-adverse-impact-caused by-withdrawals-permitted-herein-on-legal-uses-of-water-existing at-the-time-of-permit-application---The-SJRWMD-has-the-right-to curtail-permitted-withdrawal-rates-or-water-allocations-if-the withdrawals-of-water-cause-an-adverse-impact-on-legal-uses-of water-which-existed-at-the-time-of-permit-application---Adverse impacts-are-exemplified-but-not-limited-to---

a---Reduction-of-well-water-levels-resulting-in-a reduction-of-10-percent-in-the-ability-of-an-adjacent-well-to produce-water;-

b---Reduction-of-water-levels-in-an-adjacent-surface water-body-resulting-in-a-significant-impairment-of-the-use-of water-in-that-water-body-

e---Saline-water-intrusion-or-introduction-of pollutants-into-the-water-supply-of-an-adjacent-water-use resulting-in-a-significant-reduction-of-water-quality;-or

d---Change-in-water-quality-resulting-in-either impairment-or-loss-of-use-of-a-well-or-water-body---

- 3. Legal uses of water existing at the time of certification application may not be significantly adversely impacted by the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by CBCP.
- 4---The-AESCB--shall-mitigate-any-adverse-impact caused-by-withdrawals-permitted-herein-on-adjacent-land-uses which-existed-at-the-time-of-permit-application---The-SJRWMD has-the-right-to-curtail-permitted-withdrawal-rates-of-water allocations-if-withdrawals-of-water-cause-any-adverse-impact-on adjacent-land-use-which-existed-at-the-time-of-permit application---Adverse-impacts-are-exemplified-by-but-not limited-to---
- a---Significant-reduction-in-water-levels-in-an adjacent-surface-water-body;-
- b---band-collapse-or-subsidence-caused-by-a reduction-in-water-levels;-or
  - e---Bamage-to-crops-and-other-types-of-vegetation-
- d--Significant-increases-in-Chloride-levels-such that-it-is-likely-that-wells-from-the-plant-or-those-being impacted-from-the-plant,-will-exceed-250-mg/l-
- 4. Off-site land uses existing at the time of certification application may not be significantly adversely impacted as a result of the consumptive use for the CBCP. If unanticipated significant adverse impacts occur, the consumptive use shall be subject to revocation modification in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the-AESCB CBCP.
- 5. During the seventh year following issuance of this certification order, AES-Cedar-Bay CBCP shall submit a report to SJRWMD, DER, and BRESD demonstrating compliance with these conditions of certification, Chapter 373, Florida Statutes, and the Rules of SJRWMD and DER, applicable to the consumptive use of water. Compliance shall be demonstrated with rules and statutory provisions in effect at that time.

SJRWMD shall evaluate the report and notify DER in a report of any issues regarding compliance with this certification and applicable rules and statutory provisions, including whether the consumptive use of water for the CBCP complies with those provisions of Chapter 272, Florida Statutes, and DER's and SJRWMD's rules applicable to consumptive use and whether any conditions of certification

must be amended, added or deleted in order insure that the referenced rules and statutory provisions. SJRWMD shall respond within 30 days of receipt of CBCP's report as to whether or not it contains information sufficient to make a determination as to compliance with the referenced rules and statutory provisions. Thereafter, DER shall notify CBCP and RESD within ninety (90) days after DER's determination that CBCP's report is sufficient. Section 40C-1.610, F.A.C., shall apply. An opportunity for hearing pursuant to Section 120.57, Florida Statutes, shall be afforded any party. In any hearing requested pursuant to this condition of certification, the burden of demonstrating compliance shall be on CBCP. continued consumptive use of water for the CBCP shall be dependent upon CBCP demonstrating and presenting sufficient data to establish that its consumptive use meets the referenced rules on statutory provisions. Board hereby delegates to the Secretary the authority to enter final orders regarding this condition in the event an administrative hearing is requested.

## G. Ground Water Monitoring Requirements

After consultation with the DER, BRESD, and SJRWMD, AESCB CBCP shall install a monitoring well network to monitor ground water quality horizontally and vertically through the aquifer above the Hawthorn Formation. Ground water quantity and flow directions will be determined seasonally at the site through the preparation of seasonal water table contour maps, based upon water level data obtained during the applicant's proportional monitoring program. From these maps and the results of the detailed subsurface investigation of site stratigraphy, the water quality monitoring well network will be located. A ground water monitoring plan that meets the requirements of Section 17-28.700(6)(d), F.A.C., shall be submitted to the Department's Northeast District Office for Approval or disapproval of the ground water monitoring plan shall be given within 60 days of receipt. Ground water monitoring shall be required at AESCB's CBCP pelletized ash storage area, each sedimentation pond, the lime mud storage area, and each coal pile storage area. Insofar as possible, the monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program, provided that the wells construction will not preclude their use. Existing wells will be properly sealed in accordance with Chapter 17-21, F.A.C., whenever they are abandoned due to construction of facilities. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water equal to at least three casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. No sampling or analysis is to be initiated until receipt of written approval of a site-specific quality assurance project plan (QAPP by the

Department. Results shall be submitted to the BRESD by the fifteenth (15th) day of the month following the month during which such analyses were performed. Testing for the following constituents is required around unlined ponds or storage areas:

TDS Cadmium

Conductance Zinc

pH Copper

Redox Nickel

Sulfate Selenium

Sulfite Chromium

Color Arsenic

Chloride Beryllium

Iron Mercury

Aluminum Lead

Gross Alpha

Conductivity shall be monitored in wells around all lined solid waste disposal sites, coal piles, and wastewater treatment and sedimentation ponds.

## H. Leachate

## 1. Zone of Discharge

Leachate from AESCB's <u>CBCP's</u> coal storage piles, <u>SK's lime mud storage area or CBCP's sedimentation ponds</u> shall not cause or contribute to contamination of waters of the State (including both surface and ground waters) in excess of the limitations of Chapter 17-3, F.A.C., beyond the boundary of a zone of discharge extending to the top of the Hawthorn Formation below the waste landfill cell or pond rising to a depth of 50 feet at a horizontal distance of 200 feet from the edge of the landfill or ponds, or rising to the boundary of the site, as appropriate.

#### 2. Corrective Action

When the ground water monitoring system shows a potential for this facility to cause or contribute to a violation of the ground water quality standards of Chapter 17-3, F.A.C., at the boundary of the zone of discharge, the

appropriate ponds or coal pile shall be bottom sealed, relocated, or the operation of the affected facility shall be altered in such a manner as to assure the Department that no violation of the ground water standards will occur beyond the boundary of the zone of discharge.

## V. CONTROL MEASURES DURING CONSTRUCTION

### A. Storm Water Runoff

During construction, appropriate measures shall be used to settle, filter, treat or absorb silt-containing or pollutant- laden storm water runoff to limit the total suspended solids to 50 mg/l or less and pH to 6.0 to 9.0 at OSN 003 during rainfall events that are lesser in intensity than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more than 29 NTU above background in waters of the State.

Control measures shall consist at the minimum of sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt- and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 9.0 at OSN.003. Stormwater drainage to the Broward River or-Str-Johns-River shall be monitored as indicated below:

*Storm water drainage BOD5, TOC, sus- ** ** to the Broward River pended solids,	Monitoring Point	Parameters	Frequency	Sample Typ	e
from the runoff turbidity, distreatment pond solved oxygen, pH, TKN, Total phosphorus, Fecal Coliform, Total Coliform Oil and grease **	to the Broward River from the runoff	pended solids turbidity, di solved oxygen pH, TKN, Tota phosphorus, Fecal Colifor Total Colifor	s- , 1 m,		

\*Monitoring shall be conducted at suitable points for allowing a comparison of the characteristics of reconstruction and construction phase drainage and receiving waters.

\*\*The frequency and sample type shall be as outlined in a sampling program prepared by the applicant and submitted at least ninety days prior to start of construction for review and approval by the DER Northeast District Office. The District Office will furnish copies of the sampling program to the BRESD and SJRWMD and shall indicate approval or disapproval within 60 days of submittal.

## B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and the  $B\underline{R}ESD$ .

## C. Environmental Control Program

Each permittee shall establish an environmental control program under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification. written plan for controlling pollution during construction shall be submitted to DER and BRESD within sixty days of issuance of the Certification. The plan shall identify and describe all pollutants and waste generated during construction and the methods for control, treatment and disposal. Each permittee shall notify the Department's Northeast District Office and BRESD by telephone within 24 hours if possible if unexpected harmful effects or evidence of irreversible environmental damage are detected by it during construction, shall immediately report in writing to the Department, and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

## D. Construction Dewatering Effluent

Maximum daily withdrawals for dewatering for the construction of the railcar unloading facility must not exceed 0.288 million gallons.

Dewatering for the construction of the railcar unloading facility shall terminate no later than nine months from the start of dewatering.

Should the permittee's dewatering operation create shoaling in adjacent water bodies, the permittee is responsible for removing such shoaling.

All offsite discharges resulting from dewatering activities must be in compliance with water quality standards required by DER Chapters 17-3 and 17-4, F.A.C.

There shall be no discharge of construction dewatering effluent.

## VI. SAFETY

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized

to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The Safety Standards specified under Section 440.56, F.S., by the Industrial Safety Section of the Florida Department of Commerce will also be complied with.

#### VII. SCREENING

The AESCB CBCP shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

VIII. TOXIC, DELETERIOUS, OR HAZARDOUS MATERIALS

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XI, Noncompliance Notification.

## IX. SOLID WASTE STORAGE AND DISPOSAL

CBCP shall be responsible for arranging for the proper storage, handling, disposal, or reuse of any solid waste generated by the CBCP facility. Solid waste produced by the operation of the AESCB CBCP facility shall be removed from site and disposed of in a permitted disposal facility, with the exception of bottom ash and fly ash. Bottom ash and fly ash will be pelletized, or made into aggregate form, and either shipped back to the mine utilizing the trains to deliver the coal, or sold as an additive to concrete, or utilized by companies specializing in the marketing and utilization of combustion by-products. The bottom ash and fly ash shall not be disposed of in a landfill within Duval If the permittees decide to dispose of the bottom ash or fly ash by other than returning it to the mine, they shall notify BRESD and DER. Prior to removal and disposal of spent lime mud and pond tailings, the permittees shall determine whether those wastes are hazardous under 40 CFR 26 and 17-730, F.A.C. If wastes are determined to be hazardous, they shall be disposed of in accordance with Chapter 17-730, F.A.C., after consultation with the DER and BRESD. If not hazardous, disposal shall be to a landfill designed to ensure compliance with groundwater quality criteria as contained in Chapters 17-3, and 17-730 F.A.C. All solid wastes disposed of on site shall comply with the provisions of Chapter 17-7, F.A.C. Ground water monitoring in accordance with 17-4, and 17-28, F.A.C. shall be implemented at the lime mud disposal site.

At least ninety (90) days prior to disposal or use of any sludge generated by pretreatment of reclaimed Seminole Kraft wastewater or zero wastewater discharge system, CBCP shall report to DER and RESD concerning the chemical characterization of any such sludge. DER reserves the right to require additional sampling and analysis as necessary to ensure that the above-cited, AESCB CBCP shall obtain a letter of acceptance from a permitted disposal site. On or before the last day of the first year of commercial operation, and each year of commercial operation, and each year of commercial operation thereafter, AESCB CBCP shall report to DER and RESD concerning the composition and quantity of sludge generated by the zero water discharge system and the method of disposal, including name and location of facilities handling, treating, storing, and/or disposing of said sludge waste.

## X. CHANGE IN DISCHARGE

All discharges or emissions authorized herein to AESCB CBCP shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application or any discharge more frequent than, or at a level in excess of, that authorized herein shall constitute a violation of this certification. Any anticipated facility expansions, production increases, or process modification which will result in new, different or increased discharges or expansion in steam generating capacity will require a submission of new or supplemental application to DER's Siting Coordination Office pursuant to Chapter 403, F.S.

#### XI. NONCOMPLIANCE NOTIFICATION

If, for any reason, either permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the DER's Northeast District Office and BRESD office by telephone as soon as possible but not later than the first DER working day after the permittee becomes aware of said noncompliance, and shall confirm the reported situation in writing within seventy-two (72) hours supplying the following information:

## A. A description and cause of noncompliance; and

B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying event.

#### XII. FACILITIES OPERATION

Each permittee shall at all times maintain good working order and operate as efficiently as possible all of its treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department (Northeast District) after approval and after notice to BRESD except where otherwise authorized by applicable regulations.

#### XIII. ADVERSE IMPACT

The permittees shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

## XIV. RIGHT OF ENTRY

The permittees shall allow the Secretary of the Florida Department of Environmental Regulation and/or authorized DER representatives, and representatives of the BRESD and SJRWMD, upon the presentation of credentials:

- A. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and
- B. To have access to and copy all records required to be kept under the conditions of this certification; and
- C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or emissional pollutants; and
- D. To assess any damage to the environment or violation of ambient standards.
- E. SJRWMD authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related CUP CBCP facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.
- F. BRESD authorized staff, upon proper identification, will have permission to enter, inspect, sample any discharge, and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.

#### XV. REVOCATION OR SUSPENSION

This certification may be suspended, or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any Condition of Certification.

#### XVI. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve either permittee from civil or criminal responsibility or liability for noncompliance with any conditions of this certification,

applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve either permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

## XVII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. The permittees shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

## XVIII. SEVERABILITY

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

## XVIV. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department.

## XX. REVIEW OF SITE CERTIFICATION

A. The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination Control Act Amendments of 1972 for the plant units, the Department shall review all monitoring data that has been submitted to it or it's agent(s) during the preceding five-year period for the purpose of determining the extent of the permittee's

compliance with the conditions of this certification of the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the permittees. Such review will be repeated at least every five years thereafter.

## XXI. MODIFICATION OF CONDITIONS

The conditions of this certification may be modified in the following manner:

- A. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, reclaimed water, monitoring, sampling, ground water, surface water, mixing zones, or variances to water quality standards, zones of discharge, leachate control programs, effluent limitations, air emission limitations, fuel, or solid waste disposal, right of entry, railroad spur transmission line, access road, pipelines, or designation of agents for the purpose of enforcing the conditions of this certification.
- B. All other modifications shall be made in accordance with Section 403.516, Florida Statutes.

## XXII. FLOOD CONTROL PROTECTION

The plant and associated facilities shall be constructed in such a manner as to comply with the Duval County flood protection requirements.

#### XXIII. EFFECT OF CERTIFICATION

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application. Thus, conformance to those criteria, unless Specifically amended, modified, or as the Department and parties are otherwise notified, is binding upon the applicants in the preparation, construction, and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

#### XXIV. NOISE

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, the permittees shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise. The permittees shall comply with the applicable noise limitations specified in Environmental Protection Board Rules or The City of Jacksonville Noise Ordinance.

## XXV USE-OF-RECLAIMED-WATER

The-CBCP-may-use-either-surface-water-from-the-Broward or-St-Johns-River-or-reclaimed-water-provided-either-by-the City-of-Jacksonville-or-by-the-Seminole-Kraft-Papermill-as-its source-of-cooling-water-makeup-

Within-six-months-after-issuance-of-certification, AESCB-shall-submit-to-DER-an-application-for-a-modification containing-information-concerning-the-design-and-operation-of the-plant-cooling-system-as-appropriate-for-the-cooling-water source-selected. -- The-application-shall-also-be-submitted-to SJRWMD-and-BESD,-who-may-report-concerning-the-AESCB-cooling water-application-modification---The-AESCB-application-shall contain-all-information-necessary-to-demonstrate-that operation-of-the-cooling-system-using-either-reclaimed-or surface-water-for-the-preferred-cooling-water-source-selected will-comply-with-all-relevant-non-procedural-agency-standards; or-that-AESCB-qualifies-for-a-variance---The-AESCB-application shall-also-include-an-analysis-of-the-reasons-for-the selection-of-the-requested-cooling-water-source-over-the-other preferred-alternate-sources-referred-to-in-the-above paragraph. -- The-participating-agencies-shall-respond-within-30 days-of-the-receipt-of-the-application-modification-as-to whether-or-not-it-contains-information-sufficient-to-make-a determination-as-to-compliance-with-non-procedural-agency standards.--Thereafter,-DER-shall-notify-AESCB,-BESD,-and SJRWMD-as-to-its-determination-concerning-sufficiency---SJRWMD and-BESD-shall-file-any-reports-concerning-the-application with-BER-and-provide-a-copy-to-AESCB-within-60-days-after DER's-determination-that-the-application-is-sufficient---DER shall-indicate-its-approval-or-disapproval-of-the-selected cooling-water-system-proposal-within-90-days-of-its determination-that-the-application-is-sufficient---Any modifications-of-the-certification-or-the-conditions-of certification-including-variances,-exceptions,-or-mixing-zones shall-be-made-pursuant-to-the-procedures-set-forth-in-Section 403-516,-Fla--Stat-,-and/or-Fla--Admin--Code-Rule-17-17-211-

Reclaimed-water-used-in-the-AESCB-cooling-tower-shall be-disinfected-prior-to-use:--Bisinfectant-levels-in-the cooling-tower-makeup-water-shall-be-continuously-monitored; prior-to-insertion-in-the-cooling-tower:--The-reclaimed-water shall-be-treated-so-as-to-obtain-no-less-than-a-1:0-mg/l-free chlorine-residual-after-fifteen-(15)-minutes'-contact-time-or its-equivalent:--Chlorination-shall-occur-at-a-turbidity-of-5 Nephelometric-Turbidity-Units-(NTU)-or-less;-unless-a-lesser degree-of-disinfection-is-approved-by-the-Department-upon demonstration-of-successful-viral-kill:--

## XXV. USE OF WATER FOR COOLING PURPOSES

The CBCP shall use reclaimed wastewater from the Seminole Kraft paper mill (in addition to any wastewater generated by the CBCP that is suitable for reuse for that purpose) for cooling water supply. In the event of disruption of SKC reclaimed wastewater as the cooling after makeup source for Cedar Bay, Inc., Cedar Bay, Inc. will utilize the water retained in SKC's holding basins or other non-potable sources of water as cooling water makeup.

At least 90 days prior to beginning commercial operation, Cedar Bay Cogeneration, Inc. shall submit to the Department a report concerning the actual measured pollutant characteristics of reclaimed water to be obtained from the Seminole Kraft paper mill. Such report shall be based on approved analytical results from four monthly samples obtained directly from the Seminole Kraft waste stream to be tied in with the CBCP cooling system, and shall include the concentrations of BOD5, COD, total organic carbon, total suspended solids, ammonia, pH, oil and grease, calcium, magnesium, sodium, potassium, alkalinity as mg of CaCO3, sulfate, chloride, nitrate, fluoride, silica, chlorine, phosphate (total) as P, cyanide, iron, manganese, aluminum, nickel, zinc, copper, cadmium, chromium, beryllium, arsenic, selenium, antimony, mercury, barium, silver, lead, thallium, phosphorus, and TKN. Where applicable, wastewater sampling and analyses conducted by SKC under the terms of operation permit number I016-200147 may be used to meet the terms of this condition. Any other sampling and analyses submitted under the terms of this permit shall be in accordance with a Department-approved Quality Assurance Plan. Results of all testing and sampling specified above shall be submitted to the Department within 30 days of testing.

Seminole Kraft's generation, treatment, or discharge of its wastewater is not covered by this site certification, and the permitting of Seminole Kraft's generation, treatment, or discharge of its wastewater does not require Siting Board approval.

## XXVI. ENFORCEMENT

- A. The Secretary may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.
- B. Any participating agency (federal, state, local) may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of that agency's proposed action.

C. BRESD may initiate any and all lawful actions to enforce the conditions of this certification that are based on the Department's rules, after obtaining the Secretary's written permission to so process on behalf of the Department.

#### XXVII. ENDANGERED AND THREATENED SPECIES

Prior to start of construction, AESCB CBCP shall survey the site for endangered and threatened species of animal and plant life. Plant species on the endangered or threatened list shall be transplanted to an appropriate area if practicable. Gopher Tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the Florida Game and Fresh Water Fish Commission. A relocation program, as approved by the FGFWFC, shall be followed.

#### XXVIII---PETROLEUM-STORAGE-TANKS

A---AES-Cedar-Bay-shall-provide-clean-up-of-the-#1 underground-diesel-fuel-storage-tank-site,-which-is-listed under-the-EBI-program,-in-accordance-with-F-A-C--Chapter 17-770---AES-shall-complete-an-Initial-Remedial-Action-(IRA) in-accordance-with-Rule-17-770-300,-F-A-C-,-prior-to construction-dewatering---BER-and-BESB-will-receive-written notification-ten-working-days-prior-to-initiation-of-the-IRA-AES-shall-determine-the-extent-of-contamination---AES-Cedar Bay-shall-then-design-and-install-a-pump-and-treatment-system at-the-site,-which-will-create-a-reverse-hydraulic-gradient that-will-prevent-the-further-spread-of-the-contamination-by the-dewatering-operation---This-plan-shall-be-submitted-to-DER and-BRESB-for-approval-thirty-days-prior-to-the-start-of construction-dewatering,-and-shall-be-implemented-prior-to commencement-of-the-dewatering-operation---Furthermore,-AES Cedar-Bay-shall-submit-a-Quality-Assurance-Project-Plan {QAPP}\_-a-Contamination-Assessment-Report-{CAR}-and-a-Remedial Action-plan-{RAP};-in-accordance-with-F:A:C:-Chapter-17-770-to DER-for-approval-with-copies-to-BESD-thirty-days-prior-to-the start-of-construction-dewatering---AES-Cedar-Bay-shall-provide complete-site-rehabilitation-in-accordance-with-F-A-C--Chapter 17-770-

B--AES-Cedar-Bay-shall-develop-a-QAPP-CAR-and-RAP as-required-and-in-accordance-with-Chapter-17-1700,-F-A-C-for the-site-listed-in-XXVIII,-C-and-D-below,-and-submit-these plan-to-DER-for-approval-with-copies-to-BESD-thirty-days-prior to-the-start-of-construction-dewatering-

C:--Prior-to-construction-dewatering;-at-the
underground-diesel-fuel-storage-tank-#2-site;-AES-Cedar-Bay
shall:

1--Perform-an-IRA-with-F-A-C--Rule-17-770-300-

2---Determine-the-extent-of-down-gradient contamination-and-submit-that-information-to-BESD; and-BER prior-to-installation-of-the-well-described-in-paragraph-C-4 below:

3---Establish-a-series-of-groundwater-level monitoring-wells-at-intervals-of-approximately-250-feet-from the-coal-unloading-site-to-the-#2-tank-for-determination-of the-groundwater-dewatering-cone-of-influence---Baily groundwater-levels-shall-be-recorded-for-each-of-these-wells during-construction-dewatering---h-background-well-with-a continuous-water-level-recorder-shall-be-installed;-at-a-site that-would-not-be-influenced-by-the-dewatering-operations;-to determine-ambient-conditions-at-the-site-

4.--Install-a-monitoring-well-with-a-continuous water-level-recorder-which-will-be-used-to-trigger implementation-of-the-RAP---The-well-will-be-located-150-feet down-gradient-from-the-boundary-of-the-plume-of-contamination determined-above-in-XXVII-C.2.--If-the-epiezometric-head-in the-trigger-well-drops-6-inches-below-ambient-conditions-as compared-to-the-background-well,-then-AES-Cedar-Bay-shall notify-DER-and-BESD-of-a-verified-drop-of-6-inches-or-more-in the-trigger-well-within-three-working-days-and-the-appropriate portion-of-the-RAP-shall-be-implemented-by-AES-Cedar-Bay-

5--AES-Cedar-Bay-shall-submit-a-plan-for-the location-and-construction-of-the-monitoring-wells-described above-in-paragraph-C-3-and-C-4-to-DER-and-BESD-for-approval-AES-Cedar-Bay-shall-submit-monthly-reports-of-the-groundwater level-recordings-to-DER-and-BESD-

D---Prior-to-construction-dewatering-at-each-of-the following-tank-sites---underground-diesel-fuel-storage-tank #3;-underground-#6-fuel-oil-storage-tank-#5;-above-ground-#6 fuel-oil-storage-tank-#2:--"pitch-tank"-located-North-of-the lime-kilns;-AES-Cedar-Bay-shall:

1.--Install-2-down-gradient-monitoring-wells-AES-Cedar-Bay-shall-submit-a-plan-for-location-and construction-of-these-8-wells-to-DER-and-BESD-for-approval-BESD-shall-have-the-opportunity-to-observe-the-construction-of these-wells-

2.--Sample-the-above-referenced-wells-for parameters-listed-in-17-770.600(8)-F.A.C.--In-addition;-AES Cedar-Bay-shall-sample-the-monitoring-wells-at-the above-ground-tank-sites-for-acetone-and-carbon-disulfide:--AES Cedar-Bay-shall-split-samples-with-BESD-if-BESD-so-requests and-submit-a-report-of-the-analytical-results-to-BER-and-BESD within-ten-days-of-receipt-of-analyses-by-AES-Cedar-Bay-

3---If-contamination-is-found-in-the-above referenced-wells-in-excess-of-the-clean-up-criteria-referenced in-17-770-730(5)(a)2-7-F-A-C-7-a-QAPP7-CAR-and-an-RAP-will-be developed-and7-DER-and-BESD-shall-be-provided-with-that information-prior-to-the-installation-of-the-well-described-in paragraph-D-4-below-

4.--Install-a-trigger-well-with-a-continuous water-level-recorder-which-will-be-located-150-feet-down gradient-from-the-boundary-of-the-plume-of-contamination determined-above-in-XXVIII-D-3---If-the-piezometric-head-in the-trigger-well-drops-6-inches-below-ambient-conditions-as compared-to-the-background-well-then-AES-Cedar-Bay-shall notify-DER-and-BESD-of-a-verified-drop-of-6-inches-or-more-in the-trigger-well-within-three-working-days-and-the appropriate-portion-of-the-RAP-shall-be-implemented-by-AES Cedar-Bay-

5---AES-Cedar-Bay-shall-submit-a-plan-for-the location-and-construction-of-the-monitoring-wells-described above-in-paragraph-D-4-7-to-BER-and-BESD-for-approval---AES Cedar-Bay-shall-submit-monthly-reports-of-the-groundwater level-recordings-to-BER-and-BESD-

E---Implementation-of-the-appropriate-portion-of-the RAP-shall-commence-within-14-days-of-the-determination-that the-construction-dewaterings-cone-of-depression-will-reach-any of-contaminated-sites-

FT--AES-Cedar-Bay-shall-monitor-the-construction dewatering-effluent-from-their-treatment-system,-once-a-week during-dewatering,-for-the-following-criteria:--Benzene-1 ug/1;-Total-V0A-50-ug/1;-Total-Naphthalenes-(Total-anaphthalenes-treatment-system)
naphthalenes-+-methyl-naphthalenes)-100-ug/1;-and-Total naphthalenes-treatment naphthalenes-t

G---If-any-disagreement-arises-regarding-this condition;-the-parties-agree-to-submit-the-matter-for-an expedited-hearing-to-the-DOAH-and-shall-request-assignment-of the-Hearing-Officer-who-has-heard-this-case;-if-possible; pursuant-to-403.5064;-F-S---The-informal-dispute-resolution process-shall-be-used-

H---Nothing-in-this-condition-shall-affect-the eligibility-of-reimbursement-for-clean-up-of-any-site-under EDI-program-

I:--Reinjection-or-infiltration-of-groundwater meeting-the-petroleum-contamination-clean-up-criteria-into-the same-zone-from-which-it-was-extracted-pursuant-to-any-of-the approved-remedial-action-plans-shall-be-permitted-and-is hereby-authorized-by-this-condition---The-proposed-location-of the-recharge-system-shall-be-upgradient-of-the-site-and included-in-the-plans-for-remedial-action-referenced-in XXVIII-A:-and-B:

## XXVIII. Environmentally Sensitive Land Acquisition

## A. Periodic Payments

- 1. As a condition of this certification, CBCP shall be required to make periodic monetary contributions for the purpose of funding a program for the acquisition and management of environmentally sensitive lands in or near Duval County, Florida. It is the intent of the Siting Board that the two million dollar payment made by AES Corporation to The Nature Conservancy, Inc. on or about June 16, 1992, shall be deemed to be the first of the required periodic payments.
- 2. All periodic payments made by or on behalf of the CBCP under this condition shall be submitted to The Nature Conservancy, which shall hold all funds received in trust for the State of Florida. All funds attributable to the periodic payments required by this condition shall be received, held, disbursed, and expended in conformance with the provisions of this condition.
- 3. A payment of 2.5 million dollars shall be transmitted within 48 hours of the date on which the CBCP commences commercial operation.
- 4. Commencing on the first anniversary of the payment required by subsection (3) above, and continuing for 30 years thereafter, a payment of \$300,000 shall be submitted for each year that the CBCP remains in commercial operation. Each annual payment shall be transmitted within 48 hours of the anniversary of the date on which commercial operation commenced at CBCP.
- 5. Any failure to achieve timely transmission of a periodic payment required by this condition shall be grounds for revocation of the certification.

## B. Land Acquisition Process

1. All land acquisition and management funded by the certification shall be undertaken in accordance with the process established by this condition.

- 2. The Nature Conservancy shall serve as the agent for acquisition of any parcel of land purchased with funds made available under this condition. The Department and The Nature Conservancy shall enter into an agreement which incorporates the provisions of this condition and such other provisions not inconsistent with this condition that the Department finds necessary to assure that this condition is properly implemented in the public interest. The agreement shall specify the duties and responsibilities of the parties with respect to the retention and disbursement of funds received to assure an accurate accounting and audit trail.
- 3. There shall be a six member Regional Land Acquisition and Management Advisory Council (RLAMAC) comprising two representatives appointed by each of the following governmental entities: the Department, the St. Johns River Water Management District, and the City of Jacksonville. The Nature Conservancy shall appoint a representative to serve as chair of the RLAMAC. The RLAMAC shall hold one or more public hearings for the purpose of receiving public input as to lands potentially suitable for acquisition under this condition. Following appropriate public input, the RLAMAC shall report its findings to the Department.
- 4. After review of the RLAMAC report, The Nature Conservancy shall identify and list as many land acquisition options as it deems practicable. A copy of the list shall be submitted to each of the entities represented on the RLAMAC. In establishing this list, The Nature Conservancy shall consider:
- <u>a.</u> the regional environmental importance of each parcel of property taking into account its proximity to water bodies and other publicly-held land;
- b. the extent of wildlife habitat and diversity on each parcel and the effect of its acquisition on regional efforts towards wildlife conservation; and
- c. the potential of each parcel for environmental enhancement, restoration, and recreational uses.

The RLAMAC shall review and approve the land acquisition options list before any parcels are acquired under this condition.

5. Following approval of the list, The Nature Conservancy shall initiate selection of parcels to be acquired. In selecting parcels for acquisition, preference shall be given to parcels located near the CBCP site.

Preference shall also be given to the selection of larger parcels which can be purchased using contributions from other

entities to supplement funds available under this condition.

After approval by the Secretary of the Department of a proposed acquisition, the parcel shall be purchased by The Nature Conservancy in trust for the State of Florida.

6. Title to any parcel purchased under this condition shall ultimately vest in a governmental entity following a determination by the Secretary of the Department, after consultation with the RLAMAC, as to how the property can be managed most appropriately in the public interest. It is